Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Building Floorspace (Square Feet)								
1,001 to 5,000	2,552	6,789	672	1,164	386	250	34	Q
5,001 to 10,000	889	6,585	516	790	262	209	36	Q
10,001 to 25,000	738	11,535	776	1,229	407	309	27	Q
25,001 to 50,000	241	8,668	673	1,058	350	258	16	Q
50,001 to 100,000	129	9,057	759	1,223	405	244	26	Q
100,001 to 200,000	65	9,064	934	1,458	483	249	37	165
200,001 to 500,000	25	7,176	725	1,090	361	205	36	123
Over 500,000	7	5,908	766	1,157	383	204	10	169
Principal Building Activity								
Education	386	9,874	820	1,121	371	268	47	134
Food Sales	226	1,255	251	629	208	39	Q	N
Food Service	297	1,654	427	654	217	203	Q	Q
Health Care	129	3,163	594	748	248	243	11	Q
Inpatient	8	1,905	475	539	178	204	9	Q
Outpatient	121	1,258	119	209	69	38	Q	Q
Lodging	142	5,096	510	709	235	215	35	Q
Retail (Other Than Mall)	443	4,317	319	637	211	91	Q	Q
Office	824	12,208	1,134	2,170	719	269	18	128
Public Assembly	277	3,939	370	506	167	102	29	Q
Public Order and Safety	71	1,090	126	172	57	29	8	Q
Religious Worship	370	3,754	163	188	62	82	18	Q
Service	622	4,050	312	451	149	139	Q	Q
Warehouse and Storage	597	10,078	456	738	244	132	9	Q
Other	79	1,738	286	401	133	87	Q	Q
Vacant	182	2,567	54	46	15	28	Q	Q
Year Constructed								
Before 1920	330	3,769	302	271	90	143	38	Q
1920 to 1945	527	6,871	620	626	208	229	54	129
1946 to 1959	562	7,045	565	696	231	216	48	Q
1960 to 1969	579	8,101	737	989	327	255	Q	117
1970 to 1979	731	10,772	1,023	1,726	572	351	22	77
1980 to 1989	707	10,332	1,034	1,892	627	291	9	Q
1990 to 1999	876	12,360	1,098	2,082	690	314	9	Q
2000 to 2003	334	5,533	441	884	293	127	Q	Q
Census Region and Division								
Northeast	726	12,905	1,271	1,519	503	428	175	165
New England	233	2,964	294	326	108	75	69	Q
Middle Atlantic	493	9,941	978	1,192	395	353	106	Q
Midwest	1,266	17,080	1,690	2,224	737	705	24	225
East North Central	696	11,595	1,254	1,580	524	528	Q	192
West North Central	571	5,485	436	643	213	177	Q	Q
South	1,775	23,489	1,948	3,858	1,278	474	14	182
South Atlantic	874	12,258	1,064	2,166	717	217	13	117
East South Central	348	3,393	309	515	171	102	1	Q
West South Central	553	7,837	575	1,177	390	156	1	Q
West	878	11,310	911	1,568	519	320	9	Q
Mountain	299	3,675	381	576	191	167	Q	Q
Pacific	580	7,635	530	992	329	153	4	Q

Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Climate Zone: 30-Year Average								
Under 2,000 CDD and --								
More than 7,000 HDD	855	10,622	990	1,232	408	431	63	88
5,500-7,000 HDD	1,173	17,335	1,761	2,305	763	679	63	255
4,000-5,499 HDD	673	11,504	1,134	1,713	567	337	90	140
Fewer than 4,000 HDD	1,276	15,739	1,213	2,259	748	358	6	101
2,000 CDD or More and --								
Fewer than 4,000 HDD	669	9,584	724	1,659	549	122	1	Q
Number of Floors								
One	3,136	25,981	1,937	3,442	1,140	664	47	Q
Two	1,031	16,270	1,311	2,080	689	491	69	Q
Three	339	7,501	619	863	286	241	39	Q
Four to Nine	128	10,085	1,336	1,796	595	378	55	308
Ten or More	12	4,947	617	987	327	154	13	123
Elevators and Escalators (more than one may apply)								
Any Elevators	309	24,617	2,826	4,289	1,421	830	84	491
Number of Elevators								
One	208	8,221	732	1,069	354	244	23	111
Two to Five	88	10,129	1,157	1,767	585	333	46	194
Six or More	13	6,268	937	1,453	481	254	16	186
Any Escalators	6	2,350	282	583	193	61	Q	Q
Number of Workers (main shift)								
Fewer than 5	2,653	15,492	817	1,122	372	272	69	Q
5 to 9	778	6,166	468	749	248	198	17	Q
10 to 19	563	7,803	594	915	303	242	33	Q
20 to 49	398	10,989	1,050	1,581	524	395	36	96
50 to 99	147	7,934	728	1,218	403	241	27	Q
100 to 249	77	6,871	838	1,388	460	235	19	124
250 or More	30	9,528	1,325	2,195	727	344	22	232
Weekly Operating Hours								
Fewer than 40	1,002	6,863	228	272	90	107	15	Q
40 to 48	1,117	11,622	773	1,199	397	249	58	Q
49 to 60	1,062	15,723	1,179	1,805	598	374	32	176
61 to 84	591	10,334	924	1,500	497	314	40	73
85 to 167	400	7,092	889	1,579	523	257	18	91
Open Continuously	475	13,149	1,827	2,813	932	626	59	210
Ownership and Occupancy								
Nongovernment Owned	4,011	49,421	4,203	6,944	2,300	1,503	154	247
Owner Occupied	1,841	23,591	2,060	3,280	1,086	708	81	185
Nonowner Occupied	2,029	23,914	2,115	3,639	1,205	779	72	Q
Unoccupied	141	1,916	Q	25	8	Q	Q	Q
Government Owned	635	15,363	1,617	2,224	737	425	69	387
Federal	46	1,956	303	395	131	35	Q	Q
State	164	3,808	513	616	204	98	23	188
Local	425	9,599	800	1,213	402	291	39	Q
Vacancy Status								
Completely Vacant	157	2,161	37	28	9	18	Q	Q
Mostly Vacant	25	406	Q	Q	Q	Q	Q	N
Partially Vacant	548	12,382	1,086	1,736	575	318	30	164
Not At All Vacant	3,915	49,834	4,681	7,386	2,446	1,582	191	461

Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Number of Establishments								
One	3,754	45,144	4,167	6,454	2,138	1,462	183	384
2 to 5	643	10,960	992	1,517	502	307	28	156
6 to 10	55	1,958	216	348	115	48	Q	Q
11 to 20	23	1,951	152	295	98	34	Q	Q
More than 20	14	2,609	257	526	174	58	Q	Q
Currently Unoccupied	157	2,161	37	28	9	18	Q	Q
Predominant Exterior Wall Material								
Brick, Stone or Stucco	2,044	32,817	3,186	4,549	1,507	1,127	144	408
Concrete (Block or Poured)	786	10,832	974	1,599	530	351	24	Q
Concrete Panels	131	6,559	667	1,205	399	180	Q	Q
Siding or Shingles	779	4,120	276	452	150	85	41	Q
Metal Panels	825	7,912	463	897	297	130	8	Q
Window Glass	17	1,024	95	201	67	14	0	Q
Other	47	1,113	121	190	63	35	Q	Q
No One Major Type	18	406	Q	Q	Q	Q	Q	Q
Predominant Roof Material								
Built-Up	1,036	21,170	2,083	3,143	1,041	743	37	263
Shingles (Not Wood)	1,325	10,195	823	1,247	413	310	63	Q
Metal Surfacing	1,288	11,944	630	1,184	392	194	21	Q
Synthetic or Rubber	511	14,730	1,649	2,686	890	542	46	171
Slate or Tile	263	2,462	207	313	104	67	12	Q
Wooden Materials	122	887	68	111	37	21	Q	Q
Concrete	61	2,231	236	299	99	24	Q	Q
Other	16	598	Q	125	41	Q	Q	Q
No One Major Type	25	565	40	61	20	16	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)								
Any Type of Renovation Since 1980	1,018	17,844	1,766	2,356	780	684	105	197
Addition or Annex	256	6,551	733	951	315	304	Q	Q
Reduction In Floorspace	22	1,012	117	158	52	52	Q	Q
Cosmetic Improvements	741	13,119	1,317	1,812	600	497	77	143
Wall or Roof Replacement	370	8,070	777	1,046	347	278	54	99
Interior Wall Re-Configuration	411	8,518	911	1,212	401	342	44	124
HVAC Equipment Upgrade	442	10,768	1,156	1,591	527	467	34	128
Lighting Upgrade	455	10,275	1,085	1,442	478	397	53	157
Window Replacement	310	6,354	613	757	251	242	50	Q
Plumbing System Upgrade	315	7,144	748	947	314	287	45	103
Insulation Upgrade	227	4,015	381	526	174	132	21	Q
Other Renovation	19	523	50	49	16	26	Q	Q
No Renovations Since 1980	1,710	18,714	1,482	1,953	647	512	94	229
Building Newer than 1980	1,917	28,225	2,573	4,859	1,609	732	23	208

Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Energy Sources (more than one may apply)								
Electricity	4,404	63,307	5,820	9,168	3,037	1,927	222	634
Natural Gas	2,391	43,468	4,492	6,524	2,161	1,928	99	305
Fuel Oil	451	15,157	1,760	2,578	854	507	222	177
District Heat	67	5,443	1,017	1,011	335	47	1	634
District Chilled Water	33	2,853	538	580	192	35	2	309
Propane	502	7,076	584	1,022	339	106	54	Q
Other	132	1,401	139	233	77	47	Q	Q
Space-Heating Energy Sources (more than one may apply)								
Electricity	1,766	28,600	2,373	4,696	1,555	667	29	122
Natural Gas	2,165	36,959	3,682	5,401	1,789	1,803	30	Q
Fuel Oil	360	5,988	591	588	195	176	212	Q
District Heat	65	5,198	994	967	320	39	1	633
Propane	372	3,204	160	362	120	Q	11	Q
Other	113	842	61	122	41	18	Q	N
Primary Space-Heating Energy Source								
Electricity	1,258	15,996	1,089	2,739	907	177	3	Q
Natural Gas	1,999	32,970	3,280	4,724	1,565	1,687	15	Q
Fuel Oil	282	3,818	294	232	77	20	197	N
District Heat	63	4,907	951	935	310	23	1	618
Propane	308	1,955	71	211	70	Q	Q	Q
Other	72	382	19	47	16	Q	Q	N
Cooling Energy Sources (more than one may apply)								
Electricity	3,589	54,321	5,021	8,386	2,778	1,762	174	307
Natural Gas	17	1,018	159	189	63	92	Q	Q
District Chilled Water	33	2,853	538	580	192	35	2	309
Water-Heating Energy Sources (more than one may apply)								
Electricity	1,910	27,490	2,145	4,146	1,373	522	84	167
Natural Gas	1,445	28,820	3,206	4,592	1,521	1,509	56	Q
Fuel Oil	94	1,880	206	176	58	36	109	Q
District Heat	27	3,088	563	603	200	33	Q	329
Propane	128	1,422	81	191	63	Q	Q	Q
Cooking Energy Sources (more than one may apply)								
Electricity	410	13,161	1,579	2,561	848	538	47	146
Natural Gas	457	15,438	2,074	2,970	984	856	76	158
Propane	108	1,460	114	240	80	Q	25	Q
Energy End Uses (more than one may apply)								
Buildings with Space Heating	3,982	60,028	5,705	8,887	2,944	1,909	219	634
Buildings with Cooling	3,625	56,940	5,464	8,855	2,933	1,821	176	535
Buildings with Water Heating	3,472	56,478	5,498	8,732	2,892	1,870	213	523
Buildings with Cooking	801	22,237	2,712	4,158	1,377	997	119	219
Buildings with Manufacturing	119	3,138	254	426	141	100	7	Q
Buildings with Electricity Generation	149	12,821	1,693	2,687	890	534	31	237

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				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Percent of Floorspace Heated								
Not Heated	663	4,756	115	281	93	Q	Q	Q
1 to 50	523	6,850	299	565	187	97	13	Q
51 to 99	498	8,107	746	1,193	395	268	26	57
100	2,962	45,071	4,660	7,129	2,361	1,544	180	575
Percent of Floorspace Cooled								
Not Cooled	1,020	7,843	356	312	104	107	46	Q
1 to 50	985	16,598	1,026	1,339	444	452	93	Q
51 to 99	629	13,211	1,413	2,252	746	451	45	171
100	2,011	27,132	3,026	5,265	1,744	918	38	326
Percent Lit When Open								
Zero	47	293	Q	Q	Q	Q	Q	Q
1 to 50	929	10,203	540	679	225	224	50	Q
51 to 99	1,108	18,288	1,736	2,698	894	576	67	199
100	2,176	32,789	3,490	5,740	1,901	1,100	104	385
Building Never Open/ Electricity Not Used	386	3,210	46	37	12	23	Q	Q
Percent Lit When Closed								
Zero	1,964	17,385	1,132	1,639	543	395	48	Q
1 to 50	1,882	30,948	2,626	4,248	1,407	868	107	244
51 to 100	136	2,093	235	468	155	40	Q	Q
Building Never Closed/ Electricity Not Used	664	14,357	1,827	2,813	932	626	60	210
Heating Equipment (more than one may apply)								
Heat Pumps	476	8,814	805	1,578	523	224	6	Q
Packaged Heat Pumps	278	5,442	523	1,085	359	140	3	Q
Split-System Heat Pumps	166	2,581	198	410	136	42	Q	Q
Individual Room Heat Pumps	58	2,691	255	448	148	84	Q	Q
Furnaces	1,864	19,615	1,493	2,298	761	673	50	Q
Individual Space Heaters	819	12,545	1,024	1,701	563	379	31	50
District Heat	65	5,166	986	958	317	39	1	628
Boilers	579	20,423	2,244	3,045	1,009	1,040	171	Q
Packaged Heating Units	953	18,021	1,729	3,195	1,058	582	17	Q
Other	205	3,262	231	508	168	47	5	Q
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	1,006	11,035	924	1,375	455	391	56	Q
Heat Pumps	492	9,041	837	1,652	547	234	6	Q
Packaged Heat Pumps	288	5,426	529	1,086	360	145	Q	Q
Split-System Heat Pumps	174	2,606	204	421	139	45	Q	Q
Individual Room Heat Pumps	58	2,940	278	518	171	85	Q	Q
Individual Air Conditioners	742	12,558	1,080	1,445	479	410	99	91
District Chilled Water	33	2,853	538	580	192	35	2	309
Central Chillers	111	11,636	1,531	2,524	836	501	26	169
Packaged Air Conditioning Units	1,613	29,969	2,862	4,765	1,578	1,090	85	110
Swamp Coolers	122	1,561	158	227	75	81	Q	Q
Other	40	1,232	142	225	75	52	Q	Q

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	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Main Equipment Replaced Since 1990 (more than one may apply)								
Heating	1,197	16,403	1,367	2,161	716	605	43	Q
Cooling	1,356	20,995	1,949	2,947	976	779	103	91
Water Heating Equipment								
Centralized System	2,513	34,671	3,432	5,310	1,759	1,226	161	286
Distributed System	785	11,540	835	1,458	483	254	31	Q
Combination of Centralized and Distributed System	175	10,267	1,231	1,964	651	390	20	170
Lighting Equipment Types (more than one may apply)								
Incandescent	2,184	38,528	3,916	6,057	2,006	1,351	161	398
Standard Fluorescent	3,943	59,688	5,644	8,909	2,951	1,865	214	614
Compact Fluorescent	941	27,571	3,208	5,027	1,665	1,025	98	419
High Intensity Discharge	455	20,643	2,141	3,400	1,126	693	52	270
Halogen	565	17,703	1,982	3,226	1,069	666	65	182
Other	8	269	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]								
Any Refrigeration.....	3,176	52,974	5,213	8,366	2,771	1,729	200	513
Commercial Refrigeration	1,007	26,768	3,336	5,397	1,788	1,124	126	299
Walk-In Units	666	20,254	2,766	4,496	1,489	939	95	243
Cases or Cabinets	825	20,424	2,703	4,349	1,441	910	95	257
Residential-Type Units	2,370	38,884	3,466	5,342	1,769	1,181	159	357
Vending Machines	996	35,335	3,721	5,992	1,985	1,163	105	468
No Refrigeration	1,469	11,809	607	802	266	198	23	Q
Office Equipment (more than one may apply)								
Computers	3,081	55,627	5,376	8,567	2,838	1,750	196	593
With Flat Screen Monitors	877	26,417	2,966	4,797	1,589	872	88	417
Dedicated Servers	1,175	36,338	3,760	6,143	2,035	1,190	105	431
Laser Printers	1,970	33,012	3,009	4,679	1,550	1,067	124	268
Inkjet Printers	1,420	32,210	3,302	5,495	1,820	1,041	74	368
FAX Machines	2,715	52,373	5,092	8,154	2,701	1,689	184	517
Photocopiers	1,939	46,257	4,466	7,128	2,361	1,429	155	521
Number of Computers								
None	1,565	9,156	444	601	199	178	27	Q
1 to 4	1,670	12,395	1,015	1,578	523	357	74	Q
5 to 9	559	7,179	546	826	274	249	15	Q
10 to 19	370	6,610	515	859	285	196	13	Q
20 to 49	255	7,414	707	1,233	408	232	15	Q
50 to 99	110	5,376	513	781	259	147	35	Q
100 to 249	79	6,690	714	1,111	368	208	17	121
250 or More	38	9,963	1,366	2,179	722	360	27	257
Number of Dedicated Servers								
None	3,471	28,445	2,060	3,025	1,002	738	118	203
1 to 4	1,060	24,116	2,234	3,520	1,166	809	74	184
5 to 9	58	3,864	405	756	250	112	14	Q
10 to 19	30	3,027	432	653	216	101	5	109
20 to 49	17	2,583	307	552	183	76	7	Q
50 or More	10	2,748	382	662	219	91	5	Q

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	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	5,820	9,168	3,037	1,928	222	634
Number of Photocopiers								
None	2,706	18,526	1,355	2,040	676	498	68	Q
One	1,250	15,475	1,130	1,792	593	429	55	Q
2 to 4	549	15,082	1,334	2,132	706	451	41	137
5 to 9	85	5,515	612	976	323	191	35	Q
10 or More	54	10,185	1,389	2,229	738	359	25	268
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	799	22,223	2,711	4,155	1,376	996	119	219
Activities with Large Amounts of Hot Water	567	19,482	2,465	3,522	1,167	931	95	273
Separate Computer Area	553	26,873	2,895	4,678	1,550	875	96	374
HVAC Conservation Features (more than one may apply)								
Variable Air-Volume System	466	19,597	2,380	3,827	1,267	710	35	368
Economizer Cycle	508	21,108	2,589	4,251	1,408	805	42	334
HVAC Maintenance	2,581	51,163	5,170	8,161	2,703	1,659	196	612
Energy Management and Control System (EMCS)	252	15,630	1,782	2,881	954	477	31	320
Window and Interior Lighting Features (more than one may apply)								
Multipaned Windows	2,201	38,910	3,929	6,109	2,024	1,349	171	386
Tinted Window Glass	1,323	29,887	3,098	5,077	1,682	947	44	425
Reflective Window Glass	308	8,544	927	1,576	522	306	16	83
External Overhangs or Awnings	1,233	17,242	1,737	2,900	961	594	59	124
Skylights or Atriums	331	12,546	1,307	1,948	645	465	48	148
Daylighting Sensors	74	2,868	377	623	206	124	3	Q
Specular Reflectors	928	26,118	2,829	4,488	1,487	862	89	391
Electronic Ballasts	2,577	46,882	4,746	7,543	2,498	1,513	156	578
Energy Management and Control System (EMCS) For Lighting	60	4,781	538	939	311	133	6	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]								
Heating	2,878	42,722	3,740	5,828	1,930	1,292	162	356
Cooling	2,761	43,205	3,844	6,132	2,031	1,288	135	390
Lighting	3,685	46,987	3,818	6,057	2,006	1,250	156	406
Office Equipment	1,504	19,397	1,465	2,177	721	476	92	Q

Table C1. Total Energy Consumption by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Consumption (trillion Btu)					
				Electricity				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Primary	Site	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	5,820	9,168	3,037	1,928	222	634

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use the particular energy source.

Notes: ● Site electricity is the amount of electricity delivered to commercial buildings. Primary electricity, which is not included in the "Total of Major Fuels" category, is site electricity plus the conversion losses in the generation, transmission, and distribution processes. ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Building Floorspace (Square Feet)							
1,001 to 5,000	2,552	6,789	12,812	10,348	2,155	292	Q
5,001 to 10,000	889	6,585	9,398	7,296	1,689	307	Q
10,001 to 25,000	738	11,535	13,140	10,001	2,524	232	Q
25,001 to 50,000	241	8,668	10,392	7,871	1,865	127	Q
50,001 to 100,000	129	9,057	11,897	8,717	1,868	203	Q
100,001 to 200,000	65	9,064	13,391	9,500	1,737	272	Q
200,001 to 500,000	25	7,176	10,347	7,323	1,343	272	Q
Over 500,000	7	5,908	11,201	7,977	1,344	71	1,810
Principal Building Activity							
Education	386	9,874	12,008	8,111	1,889	362	Q
Food Sales	226	1,255	4,990	4,627	332	Q	N
Food Service	297	1,654	6,865	5,176	1,615	Q	Q
Health Care	129	3,163	7,440	4,882	1,538	79	Q
Inpatient	8	1,905	5,329	3,198	1,241	67	Q
Outpatient	121	1,258	2,111	1,684	297	Q	Q
Lodging	142	5,096	7,445	5,288	1,581	272	Q
Retail (Other Than Mall)	443	4,317	5,980	5,132	719	117	Q
Office	824	12,208	20,841	17,050	2,201	149	1,441
Public Assembly	277	3,939	5,790	3,943	775	230	Q
Public Order and Safety	71	1,090	1,917	1,216	234	Q	Q
Religious Worship	370	3,754	2,457	1,628	664	Q	Q
Service	622	4,050	4,779	3,485	1,096	Q	Q
Warehouse and Storage	597	10,078	6,894	5,034	976	74	Q
Other	79	1,738	4,420	3,049	684	Q	Q
Vacant	182	2,567	751	412	220	Q	Q
Year Constructed							
Before 1920	330	3,769	4,131	2,319	1,134	304	Q
1920 to 1945	527	6,871	8,670	5,123	1,708	417	1,423
1946 to 1959	562	7,045	8,540	5,729	1,610	392	Q
1960 to 1969	579	8,101	11,378	7,714	1,872	Q	Q
1970 to 1979	731	10,772	16,129	12,637	2,466	182	Q
1980 to 1989	707	10,332	17,346	13,902	2,270	78	Q
1990 to 1999	876	12,360	18,761	15,236	2,452	72	Q
2000 to 2003	334	5,533	7,623	6,373	1,012	Q	Q
Census Region and Division							
Northeast	726	12,905	21,344	14,262	3,553	1,393	2,136
New England	233	2,964	4,851	3,125	673	557	Q
Middle Atlantic	493	9,941	16,493	11,137	2,880	836	Q
Midwest	1,266	17,080	21,521	14,172	4,844	176	2,329
East North Central	696	11,595	15,908	10,220	3,649	Q	Q
West North Central	571	5,485	5,613	3,952	1,195	Q	Q
South	1,775	23,489	31,595	25,540	3,866	125	Q
South Atlantic	874	12,258	17,563	14,155	1,934	112	Q
East South Central	348	3,393	4,569	3,348	817	Q	Q
West South Central	553	7,837	9,463	8,037	1,115	5	Q
West	878	11,310	18,118	15,057	2,261	81	Q
Mountain	299	3,675	5,629	4,272	1,089	Q	Q
Pacific	580	7,635	12,488	10,786	1,172	Q	Q

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Climate Zone: 30-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	855	10,622	13,709	9,135	3,076	471	Q
5,500-7,000 HDD	1,173	17,335	24,455	16,298	4,901	530	Q
4,000-5,499 HDD	673	11,504	18,507	13,354	2,702	713	Q
Fewer than 4,000 HDD	1,276	15,739	22,372	18,211	2,920	54	Q
2,000 CDD or More and --							
Fewer than 4,000 HDD	669	9,584	13,534	12,034	925	8	Q
Number of Floors							
One	3,136	25,981	33,617	26,809	5,406	397	Q
Two	1,031	16,270	20,932	16,066	3,627	550	Q
Three	339	7,501	9,143	6,389	1,816	304	Q
Four to Nine	128	10,085	18,968	12,517	2,560	428	3,462
Ten or More	12	4,947	9,917	7,251	1,116	97	1,454
Elevators and Escalators (more than one may apply)							
Any Elevators	309	24,617	42,252	30,227	5,802	641	5,582
Number of Elevators							
One	208	8,221	10,967	7,712	1,713	172	Q
Two to Five	88	10,129	17,217	12,340	2,387	343	2,147
Six or More	13	6,268	14,068	10,175	1,702	125	2,066
Any Escalators	6	2,350	4,861	4,096	Q	Q	Q
Number of Workers (main shift)							
Fewer than 5	2,653	15,492	13,615	9,503	2,308	578	Q
5 to 9	778	6,166	8,265	6,390	1,666	151	Q
10 to 19	563	7,803	9,936	7,647	1,841	254	Q
20 to 49	398	10,989	16,406	11,966	2,951	274	Q
50 to 99	147	7,934	11,165	8,532	1,780	204	Q
100 to 249	77	6,871	12,970	9,768	1,652	146	Q
250 or More	30	9,528	20,222	15,224	2,327	169	2,502
Weekly Operating Hours							
Fewer than 40	1,002	6,863	3,695	2,489	892	133	Q
40 to 48	1,117	11,622	12,749	9,577	2,018	457	Q
49 to 60	1,062	15,723	19,461	14,232	2,928	260	2,041
61 to 84	591	10,334	15,040	11,559	2,373	309	Q
85 to 167	400	7,092	14,287	11,188	1,906	151	Q
Open Continuously	475	13,149	27,346	19,987	4,407	466	2,486
Ownership and Occupancy							
Nongovernment Owned	4,011	49,421	69,675	54,122	11,558	1,249	2,746
Owner Occupied	1,841	23,591	33,551	25,441	5,361	671	2,078
Nonowner Occupied	2,029	23,914	35,713	28,446	6,070	578	Q
Unoccupied	141	1,916	Q	Q	Q	Q	Q
Government Owned	635	15,363	22,902	14,910	2,967	526	4,499
Federal	46	1,956	3,964	2,159	226	Q	Q
State	164	3,808	7,090	3,973	748	170	Q
Local	425	9,599	11,849	8,777	1,993	299	Q
Vacancy Status							
Completely Vacant	157	2,161	516	258	142	Q	Q
Mostly Vacant	25	406	Q	Q	Q	Q	N
Partially Vacant	548	12,382	17,624	13,209	2,477	231	1,708
Not At All Vacant	3,915	49,834	74,203	55,411	11,828	1,536	5,427

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Number of Establishments							
One	3,754	45,144	65,153	48,376	10,950	1,466	4,361
2 to 5	643	10,960	16,030	11,440	2,377	224	Q
6 to 10	55	1,958	3,402	2,632	366	Q	Q
11 to 20	23	1,951	2,718	2,268	248	Q	Q
More than 20	14	2,609	4,759	4,057	441	Q	Q
Currently Unoccupied	157	2,161	516	258	142	Q	Q
Predominant Exterior Wall Material							
Brick, Stone or Stucco	2,044	32,817	48,399	34,133	8,403	1,135	4,728
Concrete (Block or Poured)	786	10,832	16,015	12,417	2,622	206	Q
Concrete Panels	131	6,559	10,792	8,417	1,326	Q	Q
Siding or Shingles	779	4,120	5,071	4,007	735	323	Q
Metal Panels	825	7,912	8,196	6,726	1,059	77	Q
Window Glass	17	1,024	1,709	1,462	83	Q	Q
Other	47	1,113	1,801	1,416	248	Q	Q
No One Major Type	18	406	Q	Q	Q	Q	Q
Predominant Roof Material							
Built-Up	1,036	21,170	33,145	24,170	5,529	302	3,144
Shingles (Not Wood)	1,325	10,195	13,564	10,264	2,482	529	Q
Metal Surfacing	1,288	11,944	10,782	8,837	1,516	165	Q
Synthetic or Rubber	511	14,730	24,825	18,633	3,905	367	Q
Slate or Tile	263	2,462	3,794	2,816	562	94	Q
Wooden Materials	122	887	1,140	869	160	Q	Q
Concrete	61	2,231	3,373	2,029	168	Q	Q
Other	16	598	Q	845	Q	Q	Q
No One Major Type	25	565	719	568	124	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)							
Any Type of Renovation Since 1980	1,018	17,844	25,657	17,830	4,851	806	2,170
Addition or Annex	256	6,551	9,530	6,501	1,982	Q	Q
Reduction In Floorspace	22	1,012	1,710	1,180	390	Q	Q
Cosmetic Improvements	741	13,119	19,621	13,845	3,587	593	1,595
Wall or Roof Replacement	370	8,070	11,653	8,129	1,966	422	Q
Interior Wall Re-Configuration	411	8,518	13,131	9,035	2,430	352	1,315
HVAC Equipment Upgrade	442	10,768	16,899	11,822	3,281	277	1,520
Lighting Upgrade	455	10,275	15,732	10,741	2,868	417	1,706
Window Replacement	310	6,354	9,102	6,168	1,734	391	Q
Plumbing System Upgrade	315	7,144	10,965	7,360	2,051	343	1,211
Insulation Upgrade	227	4,015	5,868	4,065	978	170	Q
Other Renovation	19	523	791	517	Q	Q	Q
No Renovations Since 1980	1,710	18,714	23,191	15,691	3,939	778	Q
Building Newer than 1980	1,917	28,225	43,729	35,511	5,734	192	Q

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Energy Sources (more than one may apply)							
Electricity	4,404	63,307	92,574	69,032	14,523	1,774	7,245
Natural Gas	2,391	43,468	67,462	48,584	14,525	775	3,578
Fuel Oil	451	15,157	25,905	18,631	3,539	1,776	1,960
District Heat	67	5,443	14,098	6,519	323	10	7,245
District Chilled Water	33	2,853	7,647	3,667	244	13	Q
Propane	502	7,076	9,424	7,234	751	410	Q
Other	132	1,401	2,032	1,539	330	26	Q
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,766	28,600	41,737	34,865	5,056	236	Q
Natural Gas	2,165	36,959	54,959	40,545	13,515	243	Q
Fuel Oil	360	5,988	7,485	4,513	1,194	1,676	Q
District Heat	65	5,198	13,623	6,106	270	8	7,238
Propane	372	3,204	3,303	2,985	Q	84	Q
Other	113	842	956	796	138	Q	N
Primary Space-Heating Energy Source							
Electricity	1,258	15,996	22,011	20,527	1,434	29	Q
Natural Gas	1,999	32,970	48,198	35,355	12,586	132	Q
Fuel Oil	282	3,818	3,963	2,246	162	1,555	N
District Heat	63	4,907	13,178	5,910	172	8	7,089
Propane	308	1,955	1,928	1,909	Q	Q	Q
Other	72	382	338	306	Q	Q	N
Cooling Energy Sources (more than one may apply)							
Electricity	3,589	54,321	81,478	63,402	13,267	1,371	3,438
Natural Gas	17	1,018	2,005	1,291	672	Q	Q
District Chilled Water	33	2,853	7,647	3,667	244	13	Q
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,910	27,490	36,908	30,298	4,084	666	1,859
Natural Gas	1,445	28,820	47,610	34,524	11,092	441	Q
Fuel Oil	94	1,880	2,700	1,598	220	849	Q
District Heat	27	3,088	8,155	4,241	218	Q	3,690
Propane	128	1,422	1,871	1,734	Q	Q	Q
Cooking Energy Sources (more than one may apply)							
Electricity	410	13,161	23,623	17,845	3,843	363	1,572
Natural Gas	457	15,438	29,444	20,873	6,157	587	1,827
Propane	108	1,460	2,508	2,203	Q	201	Q
Energy End Uses (more than one may apply)							
Buildings with Space Heating	3,982	60,028	89,615	66,253	14,377	1,744	7,242
Buildings with Cooling	3,625	56,940	87,739	66,555	13,718	1,387	6,079
Buildings with Water Heating	3,472	56,478	87,218	65,526	14,025	1,682	5,984
Buildings with Cooking	801	22,237	40,266	29,777	7,163	929	2,396
Buildings with Manufacturing	119	3,138	3,950	3,117	718	56	Q
Buildings with Electricity Generation	149	12,821	25,422	18,679	3,718	253	2,772

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Percent of Floorspace Heated							
Not Heated	663	4,756	2,962	2,779	Q	Q	Q
1 to 50	523	6,850	5,600	4,645	831	109	Q
51 to 99	498	8,107	11,972	9,096	2,078	206	Q
100	2,962	45,071	72,043	52,512	11,468	1,428	6,635
Percent of Floorspace Cooled							
Not Cooled	1,020	7,843	4,838	2,476	807	389	Q
1 to 50	985	16,598	15,503	10,901	3,465	728	Q
51 to 99	629	13,211	22,446	16,916	3,341	355	1,833
100	2,011	27,132	49,791	38,738	6,912	304	Q
Percent Lit When Open							
Zero	47	293	Q	Q	Q	Q	Q
1 to 50	929	10,203	8,599	5,942	1,768	407	Q
51 to 99	1,108	18,288	28,253	20,893	4,324	539	2,498
100	2,176	32,789	54,958	41,762	8,222	820	4,154
Building Never Open/ Electricity Not Used	386	3,210	635	325	191	Q	Q
Percent Lit When Closed							
Zero	1,964	17,385	18,308	13,104	3,185	418	Q
1 to 50	1,882	30,948	43,011	32,796	6,620	831	2,764
51 to 100	136	2,093	3,910	3,144	311	Q	Q
Building Never Closed/ Electricity Not Used	664	14,357	27,349	19,987	4,409	468	2,486
Heating Equipment (more than one may apply)							
Heat Pumps	476	8,814	14,249	11,629	1,804	50	Q
Packaged Heat Pumps	278	5,442	9,330	7,929	1,115	Q	Q
Split-System Heat Pumps	166	2,581	3,696	2,946	361	Q	Q
Individual Room Heat Pumps	58	2,691	4,199	3,289	648	Q	Q
Furnaces	1,864	19,615	23,489	17,887	5,095	417	Q
Individual Space Heaters	819	12,545	15,964	12,387	2,720	253	Q
District Heat	65	5,166	13,505	6,051	269	8	7,177
Boilers	579	20,423	31,052	22,045	7,418	1,337	Q
Packaged Heating Units	953	18,021	29,902	24,318	4,477	139	Q
Other	205	3,262	3,988	3,451	368	46	Q
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	1,006	11,035	14,441	10,746	2,867	428	Q
Heat Pumps	492	9,041	14,738	12,060	1,887	49	Q
Packaged Heat Pumps	288	5,426	9,356	7,909	1,163	Q	Q
Split-System Heat Pumps	174	2,606	3,776	3,005	382	Q	Q
Individual Room Heat Pumps	58	2,940	4,621	3,721	660	Q	Q
Individual Air Conditioners	742	12,558	16,175	11,268	3,040	790	1,077
District Chilled Water	33	2,853	7,647	3,667	244	13	Q
Central Chillers	111	11,636	22,448	17,065	3,461	205	1,717
Packaged Air Conditioning Units	1,613	29,969	46,331	36,258	8,210	654	1,208
Swamp Coolers	122	1,561	2,350	1,808	520	Q	Q
Other	40	1,232	2,096	1,540	377	Q	Q

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Main Equipment Replaced Since 1990 (more than one may apply)							
Heating	1,197	16,403	21,542	16,626	4,519	349	Q
Cooling	1,356	20,995	30,387	22,737	5,761	794	Q
Water Heating Equipment							
Centralized System	2,513	34,671	54,768	40,871	9,346	1,286	3,266
Distributed System	785	11,540	14,394	11,253	1,989	244	Q
Combination of Centralized and Distributed System	175	10,267	18,056	13,401	2,691	153	1,811
Lighting Equipment Types (more than one may apply)							
Incandescent	2,184	38,528	60,359	44,422	9,937	1,297	4,703
Standard Fluorescent	3,943	59,688	89,627	66,864	14,039	1,707	7,016
Compact Fluorescent	941	27,571	49,570	36,584	7,428	774	4,784
High Intensity Discharge	455	20,643	31,999	23,651	4,907	404	3,037
Halogen	565	17,703	30,218	23,011	4,680	506	2,021
Other	8	269	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]							
Any Refrigeration	3,176	52,974	82,557	62,357	12,913	1,575	5,713
Commercial Refrigeration	1,007	26,768	50,937	38,581	8,073	961	3,322
Walk-In Units	666	20,254	41,811	31,769	6,648	726	2,668
Cases or Cabinets	825	20,424	41,463	31,335	6,571	732	2,825
Residential-Type Units	2,370	38,884	54,108	39,936	8,848	1,259	4,065
Vending Machines	996	35,335	56,290	42,043	8,276	811	5,159
No Refrigeration	1,469	11,809	10,020	6,675	1,612	200	Q
Office Equipment (more than one may apply)							
Computers	3,081	55,627	85,407	64,010	13,089	1,544	6,764
With Flat Screen Monitors	877	26,417	46,704	34,985	6,287	688	4,743
Dedicated Servers	1,175	36,338	59,377	44,941	8,657	809	4,969
Laser Printers	1,970	33,012	47,880	36,031	7,946	999	2,904
Inkjet Printers	1,420	32,210	52,520	39,920	7,784	582	4,234
FAX Machines	2,715	52,373	80,902	60,928	12,641	1,440	5,892
Photocopiers	1,939	46,257	70,079	52,409	10,542	1,198	5,930
Number of Computers							
None	1,565	9,156	7,170	5,021	1,436	232	Q
1 to 4	1,670	12,395	17,257	12,918	3,015	602	Q
5 to 9	559	7,179	8,649	6,606	1,844	130	Q
10 to 19	370	6,610	8,588	6,741	1,492	99	Q
20 to 49	255	7,414	11,778	9,322	1,765	121	Q
50 to 99	110	5,376	7,888	5,664	1,124	259	Q
100 to 249	79	6,690	10,790	7,675	1,472	126	Q
250 or More	38	9,963	20,456	15,085	2,377	207	2,787
Number of Dedicated Servers							
None	3,471	28,445	33,201	24,090	5,867	967	Q
1 to 4	1,060	24,116	34,991	26,074	6,056	578	Q
5 to 9	58	3,864	6,784	5,608	796	100	Q
10 to 19	30	3,027	6,267	4,457	665	38	Q
20 to 49	17	2,583	4,740	3,685	518	52	Q
50 or More	10	2,748	6,594	5,118	623	40	Q

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
**All Buildings* ..... **	4,645	64,783	92,577	69,032	14,525	1,776	7,245
Number of Photocopiers							
None	2,706	18,526	22,498	16,622	3,983	578	Q
One	1,250	15,475	18,436	14,098	3,295	428	Q
2 to 4	549	15,082	20,980	15,555	3,518	315	Q
5 to 9	85	5,515	9,441	7,138	1,290	268	Q
10 or More	54	10,185	21,223	15,618	2,439	187	2,979
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	799	22,223	40,252	29,771	7,156	929	2,396
Activities with Large Amounts of Hot Water	567	19,482	34,904	24,710	6,466	724	3,003
Separate Computer Area	553	26,873	44,552	33,308	6,230	732	4,282
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	466	19,597	36,254	26,726	5,070	273	4,184
Economizer Cycle	508	21,108	39,593	29,663	5,703	331	3,896
HVAC Maintenance	2,581	51,163	81,328	60,420	12,356	1,565	6,987
Energy Management and Control System (EMCS)	252	15,630	27,646	20,451	3,318	241	3,636
Window and Interior Lighting Features (more than one may apply)							
Multipaned Windows	2,201	38,910	59,356	43,784	10,027	1,331	4,214
Tinted Window Glass	1,323	29,887	49,568	37,166	6,978	359	5,064
Reflective Window Glass	308	8,544	14,414	11,302	2,145	132	835
External Overhangs or Awnings	1,233	17,242	28,248	21,798	4,583	463	1,404
Skylights or Atriums	331	12,546	19,284	14,007	3,210	369	1,697
Daylighting Sensors	74	2,868	6,261	4,847	917	26	Q
Specular Reflectors	928	26,118	43,466	32,092	6,179	684	4,511
Electronic Ballasts	2,577	46,882	74,873	55,837	11,181	1,236	6,619
Energy Management and Control System (EMCS) For Lighting	60	4,781	8,967	6,922	906	47	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]							
Heating	2,878	42,722	60,293	45,100	9,840	1,305	4,048
Cooling	2,761	43,205	62,872	47,552	9,785	1,074	4,461
Lighting	3,685	46,987	62,313	46,811	9,710	1,257	4,534
Office Equipment	1,504	19,397	23,915	17,466	3,666	714	Q

Table C2. Total Energy Expenditures by Major Fuel for Non-Mall Buildings, 2003

	All Buildings*		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Sum of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings*	4,645	64,783	92,577	69,032	14,525	1,776	7,245

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use the particular energy source.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
All Buildings*	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Building Floorspace (Square Feet)							
1,001 to 5,000	2,552	6,789	2.7	672	263	98.9	67.6
5,001 to 10,000	889	6,585	7.4	516	580	78.3	68.7
10,001 to 25,000	738	11,535	15.6	776	1,052	67.3	72.0
25,001 to 50,000	241	8,668	35.9	673	2,790	77.6	75.8
50,001 to 100,000	129	9,057	70.4	759	5,901	83.8	90.0
100,001 to 200,000	65	9,064	138.8	934	14,300	103.0	80.3
200,001 to 500,000	25	7,176	289.0	725	29,189	101.0	105.3
Over 500,000	7	5,908	896.1	766	116,216	129.7	87.6
Principal Building Activity							
Education	386	9,874	25.6	820	2,125	83.1	65.7
Food Sales	226	1,255	5.6	251	1,110	199.7	175.2
Food Service	297	1,654	5.6	427	1,436	258.3	136.5
Health Care	129	3,163	24.6	594	4,612	187.7	94.0
Inpatient	8	1,905	241.4	475	60,152	249.2	127.7
Outpatient	121	1,258	10.4	119	985	94.6	45.8
Lodging	142	5,096	35.8	510	3,578	100.0	207.5
Retail (Other Than Mall)	443	4,317	9.7	319	720	73.9	92.1
Office	824	12,208	14.8	1,134	1,376	92.9	40.3
Public Assembly	277	3,939	14.2	370	1,338	93.9	154.5
Public Order and Safety	71	1,090	15.5	126	1,791	115.8	93.7
Religious Worship	370	3,754	10.1	163	440	43.5	95.6
Service	622	4,050	6.5	312	501	77.0	85.0
Warehouse and Storage	597	10,078	16.9	456	764	45.2	104.3
Other	79	1,738	21.9	286	3,600	164.4	157.1
Vacant	182	2,567	14.1	54	294	20.9	832.1
Year Constructed							
Before 1920	330	3,769	11.4	302	917	80.2	99.3
1920 to 1945	527	6,871	13.0	620	1,176	90.3	101.3
1946 to 1959	562	7,045	12.5	565	1,007	80.3	85.1
1960 to 1969	579	8,101	14.0	737	1,272	90.9	84.6
1970 to 1979	731	10,772	14.7	1,023	1,400	95.0	81.2
1980 to 1989	707	10,332	14.6	1,034	1,463	100.1	68.8
1990 to 1999	876	12,360	14.1	1,098	1,253	88.8	67.8
2000 to 2003	334	5,533	16.6	441	1,319	79.7	98.5
Census Region and Division							
Northeast	726	12,905	17.8	1,271	1,751	98.5	85.3
New England	233	2,964	12.7	294	1,262	99.0	93.0
Middle Atlantic	493	9,941	20.1	978	1,981	98.3	83.2
Midwest	1,266	17,080	13.5	1,690	1,334	98.9	103.2
East North Central	696	11,595	16.7	1,254	1,802	108.1	109.1
West North Central	571	5,485	9.6	436	764	79.5	89.3
South	1,775	23,489	13.2	1,948	1,098	82.9	72.0
South Atlantic	874	12,258	14.0	1,064	1,218	86.8	63.5
East South Central	348	3,393	9.8	309	889	91.1	101.0
West South Central	553	7,837	14.2	575	1,039	73.4	79.2
West	878	11,310	12.9	911	1,037	80.6	63.1
Mountain	299	3,675	12.3	381	1,278	103.8	89.1
Pacific	580	7,635	13.2	530	913	69.4	52.1

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
All Buildings*	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Climate Zone: 30-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	855	10,622	12.4	990	1,157	93.2	96.1
5,500-7,000 HDD	1,173	17,335	14.8	1,761	1,501	101.6	101.5
4,000-5,499 HDD	673	11,504	17.1	1,134	1,685	98.5	80.9
Fewer than 4,000 HDD	1,276	15,739	12.3	1,213	950	77.0	70.6
2,000 CDD or More and --							
Fewer than 4,000 HDD	669	9,584	14.3	724	1,082	75.5	51.8
Number of Floors							
One	3,136	25,981	8.3	1,937	618	74.6	81.7
Two	1,031	16,270	15.8	1,311	1,272	80.6	81.1
Three	339	7,501	22.1	619	1,825	82.6	77.8
Four to Nine	128	10,085	78.7	1,336	10,423	132.5	84.0
Ten or More	12	4,947	420.0	617	52,356	124.6	68.1
Elevators and Escalators (more than one may apply)							
Any Elevators	309	24,617	79.7	2,826	9,146	114.8	77.3
Number of Elevators							
One	208	8,221	39.5	732	3,514	89.0	80.6
Two to Five	88	10,129	115.1	1,157	13,156	114.3	72.8
Six or More	13	6,268	491.5	937	73,451	149.5	80.8
Any Escalators	6	2,350	388.7	282	46,640	120.0	69.6
Number of Workers (main shift)							
Fewer than 5	2,653	15,492	5.8	817	308	52.8	176.4
5 to 9	778	6,166	7.9	468	602	76.0	92.2
10 to 19	563	7,803	13.9	594	1,056	76.2	81.4
20 to 49	398	10,989	27.6	1,050	2,640	95.6	89.1
50 to 99	147	7,934	53.8	728	4,935	91.7	76.2
100 to 249	77	6,871	89.7	838	10,936	121.9	75.5
250 or More	30	9,528	320.4	1,325	44,551	139.0	56.7
Weekly Operating Hours							
Fewer than 40	1,002	6,863	6.9	228	227	33.2	69.1
40 to 48	1,117	11,622	10.4	773	693	66.5	56.2
49 to 60	1,062	15,723	14.8	1,179	1,111	75.0	61.6
61 to 84	591	10,334	17.5	924	1,563	89.4	79.5
85 to 167	400	7,092	17.7	889	2,226	125.4	84.9
Open Continuously	475	13,149	27.7	1,827	3,846	138.9	126.0
Ownership and Occupancy							
Nongovernment Owned	4,011	49,421	12.3	4,203	1,048	85.1	78.8
Owner Occupied	1,841	23,591	12.8	2,060	1,119	87.3	76.0
Nonowner Occupied	2,029	23,914	11.8	2,115	1,042	88.4	80.6
Unoccupied	141	1,916	13.6	Q	Q	Q	.
Government Owned	635	15,363	24.2	1,617	2,548	105.3	83.1
Federal	46	1,956	42.9	303	6,642	155.0	124.6
State	164	3,808	23.2	513	3,125	134.8	71.3
Local	425	9,599	22.6	800	1,885	83.4	81.4
Vacancy Status							
Completely Vacant	157	2,161	13.8	37	237	17.2	.
Mostly Vacant	25	406	16.1	Q	Q	Q	254.5
Partially Vacant	548	12,382	22.6	1,086	1,981	87.7	63.9
Not At All Vacant	3,915	49,834	12.7	4,681	1,196	93.9	84.0

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
**All Buildings* ..... **	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Number of Establishments							
One	3,754	45,144	12.0	4,167	1,110	92.3	94.5
2 to 5	643	10,960	17.1	992	1,544	90.6	76.3
6 to 10	55	1,958	35.7	216	3,933	110.1	33.3
11 to 20	23	1,951	85.7	152	6,655	77.6	45.3
More than 20	14	2,609	181.1	257	17,833	98.5	43.3
Currently Unoccupied	157	2,161	13.8	37	237	17.2	.
Predominant Exterior Wall Material							
Brick, Stone or Stucco	2,044	32,817	16.1	3,186	1,559	97.1	86.6
Concrete (Block or Poured)	786	10,832	13.8	974	1,239	89.9	93.1
Concrete Panels	131	6,559	50.2	667	5,111	101.7	61.3
Siding or Shingles	779	4,120	5.3	276	355	67.1	60.5
Metal Panels	825	7,912	9.6	463	561	58.5	74.3
Window Glass	17	1,024	60.1	95	5,548	92.3	49.5
Other	47	1,113	23.8	121	2,591	108.7	78.5
No One Major Type	18	406	22.9	Q	Q	Q	88.5
Predominant Roof Material							
Built-Up	1,036	21,170	20.4	2,083	2,011	98.4	80.7
Shingles (Not Wood)	1,325	10,195	7.7	823	621	80.7	78.6
Metal Surfacing	1,288	11,944	9.3	630	489	52.7	74.4
Synthetic or Rubber	511	14,730	28.8	1,649	3,228	112.0	79.3
Slate or Tile	263	2,462	9.4	207	789	84.2	68.6
Wooden Materials	122	887	7.3	68	562	77.0	70.2
Concrete	61	2,231	36.7	236	3,886	Q	120.6
Other	16	598	38.1	Q	Q	Q	Q
No One Major Type	25	565	22.7	40	1,589	69.9	59.0
Renovations in Buildings Constructed Before 1980 (more than one may apply)							
Any Type of Renovation Since 1980	1,018	17,844	17.5	1,766	1,734	99.0	86.2
Addition or Annex	256	6,551	25.6	733	2,860	111.9	109.9
Reduction In Floorspace	22	1,012	46.1	117	5,306	115.2	108.2
Cosmetic Improvements	741	13,119	17.7	1,317	1,778	100.4	82.9
Wall or Roof Replacement	370	8,070	21.8	777	2,100	96.3	76.8
Interior Wall Re-Configuration	411	8,518	20.7	911	2,218	107.0	81.4
HVAC Equipment Upgrade	442	10,768	24.4	1,156	2,619	107.4	83.5
Lighting Upgrade	455	10,275	22.6	1,085	2,388	105.6	87.2
Window Replacement	310	6,354	20.5	613	1,974	96.5	82.1
Plumbing System Upgrade	315	7,144	22.7	748	2,376	104.7	85.4
Insulation Upgrade	227	4,015	17.7	381	1,676	94.8	75.8
Other Renovation	19	523	27.3	50	2,587	94.9	104.1
No Renovations Since 1980	1,710	18,714	10.9	1,482	866	79.2	89.1
Building Newer than 1980	1,917	28,225	14.7	2,573	1,342	91.1	72.1

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
**All Buildings* ..... **	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Energy Sources (more than one may apply)							
Electricity	4,404	63,307	14.4	5,820	1,322	91.9	80.0
Natural Gas	2,391	43,468	18.2	4,492	1,878	103.3	86.5
Fuel Oil	451	15,157	33.6	1,760	3,906	116.1	89.7
District Heat	67	5,443	81.4	1,017	15,203	186.8	99.8
District Chilled Water	33	2,853	86.7	538	16,353	188.7	74.9
Propane	502	7,076	14.1	584	1,164	82.6	99.8
Other	132	1,401	10.6	139	1,050	99.2	73.8
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,766	28,600	16.2	2,373	1,344	83.0	70.0
Natural Gas	2,165	36,959	17.1	3,682	1,700	99.6	89.9
Fuel Oil	360	5,988	16.6	591	1,641	98.6	109.7
District Heat	65	5,198	79.7	994	15,241	191.2	100.0
Propane	372	3,204	8.6	160	430	49.9	53.3
Other	113	842	7.4	61	541	72.6	70.7
Primary Space-Heating Energy Source							
Electricity	1,258	15,996	12.7	1,089	865	68.1	56.1
Natural Gas	1,999	32,970	16.5	3,280	1,641	99.5	89.2
Fuel Oil	282	3,818	13.5	294	1,044	77.1	110.3
District Heat	63	4,907	77.4	951	15,010	193.8	97.8
Propane	308	1,955	6.4	71	232	36.6	37.3
Other	72	382	5.3	19	270	50.6	64.3
Cooling Energy Sources (more than one may apply)							
Electricity	3,589	54,321	15.1	5,021	1,399	92.4	79.4
Natural Gas	17	1,018	58.9	159	9,202	156.3	118.6
District Chilled Water	33	2,853	86.7	538	16,353	188.7	74.9
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,910	27,490	14.4	2,145	1,123	78.0	65.7
Natural Gas	1,445	28,820	19.9	3,206	2,218	111.2	89.7
Fuel Oil	94	1,880	19.9	206	2,186	109.7	101.2
District Heat	27	3,088	113.1	563	20,610	182.3	134.2
Propane	128	1,422	11.1	81	628	56.7	52.8
Cooking Energy Sources (more than one may apply)							
Electricity	410	13,161	32.1	1,579	3,851	120.0	98.5
Natural Gas	457	15,438	33.8	2,074	4,542	134.3	109.1
Propane	108	1,460	13.6	114	1,064	78.3	61.3
Energy End Uses (more than one may apply)							
Buildings with Space Heating	3,982	60,028	15.1	5,705	1,433	95.0	80.6
Buildings with Cooling	3,625	56,940	15.7	5,464	1,507	96.0	77.9
Buildings with Water Heating	3,472	56,478	16.3	5,498	1,583	97.4	79.4
Buildings with Cooking	801	22,237	27.8	2,712	3,386	122.0	99.6
Buildings with Manufacturing	119	3,138	26.5	254	2,144	81.1	88.3
Buildings with Electricity Generation	149	12,821	85.9	1,693	11,347	132.1	87.8

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
All Buildings*	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Percent of Floorspace Heated							
Not Heated	663	4,756	7.2	115	173	24.2	56.7
1 to 50	523	6,850	13.1	299	571	43.6	72.2
51 to 99	498	8,107	16.3	746	1,500	92.1	77.6
100	2,962	45,071	15.2	4,660	1,573	103.4	81.7
Percent of Floorspace Cooled							
Not Cooled	1,020	7,843	7.7	356	349	45.4	134.1
1 to 50	985	16,598	16.8	1,026	1,042	61.8	92.5
51 to 99	629	13,211	21.0	1,413	2,246	106.9	85.6
100	2,011	27,132	13.5	3,026	1,504	111.5	71.1
Percent Lit When Open							
Zero	47	293	6.3	Q	Q	Q	Q
1 to 50	929	10,203	11.0	540	581	52.9	122.4
51 to 99	1,108	18,288	16.5	1,736	1,567	94.9	65.2
100	2,176	32,789	15.1	3,490	1,603	106.4	84.0
Building Never Open/ Electricity Not Used	386	3,210	8.3	46	120	14.4	415.9
Percent Lit When Closed							
Zero	1,964	17,385	8.9	1,132	577	65.1	62.6
1 to 50	1,882	30,948	16.4	2,626	1,396	84.9	70.3
51 to 100	136	2,093	15.4	235	1,725	112.3	84.7
Building Never Closed/ Electricity Not Used	664	14,357	21.6	1,827	2,752	127.2	125.2
Heating Equipment (more than one may apply)							
Heat Pumps	476	8,814	18.5	805	1,692	91.3	74.8
Packaged Heat Pumps	278	5,442	19.6	523	1,880	96.0	70.0
Split-System Heat Pumps	166	2,581	15.5	198	1,191	76.8	71.6
Individual Room Heat Pumps	58	2,691	46.5	255	4,405	94.7	85.5
Furnaces	1,864	19,615	10.5	1,493	801	76.1	80.2
Individual Space Heaters	819	12,545	15.3	1,024	1,250	81.6	79.5
District Heat	65	5,166	79.7	986	15,202	190.8	100.2
Boilers	579	20,423	35.3	2,244	3,877	109.9	95.6
Packaged Heating Units	953	18,021	18.9	1,729	1,814	95.9	76.5
Other	205	3,262	15.9	231	1,127	70.7	66.4
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	1,006	11,035	11.0	924	918	83.7	80.8
Heat Pumps	492	9,041	18.4	837	1,700	92.6	76.4
Packaged Heat Pumps	288	5,426	18.9	529	1,838	97.4	70.6
Split-System Heat Pumps	174	2,606	15.0	204	1,176	78.4	73.9
Individual Room Heat Pumps	58	2,940	50.7	278	4,788	94.4	85.1
Individual Air Conditioners	742	12,558	16.9	1,080	1,455	86.0	94.1
District Chilled Water	33	2,853	86.7	538	16,353	188.7	74.9
Central Chillers	111	11,636	105.1	1,531	13,824	131.6	87.3
Packaged Air Conditioning Units	1,613	29,969	18.6	2,862	1,775	95.5	79.9
Swamp Coolers	122	1,561	12.8	158	1,296	101.1	95.3
Other	40	1,232	31.1	142	3,583	115.1	84.3

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
**All Buildings* ..... **	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Main Equipment Replaced Since 1990 (more than one may apply)							
Heating	1,197	16,403	13.7	1,367	1,143	83.4	80.5
Cooling	1,356	20,995	15.5	1,949	1,437	92.8	79.4
Water Heating Equipment							
Centralized System	2,513	34,671	13.8	3,432	1,366	99.0	85.9
Distributed System	785	11,540	14.7	835	1,064	72.4	70.5
Combination of Centralized and Distributed System	175	10,267	58.8	1,231	7,051	119.9	70.6
Lighting Equipment Types (more than one may apply)							
Incandescent	2,184	38,528	17.6	3,916	1,793	101.6	80.2
Standard Fluorescent	3,943	59,688	15.1	5,644	1,431	94.6	79.6
Compact Fluorescent	941	27,571	29.3	3,208	3,409	116.4	87.7
High Intensity Discharge	455	20,643	45.4	2,141	4,706	103.7	82.1
Halogen	565	17,703	31.3	1,982	3,505	111.9	86.6
Other	8	269	31.7	Q	Q	Q	90.9
Refrigeration Equipment (more than one may apply)[a]							
Any Refrigeration.....	3,176	52,974	16.7	5,213	1,641	98.4	79.5
Commercial Refrigeration	1,007	26,768	26.6	3,336	3,314	124.6	103.3
Walk-In Units	666	20,254	30.4	2,766	4,152	136.6	109.4
Cases or Cabinets	825	20,424	24.8	2,703	3,278	132.3	106.3
Residential-Type Units	2,370	38,884	16.4	3,466	1,463	89.1	72.5
Vending Machines	996	35,335	35.5	3,721	3,735	105.3	81.1
No Refrigeration	1,469	11,809	8.0	607	413	51.4	83.8
Office Equipment (more than one may apply)							
Computers	3,081	55,627	18.1	5,376	1,745	96.6	77.9
With Flat Screen Monitors	877	26,417	30.1	2,966	3,383	112.3	70.3
Dedicated Servers	1,175	36,338	30.9	3,760	3,201	103.5	71.6
Laser Printers	1,970	33,012	16.8	3,009	1,528	91.2	75.1
Inkjet Printers	1,420	32,210	22.7	3,302	2,325	102.5	75.2
FAX Machines	2,715	52,373	19.3	5,092	1,876	97.2	76.0
Photocopiers	1,939	46,257	23.9	4,466	2,303	96.5	72.8
Number of Computers							
None	1,565	9,156	5.9	444	284	48.5	118.2
1 to 4	1,670	12,395	7.4	1,015	608	81.9	116.9
5 to 9	559	7,179	12.8	546	976	76.0	90.8
10 to 19	370	6,610	17.9	515	1,393	77.9	75.2
20 to 49	255	7,414	29.1	707	2,777	95.3	75.3
50 to 99	110	5,376	48.9	513	4,662	95.4	73.9
100 to 249	79	6,690	84.3	714	8,992	106.7	80.5
250 or More	38	9,963	264.3	1,366	36,244	137.1	61.2
Number of Dedicated Servers							
None	3,471	28,445	8.2	2,060	594	72.4	101.5
1 to 4	1,060	24,116	22.8	2,234	2,108	92.6	83.6
5 to 9	58	3,864	67.0	405	7,027	104.9	67.0
10 to 19	30	3,027	100.1	432	14,284	142.7	50.2
20 to 49	17	2,583	150.0	307	17,825	118.9	64.1
50 or More	10	2,748	276.6	382	38,458	139.0	60.2

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
**All Buildings* ..... **	4,645	64,783	13.9	5,820	1,253	89.8	79.9
Number of Photocopiers							
None	2,706	18,526	6.8	1,355	501	73.1	118.1
One	1,250	15,475	12.4	1,130	904	73.0	90.0
2 to 4	549	15,082	27.5	1,334	2,430	88.5	77.2
5 to 9	85	5,515	64.7	612	7,173	110.9	57.3
10 or More	54	10,185	187.2	1,389	25,537	136.4	66.7
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	799	22,223	27.8	2,711	3,392	122.0	99.5
Activities with Large Amounts of Hot Water	567	19,482	34.4	2,465	4,349	126.6	113.3
Separate Computer Area	553	26,873	48.6	2,895	5,236	107.7	76.5
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	466	19,597	42.1	2,380	5,112	121.4	77.4
Economizer Cycle	508	21,108	41.5	2,589	5,092	122.6	80.1
HVAC Maintenance	2,581	51,163	19.8	5,170	2,003	101.1	81.3
Energy Management and Control System (EMCS)	252	15,630	62.0	1,782	7,068	114.0	82.4
Window and Interior Lighting Features (more than one may apply)							
Multipaned Windows	2,201	38,910	17.7	3,929	1,785	101.0	89.3
Tinted Window Glass	1,323	29,887	22.6	3,098	2,341	103.6	76.6
Reflective Window Glass	308	8,544	27.8	927	3,011	108.5	75.3
External Overhangs or Awnings	1,233	17,242	14.0	1,737	1,408	100.7	77.6
Skylights or Atriums	331	12,546	37.9	1,307	3,950	104.2	92.3
Daylighting Sensors	74	2,868	38.7	377	5,084	131.4	99.8
Specular Reflectors	928	26,118	28.2	2,829	3,049	108.3	85.6
Electronic Ballasts	2,577	46,882	18.2	4,746	1,842	101.2	80.4
Energy Management and Control System (EMCS) For Lighting	60	4,781	80.1	538	9,025	112.6	75.9
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]							
Heating	2,878	42,722	14.8	3,740	1,300	87.6	75.9
Cooling	2,761	43,205	15.6	3,844	1,392	89.0	71.2
Lighting	3,685	46,987	12.7	3,818	1,036	81.3	67.7
Office Equipment	1,504	19,397	12.9	1,465	975	75.5	72.7

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
All Buildings*	4,645	64,783	13.9	5,820	1,253	89.8	79.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Building Floorspace (Square Feet)							
1,001 to 5,000	2,552	6,789	2.7	12,812	5.0	1.89	19.08
5,001 to 10,000	889	6,585	7.4	9,398	10.6	1.43	18.22
10,001 to 25,000	738	11,535	15.6	13,140	17.8	1.14	16.93
25,001 to 50,000	241	8,668	35.9	10,392	43.1	1.20	15.44
50,001 to 100,000	129	9,057	70.4	11,897	92.5	1.31	15.68
100,001 to 200,000	65	9,064	138.8	13,391	205.1	1.48	14.34
200,001 to 500,000	25	7,176	289.0	10,347	416.7	1.44	14.28
Over 500,000	7	5,908	896.1	11,201	1698.8	1.90	14.62
Principal Building Activity							
Education	386	9,874	25.6	12,008	31.1	1.22	14.64
Food Sales	226	1,255	5.6	4,990	22.1	3.98	19.91
Food Service	297	1,654	5.6	6,865	23.1	4.15	16.07
Health Care	129	3,163	24.6	7,440	57.8	2.35	12.53
Inpatient	8	1,905	241.4	5,329	675.4	2.80	11.23
Outpatient	121	1,258	10.4	2,111	17.5	1.68	17.74
Lodging	142	5,096	35.8	7,445	52.3	1.46	14.61
Retail (Other Than Mall).....	443	4,317	9.7	5,980	13.5	1.39	18.75
Office	824	12,208	14.8	20,841	25.3	1.71	18.39
Public Assembly	277	3,939	14.2	5,790	20.9	1.47	15.65
Public Order and Safety	71	1,090	15.5	1,917	27.2	1.76	15.18
Religious Worship	370	3,754	10.1	2,457	6.6	0.65	15.06
Service	622	4,050	6.5	4,779	7.7	1.18	15.33
Warehouse and Storage	597	10,078	16.9	6,894	11.5	0.68	15.12
Other	79	1,738	21.9	4,420	55.7	2.54	15.47
Vacant	182	2,567	14.1	751	4.1	0.29	14.02
Year Constructed							
Before 1920	330	3,769	11.4	4,131	12.5	1.10	13.66
1920 to 1945	527	6,871	13.0	8,670	16.4	1.26	13.98
1946 to 1959	562	7,045	12.5	8,540	15.2	1.21	15.10
1960 to 1969	579	8,101	14.0	11,378	19.7	1.40	15.44
1970 to 1979	731	10,772	14.7	16,129	22.1	1.50	15.77
1980 to 1989	707	10,332	14.6	17,346	24.5	1.68	16.78
1990 to 1999	876	12,360	14.1	18,761	21.4	1.52	17.09
2000 to 2003	334	5,533	16.6	7,623	22.8	1.38	17.28
Census Region and Division							
Northeast	726	12,905	17.8	21,344	29.4	1.65	16.79
New England	233	2,964	12.7	4,851	20.9	1.64	16.53
Middle Atlantic	493	9,941	20.1	16,493	33.4	1.66	16.87
Midwest	1,266	17,080	13.5	21,521	17.0	1.26	12.74
East North Central	696	11,595	16.7	15,908	22.9	1.37	12.69
West North Central	571	5,485	9.6	5,613	9.8	1.02	12.87
South	1,775	23,489	13.2	31,595	17.8	1.35	16.22
South Atlantic	874	12,258	14.0	17,563	20.1	1.43	16.51
East South Central	348	3,393	9.8	4,569	13.1	1.35	14.78
West South Central	553	7,837	14.2	9,463	17.1	1.21	16.45
West	878	11,310	12.9	18,118	20.6	1.60	19.88
Mountain	299	3,675	12.3	5,629	18.9	1.53	14.76
Pacific	580	7,635	13.2	12,488	21.5	1.64	23.58

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Climate Zone: 30-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	855	10,622	12.4	13,709	16.0	1.29	13.85
5,500-7,000 HDD	1,173	17,335	14.8	24,455	20.9	1.41	13.89
4,000-5,499 HDD	673	11,504	17.1	18,507	27.5	1.61	16.33
Fewer than 4,000 HDD	1,276	15,739	12.3	22,372	17.5	1.42	18.45
2,000 CDD or More and --							
Fewer than 4,000 HDD	669	9,584	14.3	13,534	20.2	1.41	18.70
Number of Floors							
One	3,136	25,981	8.3	33,617	10.7	1.29	17.35
Two	1,031	16,270	15.8	20,932	20.3	1.29	15.97
Three	339	7,501	22.1	9,143	26.9	1.22	14.76
Four to Nine	128	10,085	78.7	18,968	148.0	1.88	14.20
Ten or More	12	4,947	420.0	9,917	842.1	2.00	16.08
Elevators and Escalators (more than one may apply)							
Any Elevators	309	24,617	79.7	42,252	136.8	1.72	14.95
Number of Elevators							
One	208	8,221	39.5	10,967	52.7	1.33	14.99
Two to Five	88	10,129	115.1	17,217	195.7	1.70	14.88
Six or More	13	6,268	491.5	14,068	1103.1	2.24	15.02
Any Escalators	6	2,350	388.7	4,861	804.2	2.07	17.24
Number of Workers (main shift)							
Fewer than 5	2,653	15,492	5.8	13,615	5.1	0.88	16.66
5 to 9	778	6,166	7.9	8,265	10.6	1.34	17.64
10 to 19	563	7,803	13.9	9,936	17.7	1.27	16.72
20 to 49	398	10,989	27.6	16,406	41.2	1.49	15.62
50 to 99	147	7,934	53.8	11,165	75.7	1.41	15.34
100 to 249	77	6,871	89.7	12,970	169.3	1.89	15.48
250 or More	30	9,528	320.4	20,222	680.0	2.12	15.26
Weekly Operating Hours							
Fewer than 40	1,002	6,863	6.9	3,695	3.7	0.54	16.24
40 to 48	1,117	11,622	10.4	12,749	11.4	1.10	16.49
49 to 60	1,062	15,723	14.8	19,461	18.3	1.24	16.50
61 to 84	591	10,334	17.5	15,040	25.4	1.46	16.28
85 to 167	400	7,092	17.7	14,287	35.8	2.01	16.06
Open Continuously	475	13,149	27.7	27,346	57.6	2.08	14.97
Ownership and Occupancy							
Nongovernment Owned	4,011	49,421	12.3	69,675	17.4	1.41	16.58
Owner Occupied	1,841	23,591	12.8	33,551	18.2	1.42	16.29
Nonowner Occupied	2,029	23,914	11.8	35,713	17.6	1.49	16.89
Unoccupied	141	1,916	13.6	411	2.9	0.21	Q
Government Owned	635	15,363	24.2	22,902	36.1	1.49	14.16
Federal	46	1,956	42.9	3,964	86.8	2.03	13.08
State	164	3,808	23.2	7,090	43.2	1.86	13.81
Local	425	9,599	22.6	11,849	27.9	1.23	14.80
Vacancy Status							
Completely Vacant	157	2,161	13.8	516	3.3	0.24	13.88
Mostly Vacant	25	406	16.1	Q	Q	Q	Q
Partially Vacant	548	12,382	22.6	17,624	32.2	1.42	16.23
Not At All Vacant	3,915	49,834	12.7	74,203	19.0	1.49	15.85

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Number of Establishments							
One	3,754	45,144	12.0	65,153	17.4	1.44	15.64
2 to 5	643	10,960	17.1	16,030	24.9	1.46	16.15
6 to 10	55	1,958	35.7	3,402	62.1	1.74	15.78
11 to 20	23	1,951	85.7	2,718	119.4	1.39	17.94
More than 20	14	2,609	181.1	4,759	330.4	1.82	18.53
Currently Unoccupied	157	2,161	13.8	516	3.3	0.24	13.88
Predominant Exterior Wall Material							
Brick, Stone or Stucco	2,044	32,817	16.1	48,399	23.7	1.47	15.19
Concrete (Block or Poured)	786	10,832	13.8	16,015	20.4	1.48	16.44
Concrete Panels	131	6,559	50.2	10,792	82.7	1.65	16.17
Siding or Shingles	779	4,120	5.3	5,071	6.5	1.23	18.34
Metal Panels	825	7,912	9.6	8,196	9.9	1.04	17.70
Window Glass	17	1,024	60.1	1,709	100.3	1.67	18.08
Other	47	1,113	23.8	1,801	38.6	1.62	14.88
No One Major Type	18	406	22.9	Q	Q	Q	Q
Predominant Roof Material							
Built-Up	1,036	21,170	20.4	33,145	32.0	1.57	15.91
Shingles (Not Wood)	1,325	10,195	7.7	13,564	10.2	1.33	16.49
Metal Surfacing	1,288	11,944	9.3	10,782	8.4	0.90	17.12
Synthetic or Rubber	511	14,730	28.8	24,825	48.6	1.69	15.05
Slate or Tile	263	2,462	9.4	3,794	14.4	1.54	18.30
Wooden Materials	122	887	7.3	1,140	9.4	1.28	16.68
Concrete	61	2,231	36.7	3,373	55.5	Q	14.28
Other	16	598	38.1	1,235	78.7	2.06	Q
No One Major Type	25	565	22.7	719	28.9	1.27	18.21
Renovations in Buildings Constructed Before 1980 (more than one may apply)							
Any Type of Renovation Since 1980	1,018	17,844	17.5	25,657	25.2	1.44	14.53
Addition or Annex	256	6,551	25.6	9,530	37.2	1.45	13.00
Reduction In Floorspace	22	1,012	46.1	1,710	77.8	1.69	14.67
Cosmetic Improvements	741	13,119	17.7	19,621	26.5	1.50	14.90
Wall or Roof Replacement	370	8,070	21.8	11,653	31.5	1.44	14.99
Interior Wall Re-Configuration	411	8,518	20.7	13,131	32.0	1.54	14.41
HVAC Equipment Upgrade	442	10,768	24.4	16,899	38.3	1.57	14.61
Lighting Upgrade	455	10,275	22.6	15,732	34.6	1.53	14.50
Window Replacement	310	6,354	20.5	9,102	29.3	1.43	14.85
Plumbing System Upgrade	315	7,144	22.7	10,965	34.8	1.53	14.66
Insulation Upgrade	227	4,015	17.7	5,868	25.8	1.46	15.41
Other Renovation	19	523	27.3	791	41.3	1.51	15.96
No Renovations Since 1980	1,710	18,714	10.9	23,191	13.6	1.24	15.65
Building Newer than 1980	1,917	28,225	14.7	43,729	22.8	1.55	17.00

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Energy Sources (more than one may apply)							
Electricity	4,404	63,307	14.4	92,574	21.0	1.46	15.91
Natural Gas	2,391	43,468	18.2	67,462	28.2	1.55	15.02
Fuel Oil	451	15,157	33.6	25,905	57.5	1.71	14.72
District Heat	67	5,443	81.4	14,098	210.7	2.59	13.86
District Chilled Water	33	2,853	86.7	7,647	232.3	2.68	14.20
Propane	502	7,076	14.1	9,424	18.8	1.33	16.12
Other	132	1,401	10.6	2,032	15.4	1.45	14.63
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,766	28,600	16.2	41,737	23.6	1.46	17.59
Natural Gas	2,165	36,959	17.1	54,959	25.4	1.49	14.93
Fuel Oil	360	5,988	16.6	7,485	20.8	1.25	12.67
District Heat	65	5,198	79.7	13,623	208.9	2.62	13.71
Propane	372	3,204	8.6	3,303	8.9	1.03	20.65
Other	113	842	7.4	956	8.5	1.14	15.65
Primary Space-Heating Energy Source							
Electricity	1,258	15,996	12.7	22,011	17.5	1.38	20.22
Natural Gas	1,999	32,970	16.5	48,198	24.1	1.46	14.69
Fuel Oil	282	3,818	13.5	3,963	14.1	1.04	13.47
District Heat	63	4,907	77.4	13,178	208.0	2.69	13.86
Propane	308	1,955	6.4	1,928	6.3	0.99	26.96
Other	72	382	5.3	338	4.7	0.88	17.47
Cooling Energy Sources (more than one may apply)							
Electricity	3,589	54,321	15.1	81,478	22.7	1.50	16.23
Natural Gas	17	1,018	58.9	2,005	116.0	1.97	12.60
District Chilled Water	33	2,853	86.7	7,647	232.3	2.68	14.20
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,910	27,490	14.4	36,908	19.3	1.34	17.21
Natural Gas	1,445	28,820	19.9	47,610	32.9	1.65	14.85
Fuel Oil	94	1,880	19.9	2,700	28.6	1.44	13.10
District Heat	27	3,088	113.1	8,155	298.6	2.64	14.49
Propane	128	1,422	11.1	1,871	14.6	1.32	23.21
Cooking Energy Sources (more than one may apply)							
Electricity	410	13,161	32.1	23,623	57.6	1.79	14.96
Natural Gas	457	15,438	33.8	29,444	64.5	1.91	14.20
Propane	108	1,460	13.6	2,508	23.3	1.72	21.92
Energy End Uses (more than one may apply)							
Buildings with Space Heating	3,982	60,028	15.1	89,615	22.5	1.49	15.71
Buildings with Cooling	3,625	56,940	15.7	87,739	24.2	1.54	16.06
Buildings with Water Heating	3,472	56,478	16.3	87,218	25.1	1.54	15.86
Buildings with Cooking	801	22,237	27.8	40,266	50.3	1.81	14.84
Buildings with Manufacturing	119	3,138	26.5	3,950	33.3	1.26	15.53
Buildings with Electricity Generation	149	12,821	85.9	25,422	170.4	1.98	15.02

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
**All Buildings* ..... **	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Percent of Floorspace Heated							
Not Heated	663	4,756	7.2	2,962	4.5	0.62	25.77
1 to 50	523	6,850	13.1	5,600	10.7	0.82	18.76
51 to 99	498	8,107	16.3	11,972	24.1	1.48	16.04
100	2,962	45,071	15.2	72,043	24.3	1.60	15.46
Percent of Floorspace Cooled							
Not Cooled	1,020	7,843	7.7	4,838	4.7	0.62	13.59
1 to 50	985	16,598	16.8	15,503	15.7	0.93	15.11
51 to 99	629	13,211	21.0	22,446	35.7	1.70	15.89
100	2,011	27,132	13.5	49,791	24.8	1.84	16.46
Percent Lit When Open							
Zero	47	293	6.3	Q	Q	Q	Q
1 to 50	929	10,203	11.0	8,599	9.3	0.84	15.92
51 to 99	1,108	18,288	16.5	28,253	25.5	1.54	16.28
100	2,176	32,789	15.1	54,958	25.3	1.68	15.75
Building Never Open/ Electricity Not Used	386	3,210	8.3	635	1.6	0.20	13.75
Percent Lit When Closed							
Zero	1,964	17,385	8.9	18,308	9.3	1.05	16.17
1 to 50	1,882	30,948	16.4	43,011	22.9	1.39	16.38
51 to 100	136	2,093	15.4	3,910	28.7	1.87	16.63
Building Never Closed/ Electricity Not Used	664	14,357	21.6	27,349	41.2	1.90	14.97
Heating Equipment (more than one may apply)							
Heat Pumps	476	8,814	18.5	14,249	30.0	1.62	17.71
Packaged Heat Pumps	278	5,442	19.6	9,330	33.6	1.71	17.85
Split-System Heat Pumps	166	2,581	15.5	3,696	22.2	1.43	18.65
Individual Room Heat Pumps	58	2,691	46.5	4,199	72.6	1.56	16.48
Furnaces	1,864	19,615	10.5	23,489	12.6	1.20	15.73
Individual Space Heaters	819	12,545	15.3	15,964	19.5	1.27	15.59
District Heat	65	5,166	79.7	13,505	208.3	2.61	13.70
Boilers	579	20,423	35.3	31,052	53.6	1.52	13.84
Packaged Heating Units	953	18,021	18.9	29,902	31.4	1.66	17.30
Other	205	3,262	15.9	3,988	19.5	1.22	17.29
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	1,006	11,035	11.0	14,441	14.4	1.31	15.63
Heat Pumps	492	9,041	18.4	14,738	29.9	1.63	17.61
Packaged Heat Pumps	288	5,426	18.9	9,356	32.5	1.72	17.70
Split-System Heat Pumps	174	2,606	15.0	3,776	21.7	1.45	18.48
Individual Room Heat Pumps	58	2,940	50.7	4,621	79.7	1.57	16.64
Individual Air Conditioners	742	12,558	16.9	16,175	21.8	1.29	14.98
District Chilled Water	33	2,853	86.7	7,647	232.3	2.68	14.20
Central Chillers	111	11,636	105.1	22,448	202.7	1.93	14.66
Packaged Air Conditioning Units	1,613	29,969	18.6	46,331	28.7	1.55	16.19
Swamp Coolers	122	1,561	12.8	2,350	19.3	1.51	14.89
Other	40	1,232	31.1	2,096	53.0	1.70	14.79

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Main Equipment Replaced Since 1990 (more than one may apply)							
Heating	1,197	16,403	13.7	21,542	18.0	1.31	15.75
Cooling	1,356	20,995	15.5	30,387	22.4	1.45	15.59
Water Heating Equipment							
Centralized System	2,513	34,671	13.8	54,768	21.8	1.58	15.96
Distributed System	785	11,540	14.7	14,394	18.3	1.25	17.23
Combination of Centralized and Distributed System	175	10,267	58.8	18,056	103.4	1.76	14.67
Lighting Equipment Types (more than one may apply)							
Incandescent	2,184	38,528	17.6	60,359	27.6	1.57	15.41
Standard Fluorescent	3,943	59,688	15.1	89,627	22.7	1.50	15.88
Compact Fluorescent	941	27,571	29.3	49,570	52.7	1.80	15.45
High Intensity Discharge	455	20,643	45.4	31,999	70.3	1.55	14.94
Halogen	565	17,703	31.3	30,218	53.4	1.71	15.25
Other	8	269	31.7	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]							
Any Refrigeration.....	3,176	52,974	16.7	82,557	26.0	1.56	15.84
Commercial Refrigeration	1,007	26,768	26.6	50,937	50.6	1.90	15.27
Walk-In Units	666	20,254	30.4	41,811	62.8	2.06	15.12
Cases or Cabinets	825	20,424	24.8	41,463	50.3	2.03	15.34
Residential-Type Units	2,370	38,884	16.4	54,108	22.8	1.39	15.61
Vending Machines	996	35,335	35.5	56,290	56.5	1.59	15.13
No Refrigeration	1,469	11,809	8.0	10,020	6.8	0.85	16.50
Office Equipment (more than one may apply)							
Computers	3,081	55,627	18.1	85,407	27.7	1.54	15.89
With Flat Screen Monitors	877	26,417	30.1	46,704	53.3	1.77	15.75
Dedicated Servers	1,175	36,338	30.9	59,377	50.6	1.63	15.79
Laser Printers	1,970	33,012	16.8	47,880	24.3	1.45	15.91
Inkjet Printers	1,420	32,210	22.7	52,520	37.0	1.63	15.90
FAX Machines	2,715	52,373	19.3	80,902	29.8	1.54	15.89
Photocopiers	1,939	46,257	23.9	70,079	36.1	1.52	15.69
Number of Computers							
None	1,565	9,156	5.9	7,170	4.6	0.78	16.13
1 to 4	1,670	12,395	7.4	17,257	10.3	1.39	17.00
5 to 9	559	7,179	12.8	8,649	15.5	1.20	15.85
10 to 19	370	6,610	17.9	8,588	23.2	1.30	16.68
20 to 49	255	7,414	29.1	11,778	46.3	1.59	16.66
50 to 99	110	5,376	48.9	7,888	71.7	1.47	15.39
100 to 249	79	6,690	84.3	10,790	135.9	1.61	15.12
250 or More	38	9,963	264.3	20,456	542.6	2.05	14.97
Number of Dedicated Servers							
None	3,471	28,445	8.2	33,201	9.6	1.17	16.12
1 to 4	1,060	24,116	22.8	34,991	33.0	1.45	15.66
5 to 9	58	3,864	67.0	6,784	117.6	1.76	16.74
10 to 19	30	3,027	100.1	6,267	207.2	2.07	14.50
20 to 49	17	2,583	150.0	4,740	275.2	1.84	15.44
50 or More	10	2,748	276.6	6,594	663.9	2.40	17.26

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91
Number of Photocopiers							
None	2,706	18,526	6.8	22,498	8.3	1.21	16.61
One	1,250	15,475	12.4	18,436	14.7	1.19	16.32
2 to 4	549	15,082	27.5	20,980	38.2	1.39	15.72
5 to 9	85	5,515	64.7	9,441	110.7	1.71	15.43
10 or More	54	10,185	187.2	21,223	390.1	2.08	15.27
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	799	22,223	27.8	40,252	50.4	1.81	14.85
Activities with Large Amounts of Hot Water	567	19,482	34.4	34,904	61.6	1.79	14.16
Separate Computer Area	553	26,873	48.6	44,552	80.6	1.66	15.39
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	466	19,597	42.1	36,254	77.9	1.85	15.23
Economizer Cycle	508	21,108	41.5	39,593	77.9	1.88	15.29
HVAC Maintenance	2,581	51,163	19.8	81,328	31.5	1.59	15.73
Energy Management and Control System (EMCS)	252	15,630	62.0	27,646	109.6	1.77	15.51
Window and Interior Lighting Features (more than one may apply)							
Multipaned Windows	2,201	38,910	17.7	59,356	27.0	1.53	15.11
Tinted Window Glass	1,323	29,887	22.6	49,568	37.5	1.66	16.00
Reflective Window Glass	308	8,544	27.8	14,414	46.8	1.69	15.55
External Overhangs or Awnings	1,233	17,242	14.0	28,248	22.9	1.64	16.27
Skylights or Atriums	331	12,546	37.9	19,284	58.3	1.54	14.76
Daylighting Sensors	74	2,868	38.7	6,261	84.5	2.18	16.62
Specular Reflectors	928	26,118	28.2	43,466	46.9	1.66	15.37
Electronic Ballasts	2,577	46,882	18.2	74,873	29.1	1.60	15.78
Energy Management and Control System (EMCS) For Lighting	60	4,781	80.1	8,967	150.3	1.88	16.65
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]							
Heating	2,878	42,722	14.8	60,293	20.9	1.41	16.12
Cooling	2,761	43,205	15.6	62,872	22.8	1.46	16.36
Lighting	3,685	46,987	12.7	62,313	16.9	1.33	16.32
Office Equipment	1,504	19,397	12.9	23,915	15.9	1.23	16.32

Table C4. Expenditures for Sum of Major Fuels for Non-Mall Buildings, 2003

	All Buildings*			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings*	4,645	64,783	13.9	92,577	19.9	1.43	15.91

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Building Floorspace (Square Feet)												
1,001 to 5,000	118	206	240	108	1,025	1,895	2,533	1,336	115.1	108.5	94.9	80.6
5,001 to 10,000	102	117	185	112	1,123	1,565	2,658	1,239	90.7	74.7	69.5	90.8
10,001 to 25,000	148	228	250	150	1,972	3,098	4,378	2,087	75.3	73.6	57.2	71.7
25,001 to 50,000	106	247	205	114	1,292	2,567	3,168	1,643	82.4	96.3	64.8	69.4
50,001 to 100,000	203	212	255	89	2,040	2,260	3,435	1,322	99.4	93.6	74.3	67.6
100,001 to 200,000	209	252	375	97	2,117	2,296	3,475	1,177	98.8	109.8	107.9	82.7
200,001 to 500,000	189	244	191	100	1,781	2,196	1,914	1,286	106.3	111.1	99.9	78.1
Over 500,000	Q	184	246	140	1,556	1,203	1,928	1,221	Q	153.2	127.8	115.0
Principal Building Activity												
Education	171	219	301	129	1,683	2,541	3,983	1,667	101.6	86.3	75.5	77.6
Food Sales	Q	70	91	Q	238	320	487	Q	Q	219.1	187.7	Q
Food Service	Q	99	217	65	172	453	764	265	Q	218.8	283.4	243.8
Health Care	114	164	217	99	535	798	1,277	553	212.2	205.6	169.8	179.6
Inpatient	Q	119	190	67	358	438	838	270	Q	272.2	226.7	246.8
Outpatient	Q	45	27	33	177	359	438	283	Q	124.4	60.9	115.3
Lodging	108	125	164	113	1,171	1,144	1,694	1,087	Q	109.0	96.9	103.7
Retail (Other Than Mall)	41	90	127	61	630	880	1,844	963	65.0	102.7	68.7	63.2
Office	305	325	329	175	3,012	2,989	3,782	2,425	101.2	108.8	87.0	72.1
Public Assembly	93	103	109	64	1,048	1,012	1,174	706	Q	101.7	93.2	91.2
Public Order and Safety	Q	Q	Q	Q	362	221	373	Q	Q	Q	Q	Q
Religious Worship	33	59	57	14	627	1,115	1,498	515	52.1	52.8	38.3	27.6
Service	59	110	90	53	740	1,289	1,358	664	79.8	85.0	66.3	80.0
Warehouse and Storage	63	225	106	61	1,523	3,017	3,966	1,572	41.6	74.7	26.7	39.0
Other	Q	Q	Q	Q	649	316	Q	186	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	517	984	701	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	114	123	41	Q	1,406	1,552	516	295	81.4	79.4	79.5	Q
1920 to 1945	221	262	79	59	2,504	2,099	1,348	920	88.2	124.6	58.3	64.1
1946 to 1959	189	165	138	74	2,094	2,027	1,795	1,128	90.5	81.2	76.8	65.2
1960 to 1969	211	205	201	120	1,737	2,229	2,538	1,597	121.4	91.8	79.2	75.4
1970 to 1979	191	322	320	190	1,723	3,237	3,726	2,086	111.0	99.5	85.8	91.1
1980 to 1989	146	221	449	218	1,374	1,949	4,768	2,241	106.2	113.3	94.2	97.4
1990 to 1999	118	286	524	170	1,370	2,746	6,241	2,004	85.9	104.0	84.0	84.9
2000 to 2003	Q	107	197	56	698	1,240	2,557	1,038	Q	86.3	77.1	54.2
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	197	539	N	254	2,416	5,615	N	2,591	81.6	96.0	N	98.0
5,500-7,000 HDD	525	1,038	N	197	5,398	9,867	N	2,070	97.3	105.2	N	95.4
4,000-5,499 HDD	549	113	407	Q	5,092	1,597	4,122	693	107.8	70.5	98.7	94.0
Fewer than 4,000 HDD	N	N	884	329	N	N	10,338	5,401	N	N	85.5	60.9
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	658	66	N	N	9,029	555	N	N	72.8	118.8
Number of Floors												
One	271	565	736	365	3,151	6,104	11,757	4,969	86.0	92.5	62.6	73.4
Two	254	429	401	227	3,029	5,177	4,946	3,118	83.8	82.9	81.1	72.7
Three	156	236	164	64	2,083	2,584	1,938	896	74.9	91.4	84.4	71.0
Four to Nine	368	380	435	153	3,003	2,660	3,094	1,328	122.6	142.9	140.6	115.2
Ten or More	222	79	212	Q	1,640	555	1,754	999	135.5	142.6	121.1	103.1

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Elevators and Escalators (more than one may apply)												
Any Elevators	723	793	938	372	6,137	6,677	7,949	3,855	117.8	118.8	118.0	96.5
Number of Elevators												
One	167	289	200	77	1,585	3,084	2,475	1,077	105.1	93.5	80.7	71.3
Two to Five	302	334	393	128	2,971	2,704	3,094	1,360	101.7	123.5	127.1	94.3
Six or More	254	171	345	167	1,581	889	2,380	1,418	160.8	192.0	144.9	117.8
Any Escalators	Q	Q	130	Q	541	Q	1,002	Q	Q	Q	129.4	Q
Number of Workers (main shift)												
Fewer than 5	153	341	211	113	2,376	4,958	5,670	2,489	64.3	68.8	37.1	45.3
5 to 9	89	131	169	80	1,085	1,463	2,595	1,023	81.7	89.4	65.2	78.1
10 to 19	129	182	199	84	1,872	2,081	2,741	1,109	68.9	87.5	72.7	75.8
20 to 49	208	310	366	167	2,314	2,856	3,883	1,935	89.7	108.5	94.2	86.1
50 to 99	165	231	218	113	1,598	2,311	2,654	1,370	103.4	100.0	82.3	82.5
100 to 249	179	205	332	121	1,331	1,609	2,534	1,397	134.6	127.3	131.2	86.8
250 or More	349	290	453	234	2,329	1,800	3,413	1,986	149.6	161.0	132.7	117.6
Weekly Operating Hours												
Fewer than 40	35	83	68	41	923	2,300	2,544	1,096	37.8	36.2	26.8	37.7
40 to 48	161	239	257	117	2,111	2,783	4,567	2,161	76.3	85.8	56.2	54.0
49 to 60	221	447	347	163	3,098	4,614	5,556	2,455	71.4	97.0	62.5	66.5
61 to 84	195	251	329	150	2,048	2,583	3,754	1,950	95.0	97.2	87.5	76.8
85 to 167	161	286	320	122	1,317	2,008	2,459	1,308	122.5	142.7	130.1	93.1
Open Continuously	498	383	627	318	3,407	2,793	4,608	2,340	146.2	137.1	136.1	136.0
Ownership and Occupancy												
Nongovernment Owned	993	1,143	1,408	659	10,389	12,470	17,826	8,736	95.6	91.7	79.0	75.5
Owner Occupied	581	588	627	265	5,904	6,171	7,869	3,648	98.3	95.3	79.6	72.7
Nonowner Occupied	408	541	774	392	4,204	5,539	9,358	4,813	96.9	97.7	82.7	81.4
Unoccupied	Q	Q	Q	Q	Q	760	600	Q	Q	Q	Q	Q
Government Owned	278	547	541	252	2,517	4,610	5,662	2,574	110.4	118.6	95.5	97.8
Federal	Q	Q	66	Q	Q	Q	521	Q	Q	Q	126.9	Q
State	Q	119	219	88	599	764	1,718	727	Q	156.1	127.7	121.3
Local	174	251	255	120	1,706	2,925	3,423	1,545	101.7	85.9	74.6	78.0
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	892	652	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	297	322	302	164	3,117	3,119	4,061	2,085	95.3	103.3	74.4	78.9
Not At All Vacant	962	1,340	1,639	741	9,271	12,976	18,726	8,860	103.7	103.3	87.5	83.6
Number of Establishments												
One	841	1,262	1,374	689	8,061	12,359	16,947	7,776	104.4	102.1	81.1	88.6
2 to 5	245	291	324	133	2,517	2,803	3,740	1,900	97.2	103.8	86.6	70.0
6 to 10	58	56	76	25	571	510	550	327	101.9	110.1	138.2	76.9
11 to 20	Q	Q	62	Q	722	301	589	340	Q	Q	104.7	Q
More than 20	Q	Q	105	Q	696	Q	1,011	688	Q	Q	104.2	Q
Currently Unoccupied	Q	Q	Q	Q	Q	892	652	Q	Q	Q	Q	Q

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Predominant Exterior Wall Material												
Brick, Stone or Stucco	770	1,005	1,009	403	7,248	9,248	11,574	4,747	106.2	108.7	87.2	84.8
Concrete (Block or Poured)	187	288	343	156	2,184	2,887	3,985	1,777	85.4	99.9	86.0	88.0
Concrete Panels	Q	150	288	153	599	1,230	2,758	1,972	Q	121.6	104.6	77.7
Siding or Shingles	76	71	73	57	1,193	1,183	1,045	698	63.4	60.0	69.9	81.3
Metal Panels	104	95	165	99	1,054	1,880	3,426	1,552	98.7	50.5	48.2	63.7
Window Glass	Q	Q	Q	Q	Q	Q	280	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	303	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material												
Built-Up	414	586	707	378	4,068	5,262	7,430	4,411	101.7	111.3	95.1	85.6
Shingles (Not Wood)	207	258	236	122	2,022	3,199	3,325	1,649	102.4	80.7	70.9	73.7
Metal Surfacing	58	161	290	121	1,027	2,663	6,309	1,946	56.1	60.3	46.0	62.3
Synthetic or Rubber	468	482	514	185	4,116	4,443	4,298	1,873	113.7	108.5	119.6	98.7
Slate or Tile	Q	30	79	47	480	306	1,056	620	Q	98.3	74.9	75.4
Wooden Materials	Q	Q	Q	Q	Q	Q	301	244	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	426	400	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	537	566	416	248	5,104	5,437	4,462	2,841	105.2	104.0	93.2	87.3
Addition or Annex	187	241	195	110	1,797	1,970	1,804	979	104.0	122.4	108.1	112.1
Reduction In Floorspace	Q	Q	Q	Q	404	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	419	426	285	188	3,952	3,879	3,105	2,183	106.1	109.8	91.7	85.9
Wall or Roof Replacement	260	230	171	115	2,676	2,238	1,863	1,294	97.2	103.0	92.0	89.2
Interior Wall Re-Configuration	265	294	201	151	2,489	2,586	1,936	1,507	106.5	113.9	103.7	100.0
HVAC Equipment Upgrade	338	369	278	172	3,027	3,332	2,584	1,825	111.7	110.8	107.4	94.0
Lighting Upgrade	365	337	215	168	3,350	3,059	2,092	1,775	109.0	110.2	102.7	94.8
Window Replacement	271	184	82	76	2,750	1,847	916	842	98.6	99.5	89.1	90.8
Plumbing System Upgrade	261	215	148	124	2,511	1,898	1,366	1,369	103.8	113.3	108.6	90.8
Insulation Upgrade	138	115	84	43	1,370	1,212	857	576	101.0	95.2	97.6	75.2
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	390	511	362	219	4,360	5,708	5,462	3,185	89.4	89.5	66.3	68.7
Building Newer than 1980	344	613	1,170	445	3,441	5,935	13,565	5,283	100.0	103.4	86.3	84.1
Energy Sources (more than one may apply)												
Electricity	1,271	1,689	1,948	911	12,809	16,701	22,766	11,030	99.2	101.2	85.6	82.6
Natural Gas	997	1,379	1,389	726	9,181	13,163	13,311	7,813	108.6	104.8	104.4	92.9
Fuel Oil	636	389	488	247	6,080	2,832	4,122	2,123	104.6	137.4	118.4	116.2
District Heat	Q	336	324	Q	1,363	1,648	1,766	667	Q	204.2	183.7	Q
District Chilled Water	Q	Q	202	Q	620	596	1,150	487	Q	Q	175.3	Q
Propane	98	211	148	127	1,354	2,189	2,360	1,173	72.1	96.6	62.9	108.2
Other	Q	48	Q	Q	222	505	306	367	Q	94.3	Q	93.7

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Space-Heating Energy Sources (more than one may apply)												
Electricity	444	547	1,013	369	4,405	6,223	13,058	4,914	100.8	88.0	77.6	75.1
Natural Gas	778	1,227	1,082	595	7,238	12,180	10,693	6,848	107.5	100.7	101.2	86.9
Fuel Oil	358	108	92	Q	3,927	916	897	247	91.2	117.8	102.5	Q
District Heat	Q	335	318	Q	1,260	1,640	1,683	615	Q	204.0	188.7	Q
Propane	Q	27	70	Q	743	806	1,195	459	Q	33.7	58.7	80.4
Other	Q	Q	Q	Q	Q	272	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source												
Electricity	99	205	596	189	1,253	2,545	9,084	3,114	78.8	80.5	65.6	60.7
Natural Gas	677	1,112	950	541	6,439	11,321	9,299	5,911	105.1	98.2	102.2	91.5
Fuel Oil	240	Q	Q	Q	3,250	229	232	Q	73.9	Q	Q	Q
District Heat	Q	318	304	Q	1,205	1,531	1,614	557	Q	207.8	188.6	Q
Propane	Q	Q	22	Q	Q	569	674	332	Q	31.7	33.0	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)												
Electricity	1,074	1,387	1,767	792	10,402	13,781	20,623	9,515	103.3	100.7	85.7	83.3
Natural Gas	Q	Q	Q	Q	353	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	202	Q	620	596	1,150	487	Q	Q	175.3	Q
Water-Heating Energy Sources (more than one may apply)												
Electricity	404	564	909	268	5,125	6,477	11,882	4,007	78.9	87.1	76.5	66.8
Natural Gas	660	942	1,005	598	5,601	8,799	8,306	6,114	117.9	107.1	121.0	97.8
Fuel Oil	155	Q	Q	Q	1,542	Q	Q	Q	100.5	Q	Q	Q
District Heat	Q	Q	171	Q	929	749	956	454	Q	Q	179.2	Q
Propane	Q	Q	27	Q	261	390	537	Q	Q	42.9	50.5	Q
Cooking Energy Sources (more than one may apply)												
Electricity	315	449	598	217	2,495	3,784	4,900	1,982	126.2	118.8	122.1	109.3
Natural Gas	458	538	774	303	3,580	3,965	5,480	2,412	128.0	135.7	141.2	125.7
Propane	28	Q	33	Q	396	233	451	381	70.0	Q	74.3	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,264	1,682	1,900	858	12,596	16,331	20,998	10,102	100.3	103.0	90.5	85.0
Buildings with Cooling	1,170	1,511	1,927	857	10,954	14,484	21,553	9,950	106.8	104.3	89.4	86.1
Buildings with Water Heating	1,213	1,537	1,869	879	11,789	14,928	19,913	9,848	102.9	103.0	93.8	89.3
Buildings with Cooking	618	731	967	397	5,016	5,850	7,881	3,489	123.1	124.9	122.7	113.8
Buildings with Manufacturing	84	72	42	56	1,013	798	642	685	83.1	90.3	65.4	81.9
Buildings with Electricity Generation	457	487	495	254	3,245	3,317	4,017	2,241	140.8	146.8	123.3	113.2
Percent of Floorspace Heated												
Not Heated	Q	Q	48	53	309	748	2,491	1,208	Q	Q	19.2	43.7
1 to 50	57	56	121	65	1,387	1,130	2,841	1,491	41.0	49.8	42.4	43.4
51 to 99	150	176	253	167	1,539	1,727	2,891	1,950	97.5	102.1	87.5	85.8
100	1,057	1,450	1,527	626	9,671	13,474	15,266	6,661	109.3	107.6	100.0	94.0

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Percent of Floorspace Cooled												
Not Cooled	101	179	22	54	1,952	2,596	1,936	1,359	51.9	68.8	11.1	39.9
1 to 50	324	336	208	158	4,270	4,757	4,915	2,656	76.0	70.7	42.3	59.3
51 to 99	377	435	378	223	3,101	3,761	3,903	2,446	121.5	115.7	96.8	91.1
100	468	739	1,341	476	3,582	5,966	12,735	4,849	130.8	124.0	105.3	98.3
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	157	178	133	72	2,750	2,753	3,189	1,512	57.3	64.8	41.6	47.4
51 to 99	426	514	514	282	3,599	5,299	6,134	3,256	118.2	97.0	83.9	86.6
100	678	970	1,288	553	6,051	7,781	12,874	6,083	112.1	124.7	100.1	90.9
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	465	1,227	1,108	Q	Q	Q	Q	Q
Percent Lit When Closed												
Zero	189	434	333	176	2,807	5,174	6,292	3,112	67.5	83.9	52.9	56.5
1 to 50	542	790	894	399	6,279	8,293	11,027	5,349	86.3	95.3	81.1	74.7
51 to 100	Q	82	94	Q	Q	499	1,013	238	Q	164.3	92.4	Q
Building Never Closed/ Electricity Not Used	498	383	627	318	3,476	3,114	5,157	2,611	143.3	123.1	121.7	121.9
Heating Equipment (more than one may apply)												
Heat Pumps	177	96	395	136	1,213	1,058	4,942	1,600	146.1	91.0	79.9	85.2
Packaged Heat Pumps	Q	68	257	Q	744	738	2,928	1,031	Q	92.7	87.6	95.1
Split-System Heat Pumps	Q	Q	127	30	Q	Q	1,862	368	Q	Q	68.1	82.3
Individual Room Heat Pumps	Q	Q	101	34	544	358	1,250	538	Q	Q	80.5	62.5
Furnaces	275	596	397	225	3,596	7,229	5,715	3,075	76.6	82.4	69.4	73.1
Individual Space Heaters	263	339	276	146	2,786	4,169	3,608	1,981	94.2	81.4	76.5	73.6
District Heat	Q	330	318	Q	1,245	1,623	1,683	615	Q	203.5	188.7	Q
Boilers	661	656	559	368	6,228	6,141	4,393	3,662	106.1	106.8	127.4	100.5
Packaged Heating Units	365	401	722	241	2,912	3,666	8,130	3,312	125.2	109.4	88.8	72.7
Other	Q	74	85	33	579	820	1,381	481	Q	90.7	61.4	67.5
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	237	343	255	90	2,391	3,609	3,854	1,181	99.1	94.9	66.0	75.9
Heat Pumps	183	99	406	149	1,270	1,063	4,923	1,785	143.8	93.5	82.4	83.7
Packaged Heat Pumps	Q	72	255	Q	788	760	2,849	1,030	Q	95.1	89.4	94.0
Split-System Heat Pumps	Q	Q	132	32	Q	Q	1,868	404	Q	Q	70.5	79.6
Individual Room Heat Pumps	Q	Q	108	49	557	358	1,290	734	Q	Q	83.6	66.6
Individual Air Conditioners	352	320	272	136	3,687	3,488	3,635	1,749	95.4	91.8	74.7	77.8
District Chilled Water	Q	Q	202	Q	620	596	1,150	487	Q	Q	175.3	Q
Central Chillers	294	404	600	233	1,852	2,842	4,854	2,088	158.6	142.1	123.7	111.7
Packaged Air Conditioning Units	657	851	897	457	6,000	8,086	10,401	5,482	109.6	105.2	86.2	83.3
Swamp Coolers	Q	Q	Q	134	Q	Q	Q	1,342	Q	Q	Q	100.1
Other	Q	Q	Q	Q	Q	330	430	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	304	461	370	232	3,974	5,026	4,815	2,588	76.5	91.8	76.8	89.6
Cooling	535	597	522	295	5,453	5,752	6,415	3,374	98.1	103.8	81.3	87.5

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Water Heating Equipment												
Centralized System	828	1,000	1,094	510	7,770	9,724	11,537	5,640	106.6	102.8	94.9	90.4
Distributed System	179	228	312	117	2,325	2,670	4,564	1,981	77.1	85.2	68.3	58.9
Combination of Centralized and Distributed System	206	310	463	252	1,695	2,534	3,812	2,227	121.4	122.3	121.4	113.3
Lighting Equipment Types (more than one may apply)												
Incandescent	860	1,132	1,320	604	8,102	10,973	13,045	6,408	106.2	103.2	101.2	94.3
Standard Fluorescent	1,230	1,637	1,886	891	12,159	15,708	21,222	10,599	101.2	104.2	88.9	84.1
Compact Fluorescent	744	837	1,071	556	6,091	6,828	8,881	5,772	122.2	122.6	120.6	96.3
High Intensity Discharge	492	748	620	282	4,379	6,620	6,229	3,416	112.3	113.0	99.5	82.5
Halogen	430	573	675	303	3,581	4,661	6,193	3,268	120.1	122.9	109.0	92.9
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]												
Any Refrigeration	1,136	1,456	1,818	804	10,842	14,082	19,103	8,947	104.7	103.4	95.2	89.9
Commercial Refrigeration	758	883	1,225	469	5,936	7,122	9,638	4,072	127.8	124.0	127.1	115.2
Walk-In Units	588	701	1,073	404	4,452	5,201	7,469	3,132	132.0	134.9	143.6	129.0
Cases or Cabinets	641	654	1,006	402	4,504	4,978	7,664	3,277	142.3	131.4	131.2	122.6
Residential-Type Units	819	1,026	1,102	519	8,288	10,792	13,162	6,642	98.9	95.0	83.7	78.2
Vending Machines	786	1,023	1,345	567	6,559	9,400	13,534	5,841	119.8	108.9	99.4	97.0
No Refrigeration	136	234	130	107	2,064	2,997	4,386	2,363	65.7	78.0	29.7	45.4
Office Equipment (more than one may apply)												
Computers	1,198	1,526	1,794	859	11,518	14,415	19,715	9,980	104.0	105.8	91.0	86.0
With Flat Screen Monitors	748	750	1,005	463	5,995	6,346	9,135	4,940	124.8	118.2	110.0	93.7
Dedicated Servers	909	1,028	1,242	581	8,143	9,252	12,649	6,294	111.7	111.1	98.2	92.3
Laser Printers	685	834	966	524	7,095	8,463	11,566	5,888	96.6	98.6	83.5	89.0
Inkjet Printers	718	914	1,153	516	6,415	8,305	11,480	6,009	112.0	110.1	100.5	85.9
FAX Machines	1,165	1,391	1,747	789	11,173	13,295	18,782	9,123	104.3	104.6	93.0	86.5
Photocopiers	1,051	1,236	1,479	699	9,893	11,859	16,312	8,193	106.2	104.2	90.7	85.4
Number of Computers												
None	73	164	155	53	1,388	2,664	3,774	1,330	52.9	61.5	41.0	39.6
1 to 4	183	327	363	143	2,081	3,743	4,419	2,151	87.9	87.3	82.2	66.3
5 to 9	88	193	152	112	1,604	1,938	2,538	1,099	55.0	99.8	59.9	102.0
10 to 19	112	168	145	90	1,321	1,690	2,403	1,196	84.7	99.5	60.4	75.1
20 to 49	146	186	250	126	1,504	1,932	2,425	1,554	96.9	96.0	103.0	81.1
50 to 99	100	133	207	73	1,157	1,049	2,102	1,068	Q	126.6	98.6	67.9
100 to 249	173	198	222	121	1,260	1,851	2,262	1,317	137.2	106.7	98.2	91.9
250 or More	396	322	455	194	2,590	2,213	3,565	1,595	152.8	145.4	127.5	121.9
Number of Dedicated Servers												
None	362	662	706	330	4,763	7,828	10,839	5,015	75.9	84.6	65.1	65.9
1 to 4	518	650	715	351	5,247	6,567	8,208	4,093	98.7	99.0	87.1	85.7
5 to 9	Q	114	140	61	914	966	1,313	671	Q	118.3	106.9	91.1
10 to 19	Q	124	155	53	578	773	1,126	552	Q	160.3	138.0	96.2
20 to 49	Q	Q	141	Q	493	334	1,265	491	Q	Q	111.8	Q
50 or More	Q	86	90	Q	912	Q	737	487	Q	141.1	122.5	Q

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6
Number of Photocopiers												
None	220	454	469	212	3,012	5,221	7,176	3,117	73.0	86.9	65.4	68.0
One	231	366	340	192	3,027	4,235	5,460	2,753	76.4	86.5	62.2	69.9
2 to 4	276	384	482	192	2,944	4,026	5,518	2,594	93.7	95.5	87.3	74.2
5 to 9	177	162	197	76	1,518	1,401	1,782	814	116.4	115.8	110.6	93.2
10 or More	367	323	461	239	2,404	2,196	3,553	2,032	152.7	147.1	129.7	117.4
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	618	731	967	396	5,016	5,850	7,880	3,478	123.1	124.9	122.7	113.7
Activities with Large Amounts of Hot Water	506	683	856	421	3,922	5,225	6,903	3,432	129.0	130.7	124.0	122.6
Separate Computer Area	763	731	943	458	5,925	6,482	9,397	5,070	128.8	112.8	100.3	90.3
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	525	648	845	362	3,780	5,001	7,348	3,468	138.9	129.6	115.0	104.5
Economizer Cycle	587	752	813	436	4,141	5,884	6,632	4,452	141.8	127.8	122.6	98.0
HVAC Maintenance	1,160	1,457	1,731	822	11,047	13,128	17,641	9,347	105.0	111.0	98.1	87.9
Energy Management and Control System (EMCS)	419	460	609	295	3,002	3,799	5,802	3,027	139.5	121.0	104.9	97.4
Window and Interior Lighting Features (more than one may apply)												
Multipaned Windows	950	1,253	1,197	529	9,308	11,761	12,305	5,536	102.0	106.5	97.3	95.6
Tinted Window Glass	628	843	1,129	498	4,958	7,319	11,950	5,660	126.7	115.1	94.4	88.0
Reflective Window Glass	198	249	340	139	1,661	2,165	3,010	1,707	119.2	115.2	113.0	81.5
External Overhangs or Awnings	297	441	669	329	2,687	4,225	6,785	3,545	110.6	104.5	98.5	92.9
Skylights or Atriums	300	380	379	247	2,892	3,267	3,922	2,466	103.8	116.4	96.7	100.3
Daylighting Sensors	Q	112	79	139	428	815	674	951	Q	137.1	117.8	145.9
Specular Reflectors	674	931	812	412	5,834	7,709	7,871	4,703	115.6	120.7	103.1	87.5
Electronic Ballasts	1,002	1,403	1,580	761	9,288	12,610	16,459	8,525	107.9	111.3	96.0	89.2
Energy Management and Control System (EMCS) For Lighting	Q	162	148	108	849	1,292	1,471	1,169	Q	125.1	100.5	92.7
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	922	1,009	1,197	613	9,519	10,908	14,655	7,639	96.8	92.5	81.7	80.3
Cooling	883	1,002	1,309	649	8,812	10,469	16,094	7,829	100.2	95.8	81.4	82.9
Lighting	724	1,259	1,260	575	8,706	12,884	17,115	8,282	83.1	97.8	73.6	69.5
Office Equipment	355	496	401	213	4,269	5,412	6,426	3,291	83.0	91.7	62.5	64.8

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,271	1,690	1,948	911	12,905	17,080	23,489	11,310	98.5	98.9	82.9	80.6

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Building Floorspace (Square Feet)												
1,001 to 5,000	2,298	3,235	4,752	2,526	19.47	15.74	19.77	23.48	2.24	1.71	1.88	1.89
5,001 to 10,000	1,806	1,694	3,368	2,529	17.72	14.50	18.24	22.49	1.61	1.08	1.27	2.04
10,001 to 25,000	2,606	3,157	4,530	2,846	17.56	13.85	18.09	19.03	1.32	1.02	1.03	1.36
25,001 to 50,000	1,768	3,033	3,422	2,170	16.61	12.27	16.67	19.02	1.37	1.18	1.08	1.32
50,001 to 100,000	3,479	2,592	3,959	1,866	17.16	12.25	15.52	20.88	1.71	1.15	1.15	1.41
100,001 to 200,000	3,292	3,029	5,328	1,743	15.74	12.02	14.20	17.92	1.55	1.32	1.53	1.48
200,001 to 500,000	2,877	2,798	2,781	1,892	15.20	11.47	14.55	18.84	1.62	1.27	1.45	1.47
Over 500,000	Q	1,983	3,456	2,545	Q	10.75	14.03	18.12	Q	1.65	1.79	2.08
Principal Building Activity												
Education	2,508	2,465	4,948	2,087	14.66	11.24	16.46	16.14	1.49	0.97	1.24	1.25
Food Sales	Q	1,192	1,814	Q	Q	16.99	19.86	Q	Q	3.72	3.73	Q
Food Service	Q	1,384	3,399	1,250	Q	13.95	15.70	19.37	Q	3.05	4.45	4.72
Health Care	1,510	1,690	2,681	1,560	13.30	10.30	12.37	15.70	2.82	2.12	2.10	2.82
Inpatient	Q	1,052	2,180	Q	Q	8.81	11.47	Q	Q	2.40	2.60	Q
Outpatient	Q	638	501	658	Q	14.27	18.76	20.17	Q	1.78	1.14	2.33
Lodging	1,531	1,434	2,451	2,029	14.16	11.51	14.92	18.00	Q	1.25	1.45	1.87
Retail (Other Than Mall)	837	1,212	2,433	1,499	20.43	13.40	19.20	24.64	1.33	1.38	1.32	1.56
Office	6,229	4,787	5,609	4,216	20.44	14.72	17.05	24.13	2.07	1.60	1.48	1.74
Public Assembly	1,329	1,290	1,735	Q	14.22	12.54	15.87	22.31	Q	1.28	1.48	2.03
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	425	693	1,071	268	13.02	11.76	18.66	18.86	0.68	0.62	0.71	0.52
Service	942	1,434	1,535	867	15.97	13.09	Q	16.33	1.27	1.11	1.13	1.31
Warehouse and Storage	1,056	2,724	1,928	1,187	16.66	12.08	18.24	19.36	0.69	0.90	0.49	0.76
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	1,710	1,434	605	Q	14.93	11.63	14.74	Q	1.22	0.92	1.17	Q
1920 to 1945	3,246	2,880	1,301	1,242	14.69	11.01	16.57	21.07	1.30	1.37	0.97	1.35
1946 to 1959	2,943	2,031	2,126	1,440	15.54	12.34	15.42	19.57	1.41	1.00	1.18	1.28
1960 to 1969	3,505	2,448	3,222	2,203	16.63	11.96	16.04	18.29	2.02	1.10	1.27	1.38
1970 to 1979	3,425	4,127	5,077	3,500	17.91	12.82	15.88	18.41	1.99	1.27	1.36	1.68
1980 to 1989	2,923	3,069	7,152	4,202	20.02	13.90	15.93	19.26	2.13	1.57	1.50	1.87
1990 to 1999	2,216	3,988	8,567	3,989	18.83	13.96	16.34	23.45	1.62	1.45	1.37	1.99
2000 to 2003	1,376	1,544	3,544	1,158	Q	14.43	17.96	20.60	1.97	1.25	1.39	1.12
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	3,499	6,874	N	3,336	17.74	12.76	N	13.14	1.45	1.22	N	1.29
5,500-7,000 HDD	8,356	13,204	N	2,895	15.92	12.72	N	14.66	1.55	1.34	N	1.40
4,000-5,499 HDD	9,489	1,442	6,339	Q	17.29	12.80	15.58	18.99	1.86	0.90	1.54	1.78
Fewer than 4,000 HDD	N	N	13,141	9,231	N	N	14.87	28.07	N	N	1.27	1.71
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	12,115	1,419	N	N	18.42	21.51	N	N	1.34	2.55
Number of Floors												
One	5,015	7,842	13,429	7,330	18.50	13.88	18.24	20.09	1.59	1.28	1.14	1.48
Two	4,166	5,474	6,664	4,628	16.42	12.75	16.62	20.42	1.38	1.06	1.35	1.48
Three	2,390	3,012	2,457	1,285	15.31	12.75	15.02	20.20	1.15	1.17	1.27	1.43
Four to Nine	6,000	4,237	5,941	2,789	16.30	11.15	13.66	18.23	2.00	1.59	1.92	2.10
Ten or More	Q	Q	3,105	Q	Q	Q	14.62	Q	Q	Q	1.77	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars)							
					per Million Btu				per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Elevators and Escalators (more than one may apply)												
Any Elevators	11,964	9,486	13,512	7,290	16.55	11.96	14.41	19.60	1.95	1.42	1.70	1.89
Number of Elevators												
One	2,895	3,543	3,184	1,345	17.37	12.28	15.95	17.50	1.83	1.15	1.29	1.25
Two to Five	4,886	4,082	5,587	2,663	16.18	12.22	14.21	20.77	1.64	1.51	1.81	1.96
Six or More	4,183	1,861	4,741	3,283	16.46	10.91	13.75	19.66	2.65	2.09	1.99	2.31
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)												
Fewer than 5	2,461	4,520	4,256	2,378	16.11	13.25	20.21	21.09	1.04	0.91	0.75	0.96
5 to 9	1,646	1,954	3,162	1,503	18.56	14.94	18.70	18.82	1.52	1.34	1.22	1.47
10 to 19	2,128	2,417	3,596	1,795	16.49	13.26	18.06	21.36	1.14	1.16	1.31	1.62
20 to 49	3,614	3,879	5,709	3,203	17.40	12.52	15.60	19.22	1.56	1.36	1.47	1.66
50 to 99	2,655	2,903	3,486	2,121	16.07	12.57	15.96	18.76	1.66	1.26	1.31	1.55
100 to 249	2,876	2,453	4,878	2,763	16.04	11.98	14.68	22.79	2.16	1.52	1.93	1.98
250 or More	5,965	3,394	6,508	4,355	17.11	11.71	14.37	18.65	2.56	1.89	1.91	2.19
Weekly Operating Hours												
Fewer than 40	528	1,098	1,287	783	15.12	13.21	18.86	18.96	0.57	0.48	0.51	0.71
40 to 48	2,419	3,157	4,689	2,483	15.01	13.23	18.26	21.28	1.15	1.13	1.03	1.15
49 to 60	4,030	5,704	6,022	3,705	18.23	12.75	17.33	22.67	1.30	1.24	1.08	1.51
61 to 84	3,345	3,323	5,555	2,817	17.19	13.23	16.91	18.81	1.63	1.29	1.48	1.44
85 to 167	2,960	3,836	5,164	2,326	18.35	13.39	16.14	19.11	2.25	1.91	2.10	1.78
Open Continuously	8,062	4,402	8,877	6,005	16.19	11.50	14.15	18.86	2.37	1.58	1.93	2.57
Ownership and Occupancy												
Nongovernment Owned	17,306	15,018	23,198	14,154	17.42	13.14	16.48	21.46	1.67	1.20	1.30	1.62
Owner Occupied	9,772	7,513	10,288	5,979	16.83	12.78	16.42	22.55	1.66	1.22	1.31	1.64
Nonowner Occupied	7,441	7,338	12,806	8,128	18.26	13.57	16.54	20.74	1.77	1.32	1.37	1.69
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	4,038	6,503	8,397	3,964	14.53	11.90	15.53	15.75	1.60	1.41	1.48	1.54
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1.96	Q
State	Q	Q	2,976	1,384	Q	Q	13.56	15.69	Q	Q	1.73	1.90
Local	2,483	2,927	4,399	2,039	14.31	11.65	17.24	16.93	1.46	1.00	1.29	1.32
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	5,398	4,070	5,030	3,125	18.16	12.63	16.66	19.01	1.73	1.30	1.24	1.50
Not At All Vacant	15,731	17,136	26,443	14,893	16.36	12.79	16.14	20.11	1.70	1.32	1.41	1.68
Number of Establishments												
One	13,370	16,206	22,598	12,980	15.89	12.84	16.44	18.83	1.66	1.31	1.33	1.67
2 to 5	4,318	3,711	5,052	2,949	17.66	12.75	15.60	22.17	1.72	1.32	1.35	1.55
6 to 10	1,019	605	1,184	593	17.51	10.77	15.58	23.58	1.78	1.19	2.15	1.81
11 to 20	Q	Q	907	Q	Q	Q	14.70	Q	Q	Q	1.54	Q
More than 20	Q	Q	1,740	Q	Q	Q	16.51	Q	Q	Q	1.72	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Predominant Exterior Wall Material												
Brick, Stone or Stucco	11,983	12,651	16,070	7,694	15.57	12.59	15.93	19.11	1.65	1.37	1.39	1.62
Concrete (Block or Poured)	3,482	3,611	5,714	3,208	18.67	12.52	16.68	20.50	1.59	1.25	1.43	1.81
Concrete Panels	Q	1,877	4,661	2,967	Q	12.55	16.16	19.37	Q	1.53	1.69	1.50
Siding or Shingles	1,272	1,043	1,268	1,487	16.82	14.69	17.35	26.21	1.07	0.88	1.21	2.13
Metal Panels	2,068	1,435	2,778	1,915	19.87	15.10	16.83	19.37	1.96	0.76	0.81	1.23
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material												
Built-Up	7,382	7,284	11,161	7,318	17.85	12.44	15.79	19.37	1.81	1.38	1.50	1.66
Shingles (Not Wood)	3,288	3,353	4,131	2,793	15.88	12.98	17.53	22.97	1.63	1.05	1.24	1.69
Metal Surfacing	1,147	2,178	5,269	2,189	19.90	13.57	18.14	18.05	1.12	0.82	0.84	1.12
Synthetic or Rubber	7,735	6,210	7,637	3,243	16.54	12.88	14.85	17.54	1.88	1.40	1.78	1.73
Slate or Tile	Q	388	1,383	1,202	Q	12.88	17.48	25.73	Q	1.27	1.31	1.94
Wooden Materials	Q	Q	Q	291	Q	Q	Q	Q	Q	Q	Q	1.19
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1.53	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	8,758	6,522	6,154	4,223	16.31	11.53	14.80	17.03	1.72	1.20	1.38	1.49
Addition or Annex	2,757	2,582	2,761	1,429	14.75	10.71	14.16	13.03	1.53	1.31	1.53	1.46
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	7,113	4,939	4,245	3,324	16.97	11.60	14.92	17.72	1.80	1.27	1.37	1.52
Wall or Roof Replacement	4,422	2,702	2,595	1,934	17.01	11.72	15.15	16.76	1.65	1.21	1.39	1.50
Interior Wall Re-Configuration	4,296	3,448	2,812	2,575	16.20	11.71	14.00	17.09	1.73	1.33	1.45	1.71
HVAC Equipment Upgrade	5,929	4,223	3,914	2,832	17.53	11.44	14.10	16.51	1.96	1.27	1.51	1.55
Lighting Upgrade	5,917	3,880	3,025	2,911	16.21	11.51	14.09	17.29	1.77	1.27	1.45	1.64
Window Replacement	4,548	2,068	1,216	1,270	16.78	11.25	14.89	16.61	1.65	1.12	1.33	1.51
Plumbing System Upgrade	4,289	2,481	2,007	2,188	16.46	11.54	13.53	17.60	1.71	1.31	1.47	1.60
Insulation Upgrade	2,398	1,424	1,257	789	17.33	12.35	15.02	18.21	1.75	1.18	1.47	1.37
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	6,070	6,398	6,178	4,545	15.57	12.53	17.05	20.78	1.39	1.12	1.13	1.43
Building Newer than 1980	6,516	8,601	19,263	9,350	18.93	14.02	16.46	21.03	1.89	1.45	1.42	1.77
Energy Sources (more than one may apply)												
Electricity	21,344	21,518	31,595	18,118	16.79	12.74	16.22	19.88	1.67	1.29	1.39	1.64
Natural Gas	16,336	17,202	20,764	13,159	16.38	12.47	14.94	18.13	1.78	1.31	1.56	1.68
Fuel Oil	9,930	4,397	6,953	4,625	15.62	11.30	14.24	18.75	1.63	1.55	1.69	2.18
District Heat	Q	Q	Q	Q	Q	Q	13.30	Q	Q	Q	2.44	Q
District Chilled Water	Q	Q	2,629	Q	Q	Q	13.04	Q	Q	Q	2.29	Q
Propane	1,606	2,729	2,488	2,601	16.45	12.91	16.75	20.49	1.19	1.25	1.05	2.22
Other	Q	599	551	Q	Q	12.59	Q	Q	Q	1.19	1.80	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Space-Heating Energy Sources (more than one may apply)												
Electricity	8,456	7,487	17,900	7,894	19.05	13.68	17.67	21.39	1.92	1.20	1.37	1.61
Natural Gas	12,966	15,164	15,939	10,889	16.66	12.36	14.74	18.29	1.79	1.25	1.49	1.59
Fuel Oil	4,722	1,105	1,196	Q	13.18	10.24	13.00	Q	1.20	1.21	1.33	Q
District Heat	Q	Q	Q	Q	Q	Q	13.21	Q	Q	Q	2.49	Q
Propane	Q	519	1,220	Q	Q	19.13	17.40	Q	Q	0.64	1.02	Q
Other	Q	215	Q	Q	Q	Q	Q	Q	Q	0.79	Q	Q
Primary Space-Heating Energy Source												
Electricity	2,318	3,353	11,722	4,618	23.46	16.36	19.67	24.43	1.85	1.32	1.29	1.48
Natural Gas	11,229	13,617	13,826	9,525	16.59	12.24	14.55	17.62	1.74	1.20	1.49	1.61
Fuel Oil	3,278	Q	Q	Q	13.65	Q	Q	Q	1.01	Q	Q	Q
District Heat	Q	Q	Q	Q	Q	Q	13.27	Q	Q	Q	2.50	Q
Propane	Q	396	485	Q	Q	21.94	21.82	37.59	Q	0.70	0.72	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)												
Electricity	18,271	17,938	29,097	16,172	17.01	12.93	16.47	20.41	1.76	1.30	1.41	1.70
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	2,629	Q	Q	Q	13.04	Q	Q	Q	2.29	Q
Water-Heating Energy Sources (more than one may apply)												
Electricity	7,228	7,602	15,995	6,082	17.88	13.47	17.60	22.72	1.41	1.17	1.35	1.52
Natural Gas	10,768	11,529	14,522	10,791	16.31	12.24	14.44	18.05	1.92	1.31	1.75	1.76
Fuel Oil	2,025	Q	Q	Q	13.07	Q	Q	Q	1.31	Q	Q	Q
District Heat	Q	Q	Q	Q	Q	Q	13.66	Q	Q	Q	2.45	Q
Propane	Q	Q	500	Q	Q	15.90	18.42	Q	Q	0.68	0.93	Q
Cooking Energy Sources (more than one may apply)												
Electricity	5,129	5,433	9,274	3,786	16.29	12.09	15.50	17.48	2.06	1.44	1.89	1.91
Natural Gas	6,991	6,263	11,058	5,131	15.25	11.64	14.29	16.92	1.95	1.58	2.02	2.13
Propane	466	Q	584	Q	16.83	Q	17.45	Q	1.18	Q	1.30	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	21,201	21,367	30,483	16,563	16.77	12.70	16.04	19.29	1.68	1.31	1.45	1.64
Buildings with Cooling	19,935	19,466	31,209	17,129	17.04	12.88	16.20	19.99	1.82	1.34	1.45	1.72
Buildings with Water Heating	20,407	19,598	29,918	17,295	16.82	12.75	16.01	19.67	1.73	1.31	1.50	1.76
Buildings with Cooking	9,562	8,772	14,691	7,241	15.48	12.01	15.19	18.23	1.91	1.50	1.86	2.08
Buildings with Manufacturing	1,485	870	624	Q	17.65	12.06	14.86	17.30	1.47	1.09	0.97	1.42
Buildings with Electricity Generation	7,871	5,766	7,028	4,756	17.23	11.84	14.19	18.75	2.43	1.74	1.75	2.12
Percent of Floorspace Heated												
Not Heated	Q	153	1,112	1,554	Q	21.19	23.22	29.47	Q	0.20	0.45	1.29
1 to 50	1,008	794	2,185	1,614	17.74	14.10	18.12	24.91	0.73	0.70	0.77	1.08
51 to 99	2,404	2,167	4,190	3,211	16.02	12.29	16.56	19.21	1.56	1.25	1.45	1.65
100	17,789	18,407	24,109	11,738	16.83	12.70	15.79	18.74	1.84	1.37	1.58	1.76

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Percent of Floorspace Cooled												
Not Cooled	1,409	2,055	386	989	13.90	11.50	17.92	18.21	0.72	0.79	0.20	0.73
1 to 50	4,827	4,108	3,503	3,065	14.88	12.22	16.86	19.45	1.13	0.86	0.71	1.15
51 to 99	6,603	5,439	6,151	4,253	17.52	12.50	16.28	19.08	2.13	1.45	1.58	1.74
100	8,505	9,919	21,556	9,811	18.16	13.41	16.07	20.59	2.37	1.66	1.69	2.02
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	2,378	2,236	2,411	1,574	15.10	12.54	18.16	21.94	0.86	0.81	0.76	1.04
51 to 99	7,274	6,631	8,536	5,813	17.09	12.90	16.60	20.61	2.02	1.25	1.39	1.79
100	11,536	12,338	20,429	10,654	17.01	12.72	15.86	19.28	1.91	1.59	1.59	1.75
Building Never Open/ Electricity Not Used	Q	301	Q	Q	Q	Q	Q	Q	Q	0.25	Q	Q
Percent Lit When Closed												
Zero	3,294	5,545	5,920	3,549	17.39	12.78	17.77	20.20	1.17	1.07	0.94	1.14
1 to 50	9,231	10,434	15,141	8,206	17.03	13.20	16.93	20.55	1.47	1.26	1.37	1.53
51 to 100	Q	1,138	1,657	Q	Q	13.87	17.70	Q	Q	2.28	1.64	Q
Building Never Closed/ Electricity Not Used	8,062	4,405	8,878	6,005	16.19	11.50	14.15	18.86	2.32	1.41	1.72	2.30
Heating Equipment (more than one may apply)												
Heat Pumps	3,282	1,298	6,729	2,941	18.52	13.47	17.04	21.57	2.71	1.23	1.36	1.84
Packaged Heat Pumps	1,938	907	4,454	2,030	Q	13.26	17.36	20.71	2.60	1.23	1.52	1.97
Split-System Heat Pumps	Q	Q	2,201	738	Q	Q	17.37	24.40	Q	Q	1.18	2.01
Individual Room Heat Pumps	Q	Q	1,596	667	Q	Q	15.87	19.81	Q	Q	1.28	1.24
Furnaces	4,758	8,025	6,516	4,190	17.28	13.46	16.42	18.64	1.32	1.11	1.14	1.36
Individual Space Heaters	4,626	4,368	4,549	2,421	17.62	12.87	16.49	16.60	1.66	1.05	1.26	1.22
District Heat	Q	Q	Q	Q	Q	Q	13.21	Q	Q	Q	2.49	Q
Boilers	9,785	7,454	7,486	6,327	14.81	11.37	13.38	17.19	1.57	1.21	1.70	1.73
Packaged Heating Units	6,770	5,282	12,272	5,578	18.57	13.17	17.00	23.17	2.32	1.44	1.51	1.68
Other	Q	1,048	1,508	593	Q	14.09	17.78	18.23	Q	1.28	1.09	1.23
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	3,882	4,378	4,419	1,762	16.38	12.78	17.36	19.65	1.62	1.21	1.15	1.49
Heat Pumps	3,376	1,313	6,856	3,194	18.49	13.21	16.90	21.37	2.66	1.23	1.39	1.79
Packaged Heat Pumps	2,019	944	4,417	1,976	Q	13.07	17.33	20.41	2.56	1.24	1.55	1.92
Split-System Heat Pumps	Q	Q	2,271	771	Q	Q	17.24	23.98	Q	Q	1.22	1.91
Individual Room Heat Pumps	Q	Q	1,690	982	Q	Q	15.67	20.08	Q	Q	1.31	1.34
Individual Air Conditioners	5,230	3,744	4,391	2,811	14.87	11.69	16.16	20.67	1.42	1.07	1.21	1.61
District Chilled Water	Q	Q	2,629	Q	Q	Q	13.04	Q	Q	Q	2.29	Q
Central Chillers	4,731	4,571	8,574	4,572	16.10	11.32	14.28	19.61	2.55	1.61	1.77	2.19
Packaged Air Conditioning Units	11,093	11,024	14,884	9,330	16.87	12.95	16.59	20.42	1.85	1.36	1.43	1.70
Swamp Coolers	Q	Q	Q	2,049	Q	Q	Q	15.26	Q	Q	Q	1.53
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	5,572	5,905	5,972	4,093	18.33	12.80	16.15	17.64	1.40	1.17	1.24	1.58
Cooling	9,227	7,399	8,366	5,396	17.26	12.39	16.03	18.28	1.69	1.29	1.30	1.60

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars)							
					per Million Btu				per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Water Heating Equipment												
Centralized System	13,758	13,278	17,757	9,976	16.61	13.28	16.23	19.56	1.77	1.37	1.54	1.77
Distributed System	3,187	2,962	5,419	2,827	17.78	13.01	17.38	24.21	1.37	1.11	1.19	1.43
Combination of Centralized and Distributed System	3,463	3,358	6,742	4,493	16.83	10.84	14.57	17.80	2.04	1.33	1.77	2.02
Lighting Equipment Types (more than one may apply)												
Incandescent	14,219	14,319	20,589	11,232	16.53	12.65	15.60	18.59	1.76	1.30	1.58	1.75
Standard Fluorescent	20,666	20,834	30,464	17,662	16.80	12.73	16.15	19.81	1.70	1.33	1.44	1.67
Compact Fluorescent	12,479	10,498	15,934	10,660	16.76	12.54	14.88	19.17	2.05	1.54	1.79	1.85
High Intensity Discharge	8,290	8,871	9,455	5,384	16.86	11.86	15.25	19.10	1.89	1.34	1.52	1.58
Halogen	7,455	6,817	10,142	5,804	17.33	11.90	15.03	19.13	2.08	1.46	1.64	1.78
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]												
Any Refrigeration	18,988	18,548	29,141	15,880	16.72	12.74	16.03	19.75	1.75	1.32	1.53	1.77
Commercial Refrigeration	12,287	10,930	18,876	8,843	16.20	12.38	15.41	18.86	2.07	1.53	1.96	2.17
Walk-In Units	9,630	8,580	16,164	7,438	16.38	12.23	15.07	18.41	2.16	1.65	2.16	2.37
Cases or Cabinets	10,231	8,075	15,591	7,567	15.97	12.34	15.50	18.83	2.27	1.62	2.03	2.31
Residential-Type Units	13,108	13,081	17,727	10,192	16.00	12.76	16.08	19.63	1.58	1.21	1.35	1.53
Vending Machines	12,657	12,442	20,697	10,495	16.11	12.16	15.38	18.52	1.93	1.32	1.53	1.80
No Refrigeration	2,355	2,973	2,454	2,238	17.38	12.71	18.81	20.88	1.14	0.99	0.56	0.95
Office Equipment (more than one may apply)												
Computers	20,062	19,381	28,855	17,109	16.75	12.70	16.09	19.93	1.74	1.34	1.46	1.71
With Flat Screen Monitors	12,641	9,288	15,413	9,362	16.90	12.39	15.33	20.23	2.11	1.46	1.69	1.90
Dedicated Servers	15,313	13,036	19,117	11,911	16.84	12.69	15.39	20.51	1.88	1.41	1.51	1.89
Laser Printers	11,298	10,344	15,714	10,523	16.49	12.40	16.27	20.09	1.59	1.22	1.36	1.79
Inkjet Printers	12,502	11,824	17,974	10,220	17.40	12.93	15.58	19.79	1.95	1.42	1.57	1.70
FAX Machines	19,559	17,648	27,796	15,899	16.79	12.69	15.91	20.16	1.75	1.33	1.48	1.74
Photocopiers	17,464	15,408	23,166	14,041	16.61	12.47	15.66	20.08	1.77	1.30	1.42	1.71
Number of Computers												
None	1,282	2,140	2,740	1,009	17.45	13.06	17.72	19.18	0.92	0.80	0.73	0.76
1 to 4	3,089	4,589	6,663	2,916	16.88	14.05	18.35	20.45	1.48	1.23	1.51	1.36
5 to 9	1,604	2,339	2,749	1,957	18.19	12.10	18.08	17.45	1.00	1.21	1.08	1.78
10 to 19	1,909	2,222	2,518	1,939	17.06	13.22	17.35	21.58	1.45	1.32	1.05	1.62
20 to 49	2,555	2,409	3,784	3,030	17.53	12.99	15.15	24.06	1.70	1.25	1.56	1.95
50 to 99	1,548	1,625	3,155	1,561	15.45	12.23	15.23	21.52	Q	1.55	1.50	1.46
100 to 249	2,771	2,401	3,466	2,153	16.02	12.15	15.60	17.78	2.20	1.30	1.53	1.63
250 or More	6,586	3,797	6,521	3,552	16.65	11.80	14.34	18.27	2.54	1.72	1.83	2.23
Number of Dedicated Servers												
None	6,031	8,485	12,479	6,207	16.68	12.81	17.68	18.79	1.27	1.08	1.15	1.24
1 to 4	8,340	8,382	11,294	6,975	16.11	12.89	15.80	19.89	1.59	1.28	1.38	1.70
5 to 9	Q	1,468	2,203	1,525	Q	12.84	15.70	24.94	Q	1.52	1.68	2.27
10 to 19	Q	1,338	2,216	1,110	Q	10.80	14.27	20.93	Q	1.73	1.97	2.01
20 to 49	Q	Q	2,138	Q	Q	Q	15.11	Q	Q	Q	1.69	Q
50 or More	Q	1,155	1,266	Q	Q	13.40	14.01	Q	Q	1.89	1.72	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars)							
					per Million Btu				per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60
Number of Photocopiers												
None	3,880	6,113	8,429	4,077	17.64	13.47	17.97	19.24	1.29	1.17	1.17	1.31
One	3,833	4,733	6,054	3,816	16.57	12.92	17.81	19.83	1.27	1.12	1.11	1.39
2 to 4	4,517	4,954	7,500	4,010	16.37	12.89	15.57	20.84	1.53	1.23	1.36	1.55
5 to 9	2,780	1,874	3,016	1,771	15.73	11.55	15.31	23.34	1.83	1.34	1.69	2.17
10 or More	6,334	3,848	6,596	4,444	17.26	11.91	14.32	18.63	2.63	1.75	1.86	2.19
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	9,562	8,772	14,690	7,229	15.48	12.01	15.19	18.28	1.91	1.50	1.86	2.08
Activities with Large Amounts of Hot Water	7,641	7,812	12,288	7,163	15.10	11.44	14.36	17.02	1.95	1.50	1.78	2.09
Separate Computer Area	12,390	8,956	14,183	9,023	16.24	12.24	15.04	19.71	2.09	1.38	1.51	1.78
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	8,946	7,873	12,510	6,925	17.05	12.15	14.81	19.11	2.37	1.57	1.70	2.00
Economizer Cycle	10,399	9,370	11,888	7,936	17.71	12.46	14.62	18.19	2.51	1.59	1.79	1.78
HVAC Maintenance	19,443	18,283	27,254	16,349	16.77	12.55	15.74	19.89	1.76	1.39	1.54	1.75
Energy Management and Control System (EMCS)	7,348	5,459	9,285	5,554	17.54	11.87	15.25	18.83	2.45	1.44	1.60	1.84
Window and Interior Lighting Features (more than one may apply)												
Multipaned Windows	15,717	16,103	18,428	9,108	16.55	12.85	15.39	17.21	1.69	1.37	1.50	1.65
Tinted Window Glass	10,569	10,767	17,975	10,257	16.82	12.78	15.93	20.58	2.13	1.47	1.50	1.81
Reflective Window Glass	3,661	3,059	5,149	2,545	18.50	12.26	15.14	18.28	2.20	1.41	1.71	1.49
External Overhangs or Awnings	5,115	5,826	10,769	6,539	17.21	13.20	16.11	19.85	1.90	1.38	1.59	1.84
Skylights or Atriums	4,694	4,490	5,557	4,543	15.64	11.81	14.65	18.37	1.62	1.37	1.42	1.84
Daylighting Sensors	Q	1,336	1,173	2,945	Q	11.95	14.78	21.21	Q	1.64	1.74	3.10
Specular Reflectors	11,394	11,334	12,462	8,276	16.89	12.18	15.35	20.10	1.95	1.47	1.58	1.76
Electronic Ballasts	17,031	17,658	24,971	15,213	16.99	12.59	15.81	20.00	1.83	1.40	1.52	1.78
Energy Management and Control System (EMCS) For Lighting	Q	1,975	2,339	2,284	Q	12.21	15.81	21.09	Q	1.53	1.59	1.95
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	15,363	12,897	19,642	12,391	16.67	12.79	16.41	20.20	1.61	1.18	1.34	1.62
Cooling	15,068	12,931	21,644	13,228	17.06	12.90	16.53	20.39	1.71	1.24	1.34	1.69
Lighting	12,402	16,515	21,641	11,755	17.14	13.11	17.18	20.43	1.42	1.28	1.26	1.42
Office Equipment	5,758	6,293	7,457	4,407	16.24	12.68	18.58	20.66	1.35	1.16	1.16	1.34

Table C6. Expenditures by Census Region for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars)							
					per Million Btu				per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	21,344	21,521	31,595	18,118	16.79	12.74	16.22	19.88	1.65	1.26	1.35	1.60

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Building Floorspace (Square Feet)									
1,001 to 5,000	33	85	146	360	666	974	91.2	128.1	149.7
5,001 to 10,000	Q	64	73	359	764	843	Q	83.7	86.8
10,001 to 25,000	Q	115	163	553	1,419	1,934	Q	81.2	84.3
25,001 to 50,000	Q	74	140	347	944	1,618	Q	78.7	86.8
50,001 to 100,000	Q	134	148	516	1,524	1,618	Q	87.8	91.5
100,001 to 200,000	Q	150	203	414	1,703	1,682	Q	87.9	120.8
200,001 to 500,000	Q	177	214	Q	1,673	1,801	Q	105.8	118.8
Over 500,000	Q	Q	Q	Q	1,248	1,126	Q	Q	Q
Principal Building Activity									
Education	Q	143	175	Q	1,384	1,990	Q	103.1	87.7
Food Sales	Q	Q	Q	Q	Q	218	Q	Q	Q
Food Service	Q	Q	68	Q	127	248	Q	Q	276.6
Health Care	Q	102	122	Q	464	551	Q	219.0	220.7
Inpatient	Q	Q	Q	Q	310	316	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	235	Q	Q	Q
Lodging	Q	Q	70	374	797	548	Q	Q	126.7
Retail (Other Than Mall)	Q	30	59	Q	419	544	Q	72.3	108.4
Office	66	239	263	578	2,434	2,190	114.6	98.0	120.1
Public Assembly	Q	Q	80	Q	769	635	Q	Q	126.8
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	28	41	Q	474	720	Q	58.1	56.4
Service	Q	45	78	Q	620	775	Q	72.0	100.8
Warehouse and Storage	Q	55	175	Q	1,112	2,023	Q	49.2	86.4
Other	Q	Q	Q	Q	501	248	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	791	Q	Q	Q
Year Constructed									
Before 1920	38	76	84	444	962	999	86.7	79.0	84.5
1920 to 1945	Q	180	216	611	1,893	1,603	Q	95.0	135.0
1946 to 1959	Q	168	125	Q	1,745	1,454	Q	96.0	86.2
1960 to 1969	Q	150	134	Q	1,393	1,380	Q	107.4	97.0
1970 to 1979	Q	145	235	450	1,273	2,198	Q	114.2	107.1
1980 to 1989	Q	118	179	265	1,109	1,486	Q	106.4	120.8
1990 to 1999	Q	87	202	Q	1,130	1,655	Q	77.1	122.1
2000 to 2003	Q	Q	76	Q	435	820	Q	Q	93.3
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	61	Q	313	Q	1,445	3,050	62.8	94.2	102.8
5,500-7,000 HDD	232	293	940	1,993	3,404	8,545	116.6	85.9	110.0
4,000-5,499 HDD	N	549	N	N	5,092	N	N	107.8	N
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
Number of Floors									
One	55	216	416	545	2,606	3,877	100.4	83.0	107.3
Two	49	205	283	742	2,288	3,251	65.6	89.7	87.0
Three	Q	113	172	755	1,327	1,881	Q	85.2	91.4
Four to Nine	129	239	312	793	2,210	2,081	163.1	108.0	149.7
Ten or More	Q	Q	71	Q	1,510	506	Q	Q	141.2

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Elevators and Escalators (more than one may apply)									
Any Elevators	164	559	624	1,375	4,762	5,050	119.3	117.3	123.5
Number of Elevators									
One	Q	111	210	500	1,086	2,224	Q	102.2	94.3
Two to Five	Q	219	270	723	2,248	2,060	Q	97.3	131.3
Six or More	Q	229	144	Q	1,428	766	Q	160.4	187.3
Any Escalators	Q	Q	Q	Q	494	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	58	95	264	776	1,599	3,195	74.3	59.5	82.5
5 to 9	Q	64	85	401	684	866	Q	94.3	98.3
10 to 19	Q	102	122	409	1,463	1,214	Q	69.5	100.3
20 to 49	Q	168	210	350	1,964	1,980	Q	85.3	106.2
50 to 99	Q	126	158	Q	1,110	1,570	Q	113.3	100.7
100 to 249	Q	Q	163	Q	1,034	1,212	Q	Q	134.1
250 or More	Q	306	252	Q	2,087	1,558	Q	146.7	161.8
Weekly Operating Hours									
Fewer than 40	Q	28	65	Q	725	1,600	Q	38.3	40.4
40 to 48	Q	123	184	440	1,672	1,746	86.5	73.7	105.2
49 to 60	45	176	348	837	2,261	3,340	53.7	77.9	104.1
61 to 84	Q	140	179	494	1,554	1,737	Q	90.4	103.2
85 to 167	Q	135	218	Q	1,078	1,450	Q	125.6	150.0
Open Continuously	Q	375	261	756	2,651	1,721	163.2	141.3	151.4
Ownership and Occupancy									
Nongovernment Owned	215	778	799	2,283	8,106	8,015	94.2	96.0	99.7
Owner Occupied	151	429	401	1,587	4,317	3,755	95.2	99.5	106.7
Nonowner Occupied	64	344	385	669	3,535	3,597	95.4	97.2	107.0
Unoccupied	Q	Q	Q	Q	Q	663	Q	Q	Q
Government Owned	78	199	454	682	1,835	3,580	115.1	108.7	126.9
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	386	536	Q	Q	Q
Local	Q	145	202	346	1,360	2,199	Q	106.7	91.7
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	756	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	94	204	261	1,031	2,086	2,255	90.7	97.6	115.6
Not At All Vacant	199	763	973	1,795	7,475	8,549	110.6	102.1	113.9
Number of Establishments									
One	198	643	952	1,784	6,277	8,315	111.2	102.4	114.5
2 to 5	51	193	202	615	1,901	1,833	83.1	101.7	110.5
6 to 10	Q	Q	Q	Q	411	264	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	641	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	756	Q	Q	Q

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Predominant Exterior Wall Material									
Brick, Stone or Stucco	166	604	812	1,541	5,707	7,166	107.7	105.8	113.4
Concrete (Block or Poured)	Q	164	180	284	1,900	1,885	Q	86.1	95.5
Concrete Panels	Q	Q	104	Q	550	855	Q	Q	121.4
Siding or Shingles	52	24	36	779	415	473	66.5	57.6	75.5
Metal Panels	Q	Q	45	Q	862	651	Q	Q	69.8
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	Q	373	448	704	3,363	3,913	Q	110.9	114.5
Shingles (Not Wood)	66	141	186	683	1,340	2,070	96.3	105.5	89.8
Metal Surfacing	Q	49	85	Q	780	1,046	Q	62.7	81.3
Synthetic or Rubber	151	317	367	1,018	3,097	3,453	148.5	102.2	106.3
Slate or Tile	Q	Q	Q	Q	398	236	Q	Q	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	138	399	396	1,445	3,659	3,492	95.6	109.0	113.4
Addition or Annex	Q	162	156	Q	1,395	1,243	Q	116.3	125.7
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	95	324	302	943	3,010	2,354	100.8	107.7	128.4
Wall or Roof Replacement	71	189	158	720	1,955	1,367	98.1	96.8	115.2
Interior Wall Re-Configuration	73	192	220	639	1,850	1,709	114.9	103.6	128.7
HVAC Equipment Upgrade	75	263	257	739	2,287	2,136	101.7	115.0	120.6
Lighting Upgrade	92	273	240	853	2,497	1,985	107.9	109.4	120.7
Window Replacement	73	198	144	688	2,061	1,339	105.7	96.2	107.4
Plumbing System Upgrade	78	182	154	633	1,878	1,177	123.8	97.0	131.2
Insulation Upgrade	Q	100	71	356	1,014	700	Q	99.0	101.4
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	70	320	399	752	3,608	4,142	93.3	88.6	96.4
Building Newer than 1980	Q	259	458	767	2,675	3,961	110.9	96.9	115.6
Energy Sources (more than one may apply)									
Electricity	294	978	1,253	2,942	9,867	11,373	99.8	99.1	110.2
Natural Gas	187	810	1,029	1,465	7,716	9,570	127.8	105.0	107.5
Fuel Oil	147	489	277	1,577	4,502	1,871	92.9	108.7	148.1
District Heat	Q	Q	Q	Q	1,082	1,420	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	583	569	Q	Q	Q
Propane	53	Q	164	Q	505	Q	62.0	Q	136.7
Other	Q	Q	Q	Q	Q	283	Q	Q	Q

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Space-Heating Energy Sources (more than one may apply)									
Electricity	Q	319	362	1,132	3,273	3,895	110.7	97.4	92.9
Natural Gas	153	625	899	1,198	6,041	8,758	127.7	103.5	102.7
Fuel Oil	104	254	Q	1,219	2,708	456	85.5	Q	Q
District Heat	Q	Q	Q	Q	1,015	1,420	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	Q	87	135	Q	1,127	1,487	Q	76.8	91.1
Natural Gas	118	559	824	1,061	5,377	8,230	110.7	104.0	100.1
Fuel Oil	99	141	Q	1,161	2,089	Q	85.6	Q	Q
District Heat	Q	Q	Q	Q	970	1,319	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	245	829	983	1,946	8,456	9,157	126.0	98.1	107.4
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	583	569	Q	Q	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	123	281	374	1,439	3,686	4,086	85.5	76.3	91.6
Natural Gas	Q	563	709	682	4,919	6,417	142.4	114.4	110.5
Fuel Oil	68	87	Q	590	952	Q	115.5	Q	Q
District Heat	Q	Q	Q	Q	775	588	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources (more than one may apply)									
Electricity	Q	258	352	537	1,958	2,934	Q	131.5	120.1
Natural Gas	Q	400	415	474	3,106	3,052	Q	128.9	135.9
Propane	Q	Q	Q	266	Q	Q	Q	Q	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	292	972	1,247	2,819	9,778	11,223	103.5	99.4	111.1
Buildings with Cooling	254	916	1,100	2,021	8,932	9,790	125.7	102.5	112.4
Buildings with Water Heating	285	928	1,120	2,724	9,065	10,208	104.6	102.4	109.7
Buildings with Cooking	98	520	564	938	4,078	4,378	104.4	127.4	128.7
Buildings with Manufacturing	Q	71	44	Q	679	489	Q	105.2	90.0
Buildings with Electricity Generation	Q	385	387	567	2,678	2,558	Q	143.9	151.2
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	372	Q	Q	Q
1 to 50	Q	41	45	Q	899	774	Q	45.1	58.2
51 to 99	Q	116	137	418	1,120	1,214	Q	103.7	113.2
100	242	816	1,065	1,913	7,758	9,235	126.3	105.1	115.3

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Percent of Floorspace Cooled									
Not Cooled	39	62	153	943	1,009	1,805	41.9	61.3	84.9
1 to 50	93	232	236	922	3,349	3,186	100.8	69.2	74.2
51 to 99	Q	286	305	550	2,551	2,436	Q	112.0	125.1
100	70	398	559	550	3,033	4,169	127.5	131.3	134.1
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	44	114	116	953	1,796	1,575	45.8	63.3	73.6
51 to 99	105	321	377	1,070	2,529	3,641	97.9	126.9	103.4
100	143	535	737	830	5,221	5,418	172.4	102.5	136.0
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	372	946	Q	Q	Q
Percent Lit When Closed									
Zero	43	147	321	721	2,086	3,237	59.3	70.3	99.1
1 to 50	119	423	606	1,400	4,880	6,101	85.3	86.6	99.3
51 to 100	Q	Q	Q	Q	Q	Q	Q	Q	Q
Building Never Closed/ Electricity Not Used	Q	375	261	764	2,711	1,916	161.3	138.2	136.1
Heating Equipment (more than one may apply)									
Heat Pumps	Q	141	68	Q	1,019	719	Q	137.9	94.1
Packaged Heat Pumps	Q	Q	49	Q	656	541	Q	Q	91.4
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	430	Q	Q	Q	Q
Furnaces	82	193	393	990	2,606	4,572	83.2	74.1	85.9
Individual Space Heaters	Q	166	207	1,011	1,775	2,544	95.1	93.7	81.5
District Heat	Q	Q	Q	Q	1,000	1,420	Q	Q	Q
Boilers	159	502	499	1,465	4,763	4,466	108.4	105.4	111.7
Packaged Heating Units	110	255	294	615	2,297	2,531	178.9	110.8	116.2
Other	Q	Q	41	Q	408	434	Q	Q	94.7
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	Q	190	209	291	2,100	2,040	Q	90.5	102.4
Heat Pumps	Q	141	71	Q	1,008	746	Q	140.0	95.7
Packaged Heat Pumps	Q	Q	53	Q	646	563	Q	Q	93.8
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	430	Q	Q	Q	Q
Individual Air Conditioners	105	247	225	925	2,762	2,199	113.0	89.5	102.2
District Chilled Water	Q	Q	Q	Q	583	569	Q	Q	Q
Central Chillers	Q	240	310	383	1,469	2,074	Q	163.7	149.7
Packaged Air Conditioning Units	140	517	604	872	5,128	5,505	160.9	100.8	109.8
Swamp Coolers	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	317	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	70	234	320	1,013	2,961	3,273	69.3	79.0	97.9
Cooling	143	392	421	1,100	4,353	3,700	130.0	90.0	113.8

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Water Heating Equipment									
Centralized System	183	645	732	1,839	5,930	6,695	99.5	108.8	109.3
Distributed System	Q	142	167	Q	1,815	1,750	Q	78.2	95.3
Combination of Centralized and Distributed System	Q	141	221	375	1,319	1,763	Q	107.0	125.5
Lighting Equipment Types (more than one may apply)									
Incandescent	218	642	810	1,996	6,105	7,211	109.3	105.2	112.4
Standard Fluorescent	282	948	1,212	2,724	9,435	10,701	103.6	100.5	113.3
Compact Fluorescent	192	553	623	1,474	4,616	4,845	130.1	119.7	128.5
High Intensity Discharge	138	354	607	1,021	3,358	5,104	135.2	105.3	119.0
Halogen	107	323	412	769	2,812	3,259	139.4	114.8	126.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	270	866	1,063	2,474	8,367	9,538	108.9	103.5	111.4
Commercial Refrigeration	160	598	683	1,107	4,830	5,286	144.6	123.9	129.2
Walk-In Units	138	450	541	889	3,563	3,860	155.4	126.2	140.2
Cases or Cabinets	144	497	504	849	3,656	3,702	170.0	135.8	136.1
Residential-Type Units	216	603	748	2,037	6,251	7,247	106.2	96.5	103.2
Vending Machines	200	585	760	1,569	4,990	6,583	127.5	117.3	115.4
No Refrigeration	Q	112	191	490	1,574	2,056	Q	70.9	92.7
Office Equipment (more than one may apply)									
Computers	280	917	1,123	2,521	8,996	9,882	111.2	102.0	113.7
With Flat Screen Monitors	159	589	566	1,156	4,839	4,584	137.5	121.7	123.4
Dedicated Servers	202	707	754	1,656	6,486	6,456	121.9	109.1	116.8
Laser Printers	160	525	606	1,569	5,526	5,678	102.1	95.0	106.8
Inkjet Printers	151	567	663	1,204	5,211	5,817	125.7	108.8	114.0
FAX Machines	266	899	1,018	2,367	8,806	9,138	112.2	102.1	111.5
Photocopiers	230	821	914	1,869	8,024	8,273	122.9	102.4	110.5
Number of Computers									
None	13	60	130	443	945	1,712	29.5	63.9	76.0
1 to 4	62	121	245	570	1,511	2,536	108.9	80.0	96.7
5 to 9	Q	68	115	Q	1,087	1,112	Q	62.9	103.9
10 to 19	Q	82	118	329	992	1,069	Q	82.4	110.3
20 to 49	Q	110	118	322	1,182	1,196	Q	92.9	98.6
50 to 99	Q	84	95	Q	1,018	744	Q	Q	128.1
100 to 249	Q	136	142	Q	1,054	1,221	Q	128.7	115.9
250 or More	Q	316	290	439	2,151	2,005	Q	146.9	144.7
Number of Dedicated Servers									
None	92	270	500	1,308	3,455	5,139	70.0	78.2	97.2
1 to 4	109	409	433	1,028	4,219	4,202	106.2	96.8	103.1
5 to 9	Q	Q	93	Q	604	754	Q	Q	122.8
10 to 19	Q	Q	101	Q	437	647	Q	Q	156.2
20 to 49	Q	Q	Q	Q	411	Q	Q	Q	Q
50 or More	Q	Q	Q	Q	815	Q	Q	Q	Q

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
**All Buildings* ..... **	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Number of Photocopiers									
None	64	156	339	1,095	1,917	3,322	58.3	81.4	102.1
One	52	179	242	683	2,344	2,620	76.1	76.5	92.2
2 to 4	89	187	269	643	2,302	2,745	137.9	81.4	98.1
5 to 9	Q	129	122	Q	1,250	1,013	Q	103.4	120.9
10 or More	Q	325	281	276	2,128	1,894	Q	152.9	148.2
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	98	520	564	938	4,078	4,378	104.4	127.4	128.7
Activities with Large Amounts of Hot Water	139	367	490	995	2,927	3,546	139.5	125.4	138.1
Separate Computer Area	158	605	558	1,045	4,880	4,759	151.0	124.0	117.3
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	Q	419	493	592	3,188	3,660	Q	131.5	134.8
Economizer Cycle	135	452	586	824	3,317	4,350	163.8	136.3	134.6
HVAC Maintenance	261	899	1,121	2,311	8,736	9,424	112.8	102.9	119.0
Energy Management and Control System (EMCS)	Q	350	356	429	2,573	2,835	Q	135.9	125.7
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	243	707	919	2,307	7,001	8,023	105.2	101.0	114.6
Tinted Window Glass	Q	495	663	803	4,155	5,393	165.4	119.2	123.0
Reflective Window Glass	Q	159	180	Q	1,436	1,454	Q	110.4	124.1
External Overhangs or Awnings	Q	237	294	577	2,110	2,537	Q	112.2	115.8
Skylights or Atriums	Q	255	287	476	2,416	2,338	Q	105.4	122.8
Daylighting Sensors	Q	Q	89	Q	319	608	Q	Q	146.7
Specular Reflectors	157	517	741	1,390	4,444	5,813	112.9	116.4	127.5
Electronic Ballasts	237	765	1,039	2,162	7,125	8,623	109.8	107.4	120.5
Energy Management and Control System (EMCS) For Lighting	Q	Q	131	Q	758	988	Q	Q	133.1

Table C7. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 1

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	294	978	1,254	2,964	9,941	11,595	99.0	98.3	108.1
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	165	757	742	1,768	7,751	7,595	93.3	97.6	97.7
Cooling	160	723	738	1,456	7,356	7,147	109.8	98.3	103.2
Lighting	165	559	961	2,067	6,639	8,846	79.7	84.2	108.6
Office Equipment	74	280	363	847	3,422	3,645	88.0	81.8	99.5

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Building Floorspace (Square Feet)									
1,001 to 5,000	60	116	36	922	1,207	538	64.9	96.5	67.8
5,001 to 10,000	44	103	Q	722	1,387	393	60.5	74.0	Q
10,001 to 25,000	65	126	Q	1,164	2,240	810	55.9	56.4	Q
25,001 to 50,000	107	112	Q	949	1,672	498	112.5	67.3	Q
50,001 to 100,000	64	123	59	642	1,470	650	99.0	83.4	91.3
100,001 to 200,000	49	237	Q	614	2,087	Q	79.8	113.5	Q
200,001 to 500,000	Q	110	Q	395	1,072	Q	Q	102.2	Q
Over 500,000	Q	137	Q	Q	1,123	Q	Q	122.1	Q
Principal Building Activity									
Education	45	198	Q	552	2,445	341	81.0	80.9	Q
Food Sales	Q	Q	Q	Q	223	Q	Q	Q	Q
Food Service	Q	112	Q	206	433	99	Q	259.2	Q
Health Care	Q	120	Q	247	749	219	Q	160.1	Q
Inpatient	Q	Q	Q	Q	469	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	280	Q	Q	Q	Q
Lodging	55	91	Q	595	939	368	92.6	96.8	Q
Retail (Other Than Mall)	31	66	Q	337	897	353	93.6	73.4	Q
Office	62	155	50	799	1,958	481	77.6	79.3	103.2
Public Assembly	Q	42	Q	377	440	Q	Q	94.3	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	18	29	Q	395	721	310	46.2	39.6	Q
Service	31	Q	Q	514	753	307	61.3	73.5	Q
Warehouse and Storage	51	66	Q	994	1,836	390	51.0	35.7	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	252	Q	Q	Q	Q
Year Constructed									
Before 1920	39	Q	Q	553	Q	Q	70.2	Q	Q
1920 to 1945	Q	40	Q	496	650	300	Q	61.5	Q
1946 to 1959	39	88	Q	574	1,097	239	68.5	80.3	Q
1960 to 1969	71	98	Q	850	1,379	483	83.5	71.4	Q
1970 to 1979	87	152	64	1,039	1,464	789	83.3	103.6	80.7
1980 to 1989	41	221	Q	463	2,403	431	89.5	91.8	142.3
1990 to 1999	83	327	59	1,091	3,652	766	76.5	89.4	76.6
2000 to 2003	30	113	Q	420	1,272	342	72.6	89.0	Q
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	225	N	N	2,565	N	N	87.9	N	N
5,500-7,000 HDD	98	N	N	Q	N	N	74.1	N	N
4,000-5,499 HDD	113	264	Q	1,597	2,616	Q	70.5	100.8	112.6
Fewer than 4,000 HDD	N	564	Q	N	6,422	Q	N	87.8	77.6
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	237	Q	N	3,220	Q	N	73.5	99.5
Number of Floors									
One	149	370	102	2,227	5,753	1,641	66.9	64.3	62.1
Two	146	215	104	1,926	2,700	864	76.0	79.7	120.8
Three	64	99	Q	703	1,043	442	91.6	95.0	Q
Four to Nine	69	284	58	579	2,003	355	118.4	142.0	163.0
Ten or More	Q	95	Q	Q	759	Q	Q	125.3	Q

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Elevators and Escalators (more than one may apply)									
Any Elevators	169	549	134	1,627	4,612	923	104.1	119.1	145.0
Number of Elevators									
One	79	115	Q	860	1,475	369	91.5	78.0	Q
Two to Five	64	246	Q	644	1,900	386	98.6	129.6	Q
Six or More	Q	188	Q	Q	1,237	168	Q	152.0	Q
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	77	115	40	1,763	2,517	1,107	43.9	45.7	35.8
5 to 9	46	75	36	598	1,284	476	76.5	58.5	74.8
10 to 19	60	97	24	867	1,392	350	69.6	69.9	69.1
20 to 49	99	152	97	876	1,773	701	113.6	86.0	138.6
50 to 99	73	128	Q	742	1,611	Q	98.3	79.7	Q
100 to 249	Q	239	Q	397	1,737	Q	Q	137.8	Q
250 or More	Q	256	Q	242	1,943	Q	Q	131.9	Q
Weekly Operating Hours									
Fewer than 40	18	41	9	700	1,211	416	26.4	34.0	22.5
40 to 48	55	126	61	1,036	2,109	770	53.1	59.5	78.6
49 to 60	100	165	Q	1,273	3,074	610	78.2	53.7	92.7
61 to 84	72	171	57	845	1,926	600	84.9	88.6	94.2
85 to 167	Q	197	Q	558	1,402	Q	Q	140.8	Q
Open Continuously	122	364	108	1,073	2,536	823	114.0	143.6	131.2
Ownership and Occupancy									
Nongovernment Owned	344	748	200	4,455	9,049	2,453	77.2	82.6	81.7
Owner Occupied	187	365	72	2,416	4,141	967	77.4	88.1	74.2
Nonowner Occupied	156	378	128	1,942	4,678	1,450	80.4	80.8	88.5
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	92	316	109	1,030	3,209	940	89.5	98.5	115.8
Federal	Q	Q	Q	Q	Q	Q	Q	126.6	Q
State	Q	96	Q	Q	726	507	Q	132.9	Q
Local	50	168	28	726	2,078	376	68.4	81.0	75.2
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	241	Q	Q	Q	Q
Mostly Vacant	Q	Q	N	Q	Q	Q	Q	Q	N
Partially Vacant	62	137	26	864	1,980	397	71.5	69.3	64.8
Not At All Vacant	366	920	283	4,427	10,026	2,898	82.7	91.8	97.7
Number of Establishments									
One	310	752	223	4,044	8,902	2,707	76.7	84.5	82.4
2 to 5	89	193	Q	970	2,139	385	91.3	90.1	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	320	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	241	Q	Q	Q	Q

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Predominant Exterior Wall Material									
Brick, Stone or Stucco	192	514	177	2,082	6,051	1,824	92.4	84.9	97.1
Concrete (Block or Poured)	108	190	73	1,002	2,371	641	108.2	80.1	113.5
Concrete Panels	Q	189	Q	375	1,416	Q	Q	133.6	Q
Siding or Shingles	35	41	Q	711	649	Q	49.7	62.6	Q
Metal Panels	50	97	Q	1,229	1,450	616	40.4	66.6	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	N	Q	Q	N	Q	Q	N
Predominant Roof Material									
Built-Up	137	373	119	1,349	4,125	827	101.8	90.4	143.5
Shingles (Not Wood)	72	132	48	1,129	1,889	638	64.1	69.7	75.1
Metal Surfacing	75	137	60	1,616	2,557	1,116	46.7	53.7	53.9
Synthetic or Rubber	115	292	70	990	2,449	643	116.3	119.2	108.5
Slate or Tile	Q	47	Q	Q	624	Q	Q	74.8	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	N	Q	Q	N	Q	Q	N
Other	Q	Q	N	Q	Q	N	Q	Q	N
No One Major Type	Q	Q	N	Q	Q	N	Q	Q	N
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	169	231	85	1,945	2,304	884	87.1	100.3	96.6
Addition or Annex	85	91	46	727	884	392	116.7	102.9	118.3
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	124	141	70	1,525	1,497	677	81.1	94.4	103.5
Wall or Roof Replacement	73	100	36	871	961	340	83.8	103.6	105.7
Interior Wall Re-Configuration	75	107	Q	877	1,036	334	85.0	103.7	Q
HVAC Equipment Upgrade	112	161	63	1,197	1,559	464	93.3	103.1	135.6
Lighting Upgrade	97	111	60	1,074	1,186	440	90.7	93.5	137.3
Window Replacement	40	43	Q	508	505	Q	78.7	85.5	Q
Plumbing System Upgrade	61	79	Q	721	782	262	84.0	101.6	Q
Insulation Upgrade	44	Q	Q	512	468	Q	86.6	Q	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	111	172	77	1,566	2,626	971	71.1	65.7	78.8
Building Newer than 1980	155	660	147	1,974	7,327	1,538	78.7	90.1	95.8
Energy Sources (more than one may apply)									
Electricity	436	1,064	309	5,328	12,097	3,220	81.9	88.0	96.0
Natural Gas	350	693	241	3,593	6,326	2,281	97.4	109.6	105.6
Fuel Oil	112	291	Q	961	2,639	341	116.4	110.3	Q
District Heat	Q	220	Q	Q	1,243	Q	Q	177.4	Q
District Chilled Water	Q	115	Q	Q	667	Q	Q	172.3	Q
Propane	48	116	Q	991	1,548	265	48.2	75.1	39.4
Other	Q	Q	Q	222	Q	Q	Q	Q	Q

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Space-Heating Energy Sources (more than one may apply)									
Electricity	185	598	113	2,328	7,347	1,411	79.7	81.4	80.1
Natural Gas	327	504	223	3,422	4,852	2,110	95.7	103.8	105.7
Fuel Oil	Q	59	Q	460	627	Q	Q	93.5	Q
District Heat	Q	214	Q	Q	1,173	Q	Q	182.7	Q
Propane	23	64	Q	695	908	Q	33.3	70.9	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	70	334	61	1,058	4,968	791	65.7	67.2	77.2
Natural Gas	289	445	182	3,091	4,175	1,817	93.3	106.7	100.0
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	210	Q	Q	1,149	Q	Q	182.9	Q
Propane	Q	Q	Q	496	456	Q	29.7	39.7	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	404	965	270	4,625	10,969	2,820	87.4	88.0	95.7
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	115	Q	Q	667	Q	Q	172.3	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	190	558	140	2,391	7,033	1,581	79.6	79.3	88.9
Natural Gas	233	476	189	2,382	3,649	1,456	98.0	130.5	130.0
Fuel Oil	Q	Q	N	Q	Q	N	Q	Q	N
District Heat	Q	123	Q	Q	730	Q	Q	168.9	Q
Propane	Q	Q	Q	362	391	Q	Q	Q	Q
Cooking Energy Sources (more than one may apply)									
Electricity	97	322	76	850	2,611	665	114.4	123.3	114.3
Natural Gas	123	405	109	913	2,741	786	134.8	147.7	138.2
Propane	Q	Q	Q	Q	374	Q	Q	Q	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	435	1,031	306	5,108	11,012	3,056	85.2	93.7	100.1
Buildings with Cooling	411	1,052	306	4,694	11,474	2,985	87.5	91.7	102.4
Buildings with Water Heating	417	1,026	300	4,720	10,714	2,858	88.4	95.8	105.0
Buildings with Cooking	167	514	129	1,472	4,198	1,055	113.4	122.5	122.3
Buildings with Manufacturing	Q	Q	Q	Q	296	Q	Q	Q	Q
Buildings with Electricity Generation	100	280	Q	760	2,396	324	132.1	117.0	Q
Percent of Floorspace Heated									
Not Heated	Q	33	Q	377	1,246	337	Q	26.1	Q
1 to 50	11	71	Q	356	1,105	353	31.6	64.3	Q
51 to 99	39	143	34	513	1,864	309	75.7	76.9	108.4
100	385	817	252	4,239	8,043	2,394	90.8	101.6	105.2

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Percent of Floorspace Cooled									
Not Cooled	25	12	Q	791	784	408	32.1	15.7	Q
1 to 50	100	125	Q	1,571	2,418	472	63.5	51.6	Q
51 to 99	131	230	53	1,325	2,624	459	98.5	87.6	115.2
100	180	697	229	1,797	6,431	2,054	100.4	108.4	111.6
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	62	56	25	1,178	1,313	505	52.9	43.0	49.4
51 to 99	137	294	84	1,658	3,293	913	82.8	89.3	91.6
100	233	704	200	2,362	7,210	1,730	98.8	97.6	115.7
Building Never Open/ Electricity Not Used	Q	Q	Q	281	363	Q	Q	Q	Q
Percent Lit When Closed									
Zero	113	206	29	1,936	3,431	623	58.4	60.0	46.4
1 to 50	184	443	161	2,192	5,687	1,682	84.1	77.9	95.8
51 to 100	Q	Q	Q	Q	491	Q	Q	Q	Q
Building Never Closed/ Electricity Not Used	122	364	108	1,197	2,649	942	102.2	137.5	114.7
Heating Equipment (more than one may apply)									
Heat Pumps	29	297	48	339	3,677	542	84.5	80.8	89.4
Packaged Heat Pumps	Q	199	Q	Q	2,145	246	Q	92.6	Q
Split-System Heat Pumps	Q	103	Q	Q	1,459	214	Q	70.5	Q
Individual Room Heat Pumps	Q	79	Q	Q	1,039	Q	Q	76.1	Q
Furnaces	203	188	53	2,657	2,772	895	76.5	67.8	59.0
Individual Space Heaters	132	183	37	1,625	2,148	563	81.3	85.4	66.6
District Heat	Q	214	Q	Q	1,173	Q	Q	182.7	Q
Boilers	157	265	134	1,675	2,135	786	93.6	124.0	170.1
Packaged Heating Units	107	372	106	1,135	3,917	1,215	94.3	94.8	87.2
Other	33	51	Q	386	905	Q	86.1	56.8	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	134	147	36	1,568	1,843	489	85.1	79.6	72.8
Heat Pumps	28	307	54	317	3,742	586	88.3	82.0	92.6
Packaged Heat Pumps	Q	195	Q	Q	2,104	294	Q	92.5	87.4
Split-System Heat Pumps	Q	108	Q	Q	1,494	225	Q	72.3	Q
Individual Room Heat Pumps	Q	86	Q	Q	1,079	Q	Q	80.1	Q
Individual Air Conditioners	96	184	42	1,289	2,218	610	74.1	83.0	68.9
District Chilled Water	Q	115	Q	Q	667	Q	Q	172.3	Q
Central Chillers	93	319	87	768	2,489	594	121.7	128.3	146.8
Packaged Air Conditioning Units	247	478	151	2,581	5,520	1,555	95.6	86.5	97.3
Swamp Coolers	N	Q	Q	N	Q	Q	N	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	141	179	76	1,754	2,253	886	80.4	79.5	85.3
Cooling	176	247	108	2,052	3,111	1,059	85.7	79.2	102.3

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Water Heating Equipment									
Centralized System	268	539	190	3,029	5,649	1,890	88.4	95.3	100.4
Distributed System	61	174	38	920	2,432	469	66.1	71.5	80.6
Combination of Centralized and Distributed System	89	314	73	771	2,633	499	114.9	119.1	145.4
Lighting Equipment Types (more than one may apply)									
Incandescent	321	743	198	3,762	7,028	1,984	85.4	105.7	99.7
Standard Fluorescent	425	1,028	301	5,006	11,245	3,022	84.8	91.4	99.6
Compact Fluorescent	214	579	186	1,983	4,856	1,262	108.1	119.3	147.4
High Intensity Discharge	140	421	74	1,515	4,053	706	92.6	104.0	104.6
Halogen	161	430	68	1,402	3,474	620	115.0	123.9	109.7
Other	N	Q	Q	N	Q	Q	N	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	393	1,003	295	4,544	10,256	2,829	86.5	97.8	104.4
Commercial Refrigeration	200	686	165	1,835	5,426	1,145	109.1	126.4	144.4
Walk-In Units	160	606	150	1,341	4,324	862	119.5	140.1	174.0
Cases or Cabinets	150	550	140	1,276	4,246	993	117.9	129.5	140.5
Residential-Type Units	277	603	165	3,545	7,043	1,834	78.2	85.7	90.1
Vending Machines	264	743	222	2,817	7,066	2,056	93.6	105.1	107.9
No Refrigeration	43	61	Q	941	2,002	565	45.9	30.7	Q
Office Equipment (more than one may apply)									
Computers	403	966	293	4,533	10,483	2,724	88.8	92.1	107.6
With Flat Screen Monitors	184	519	176	1,762	4,768	1,314	104.6	108.8	134.1
Dedicated Servers	274	684	200	2,796	6,839	1,606	97.9	99.9	124.7
Laser Printers	228	525	163	2,784	6,059	1,813	81.9	86.7	89.9
Inkjet Printers	251	619	181	2,489	6,138	1,502	101.0	100.8	120.3
FAX Machines	373	948	278	4,157	9,973	2,551	89.7	95.1	108.8
Photocopiers	322	831	241	3,586	8,821	2,211	89.7	94.2	109.1
Number of Computers									
None	34	98	16	952	1,775	669	35.3	55.5	23.8
1 to 4	81	175	63	1,207	2,124	807	67.5	82.4	78.2
5 to 9	78	71	35	826	1,154	520	94.4	61.5	67.7
10 to 19	50	78	Q	621	1,321	Q	80.8	59.3	Q
20 to 49	68	119	68	736	1,207	437	91.8	98.3	154.6
50 to 99	Q	118	Q	305	1,265	Q	Q	93.4	Q
100 to 249	56	140	Q	630	1,353	Q	89.0	103.4	Q
250 or More	Q	264	Q	208	2,059	Q	Q	128.4	Q
Number of Dedicated Servers									
None	162	380	109	2,689	5,419	1,788	60.4	70.2	61.0
1 to 4	217	363	159	2,366	4,155	1,272	91.9	87.4	124.8
5 to 9	Q	103	Q	212	966	Q	Q	106.2	Q
10 to 19	Q	121	Q	Q	837	Q	Q	145.0	Q
20 to 49	Q	Q	Q	Q	524	Q	Q	Q	Q
50 or More	Q	Q	Q	Q	Q	Q	Q	96.6	Q

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
**All Buildings* ..... **	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Number of Photocopiers									
None	114	233	68	1,899	3,437	1,182	60.3	67.7	57.5
One	125	179	63	1,615	2,611	1,016	77.2	68.7	61.6
2 to 4	115	262	102	1,281	3,060	659	89.8	85.8	154.2
5 to 9	Q	119	Q	388	1,124	Q	Q	105.8	Q
10 or More	42	270	44	302	2,026	284	139.8	133.5	155.2
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	167	514	129	1,472	4,196	1,055	113.4	122.6	122.3
Activities with Large Amounts of Hot Water	193	518	115	1,678	4,178	949	115.2	124.1	121.6
Separate Computer Area	173	532	121	1,723	5,236	1,028	100.5	101.6	117.9
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	155	447	120	1,342	3,818	788	115.5	117.2	152.4
Economizer Cycle	166	476	105	1,533	3,815	828	108.5	124.7	126.7
HVAC Maintenance	336	959	261	3,704	9,547	2,258	90.7	100.4	115.5
Energy Management and Control System (EMCS)	103	331	80	965	3,426	542	107.2	96.6	148.5
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	333	696	180	3,738	7,191	1,685	89.2	96.7	107.1
Tinted Window Glass	179	644	129	1,925	6,498	1,169	93.1	99.1	110.1
Reflective Window Glass	69	167	56	711	1,655	257	97.0	100.8	216.5
External Overhangs or Awnings	148	367	111	1,688	3,814	1,022	87.4	96.3	108.4
Skylights or Atriums	93	173	43	929	1,831	434	100.2	94.4	99.4
Daylighting Sensors	Q	Q	Q	Q	448	Q	Q	Q	Q
Specular Reflectors	190	499	74	1,896	4,553	785	100.0	109.6	94.0
Electronic Ballasts	364	869	238	3,987	8,835	2,177	91.4	98.4	109.2
Energy Management and Control System (EMCS) For Lighting	Q	70	Q	Q	810	Q	Q	85.9	Q

Table C8. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 2

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	436	1,064	309	5,485	12,258	3,393	79.5	86.8	91.1
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	267	617	203	3,314	7,843	2,124	80.5	78.7	95.7
Cooling	265	684	214	3,323	8,678	2,175	79.6	78.9	98.2
Lighting	298	668	194	4,037	9,061	2,340	73.9	73.7	83.0
Office Equipment	134	234	59	1,767	3,468	703	75.7	67.4	83.3

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Building Floorspace (Square Feet)									
1,001 to 5,000	87	44	64	788	464	871	110.9	94.7	73.0
5,001 to 10,000	60	36	76	879	418	820	68.2	86.7	92.9
10,001 to 25,000	53	76	73	1,329	831	1,256	40.2	91.7	58.4
25,001 to 50,000	64	49	65	998	511	1,132	63.9	96.5	57.2
50,001 to 100,000	73	29	60	1,314	374	948	55.7	77.6	63.6
100,001 to 200,000	90	Q	66	1,131	Q	895	79.5	Q	73.8
200,001 to 500,000	54	Q	65	664	339	947	81.6	Q	69.0
Over 500,000	Q	Q	Q	Q	Q	766	Q	Q	Q
Principal Building Activity									
Education	74	53	76	1,198	640	1,027	61.4	82.9	74.3
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	232	Q	232	Q	Q	Q
Health Care	59	Q	57	309	230	323	192.3	Q	177.7
Inpatient	Q	Q	Q	235	Q	176	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	147	Q	Q	Q
Lodging	Q	Q	47	387	438	649	Q	Q	71.8
Retail (Other Than Mall)	39	Q	40	594	210	753	66.3	Q	52.8
Office	124	58	117	1,343	629	1,796	92.3	91.9	65.1
Public Assembly	Q	Q	Q	498	Q	468	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	20	Q	Q	467	Q	341	42.1	Q	Q
Service	Q	Q	Q	298	345	319	Q	Q	Q
Warehouse and Storage	30	Q	25	1,740	506	1,066	17.5	Q	23.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	350	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	Q	Q	46	398	Q	783	Q	Q	59.2
1946 to 1959	31	25	48	460	255	873	66.8	98.4	55.5
1960 to 1969	45	60	60	675	592	1,005	66.6	101.5	60.0
1970 to 1979	104	105	85	1,473	924	1,162	70.8	113.3	73.5
1980 to 1989	167	Q	128	1,934	700	1,541	86.4	128.5	83.2
1990 to 1999	139	55	115	1,823	627	1,377	76.2	88.4	83.3
2000 to 2003	57	Q	36	943	307	731	60.0	Q	48.9
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	N	209	Q	N	2,108	Q	N	99.2	92.5
5,500-7,000 HDD	N	121	77	N	1,090	979	N	110.8	78.2
4,000-5,499 HDD	Q	N	Q	Q	N	693	Q	N	94.0
Fewer than 4,000 HDD	171	N	329	1,992	N	5,401	85.7	N	60.9
2,000 CDD or More and --									
Fewer than 4,000 HDD	379	52	Q	5,385	476	Q	70.4	108.1	Q
Number of Floors									
One	264	160	205	4,362	1,871	3,098	60.6	85.5	66.1
Two	81	96	131	1,381	990	2,128	58.9	96.5	61.6
Three	Q	Q	42	453	181	715	Q	Q	59.4
Four to Nine	93	48	105	736	338	990	Q	141.1	106.4
Ten or More	Q	Q	Q	904	Q	704	Q	Q	Q

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Elevators and Escalators (more than one may apply)									
Any Elevators	255	144	228	2,414	1,069	2,785	105.5	134.9	81.8
Number of Elevators									
One	37	33	44	631	414	662	59.0	79.2	66.4
Two to Five	91	Q	92	808	275	1,085	Q	Q	84.4
Six or More	126	Q	92	975	Q	1,039	129.6	Q	88.8
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	56	53	59	2,046	766	1,723	27.4	69.6	34.5
5 to 9	58	29	51	835	345	678	69.9	84.8	74.6
10 to 19	78	42	42	999	428	681	77.7	98.8	61.3
20 to 49	116	59	107	1,408	645	1,291	82.5	92.1	83.1
50 to 99	68	53	60	840	558	812	81.5	94.6	74.2
100 to 249	42	Q	84	451	311	1,086	93.5	Q	77.2
250 or More	156	Q	126	1,259	622	1,364	124.2	172.1	92.7
Weekly Operating Hours									
Fewer than 40	18	Q	25	918	291	804	19.2	Q	31.5
40 to 48	71	60	57	1,688	783	1,378	41.9	76.4	41.2
49 to 60	126	55	108	1,872	712	1,744	67.3	77.2	62.2
61 to 84	101	55	95	1,228	592	1,358	82.6	93.2	69.6
85 to 167	104	Q	81	882	357	950	118.3	Q	85.2
Open Continuously	155	155	164	1,250	940	1,401	124.2	164.7	116.8
Ownership and Occupancy									
Nongovernment Owned	459	268	392	6,325	2,611	6,125	72.6	102.5	64.0
Owner Occupied	190	86	179	2,761	976	2,672	68.9	88.1	67.1
Nonowner Occupied	268	181	211	3,230	1,624	3,189	83.0	111.6	66.1
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	116	114	138	1,512	1,064	1,510	76.6	107.2	91.2
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	63	Q	Q	565	Q	Q	111.2
Local	59	65	56	969	681	864	60.5	95.3	64.3
Vacancy Status									
Completely Vacant	Q	Q	Q	346	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	139	74	90	1,685	750	1,335	82.6	99.0	67.5
Not At All Vacant	435	306	435	5,802	2,882	5,978	75.0	106.2	72.7
Number of Establishments									
One	399	308	381	5,339	2,794	4,982	74.8	110.1	76.6
2 to 5	78	45	88	1,217	538	1,362	63.9	83.5	64.7
6 to 10	Q	Q	Q	Q	Q	211	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	639	Q	547	Q	Q	Q
Currently Unoccupied	Q	Q	Q	346	Q	Q	Q	Q	Q

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Predominant Exterior Wall Material									
Brick, Stone or Stucco	318	149	253	3,699	1,551	3,195	85.9	96.2	79.3
Concrete (Block or Poured)	80	55	102	973	462	1,315	82.1	118.4	77.4
Concrete Panels	85	Q	59	1,216	695	1,277	70.3	135.7	46.1
Siding or Shingles	23	16	41	281	Q	461	81.5	68.3	88.0
Metal Panels	41	54	45	1,360	634	918	30.4	85.1	48.9
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	215	176	202	2,479	1,421	2,990	86.8	123.7	67.6
Shingles (Not Wood)	56	42	79	797	475	1,174	70.3	89.5	67.4
Metal Surfacing	93	67	55	2,635	944	1,001	35.3	70.7	54.4
Synthetic or Rubber	153	74	110	1,206	664	1,209	126.6	111.9	91.4
Slate or Tile	Q	Q	38	279	Q	552	Q	Q	69.7
Wooden Materials	Q	Q	Q	Q	Q	212	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	353	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	N	Q	Q	N	Q	Q	N	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	99	124	123	1,273	1,095	1,746	78.0	113.6	70.7
Addition or Annex	Q	71	39	529	551	428	Q	128.5	90.9
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	73	86	102	931	718	1,465	78.7	119.5	69.5
Wall or Roof Replacement	Q	59	56	562	504	789	Q	117.4	71.3
Interior Wall Re-Configuration	46	83	68	566	637	870	81.3	129.9	78.1
HVAC Equipment Upgrade	54	92	79	561	776	1,049	96.3	118.9	75.6
Lighting Upgrade	43	87	81	466	733	1,042	93.2	119.1	77.8
Window Replacement	Q	35	41	266	332	510	Q	106.0	80.9
Plumbing System Upgrade	Q	63	61	323	517	852	Q	122.3	71.7
Insulation Upgrade	Q	Q	Q	231	Q	411	Q	Q	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	113	91	127	1,864	945	2,240	60.8	96.5	56.9
Building Newer than 1980	363	166	279	4,700	1,634	3,649	77.2	101.5	76.4
Energy Sources (more than one may apply)									
Electricity	575	381	530	7,449	3,633	7,397	77.2	105.0	71.6
Natural Gas	455	330	396	4,704	2,797	5,016	96.8	118.0	78.9
Fuel Oil	143	Q	141	1,141	626	1,497	125.1	Q	94.5
District Heat	Q	Q	Q	Q	253	413	Q	Q	Q
District Chilled Water	Q	Q	Q	284	Q	300	Q	Q	Q
Propane	Q	Q	73	547	555	618	Q	97.8	117.6
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Space-Heating Energy Sources (more than one may apply)									
Electricity	302	143	226	4,300	1,389	3,526	70.2	102.7	64.2
Natural Gas	355	291	304	3,731	2,547	4,301	95.2	114.2	70.8
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	253	362	Q	Q	Q
Propane	Q	Q	Q	Q	245	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	201	57	132	3,325	789	2,325	60.5	72.6	56.7
Natural Gas	323	269	272	3,308	2,277	3,633	97.8	117.9	74.9
Fuel Oil	N	Q	Q	N	Q	Q	N	Q	Q
District Heat	Q	Q	Q	Q	Q	362	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	N	Q	Q	N	Q	Q	N	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	532	344	449	6,834	3,186	6,328	77.9	107.9	70.9
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	284	Q	300	Q	Q	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	211	94	174	3,267	1,236	2,771	64.4	76.1	62.7
Natural Gas	340	287	311	3,201	2,276	3,838	106.2	126.0	81.0
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	Q	338	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources (more than one may apply)									
Electricity	200	Q	104	1,623	791	1,192	123.5	142.5	87.2
Natural Gas	261	123	180	1,953	796	1,616	133.4	154.3	111.7
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	563	370	489	6,929	3,525	6,577	81.3	104.9	74.3
Buildings with Cooling	569	358	499	7,094	3,267	6,683	80.3	109.6	74.7
Buildings with Water Heating	543	373	507	6,341	3,422	6,426	85.6	108.8	78.8
Buildings with Cooking	324	156	241	2,628	1,209	2,280	123.1	129.4	105.6
Buildings with Manufacturing	Q	Q	Q	Q	Q	412	Q	Q	Q
Buildings with Electricity Generation	159	Q	138	1,297	738	1,504	122.9	157.0	91.7
Percent of Floorspace Heated									
Not Heated	Q	Q	41	908	Q	1,057	Q	Q	38.6
1 to 50	29	Q	51	1,384	Q	1,257	21.0	Q	40.7
51 to 99	76	70	97	718	569	1,381	105.9	123.7	70.1
100	458	286	341	4,828	2,721	3,940	94.9	105.0	86.5

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Percent of Floorspace Cooled									
Not Cooled	Q	24	31	744	407	952	Q	57.8	32.3
1 to 50	59	82	76	2,025	918	1,738	29.3	89.3	43.5
51 to 99	95	93	130	820	886	1,559	116.2	104.4	83.6
100	415	183	293	4,249	1,463	3,386	97.6	125.4	86.5
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	51	27	45	1,371	382	1,130	37.5	70.8	39.5
51 to 99	137	117	165	1,928	1,095	2,161	70.9	106.7	76.4
100	384	237	315	3,933	2,136	3,947	97.7	111.1	79.9
Building Never Open/ Electricity Not Used	Q	Q	Q	553	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	98	76	100	2,239	1,118	1,994	43.9	68.0	50.0
1 to 50	290	146	254	3,658	1,526	3,823	79.4	95.5	66.3
51 to 100	Q	Q	Q	374	Q	180	Q	Q	Q
Building Never Closed/ Electricity Not Used	155	155	164	1,565	973	1,638	99.2	159.0	99.9
Heating Equipment (more than one may apply)									
Heat Pumps	49	Q	77	722	333	1,268	68.3	Q	60.8
Packaged Heat Pumps	Q	Q	42	537	Q	741	Q	Q	57.0
Split-System Heat Pumps	Q	Q	24	Q	Q	305	Q	Q	77.6
Individual Room Heat Pumps	Q	Q	Q	Q	Q	431	Q	Q	Q
Furnaces	156	102	123	2,048	1,302	1,773	76.1	78.2	69.4
Individual Space Heaters	55	62	84	898	692	1,290	61.4	89.1	65.3
District Heat	Q	Q	Q	Q	253	362	Q	Q	Q
Boilers	161	182	186	1,472	1,359	2,302	109.4	133.7	80.9
Packaged Heating Units	245	77	164	2,998	748	2,564	81.6	102.8	63.9
Other	Q	Q	Q	399	347	Q	Q	Q	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	72	31	58	1,523	341	841	47.5	91.7	69.5
Heat Pumps	Q	Q	79	595	430	1,355	Q	Q	58.2
Packaged Heat Pumps	Q	Q	41	451	Q	742	Q	Q	55.1
Split-System Heat Pumps	Q	Q	Q	Q	Q	322	Q	Q	Q
Individual Room Heat Pumps	Q	Q	31	Q	Q	546	Q	Q	57.3
Individual Air Conditioners	45	76	60	806	730	1,019	56.3	104.2	58.8
District Chilled Water	Q	Q	Q	284	Q	300	Q	Q	Q
Central Chillers	194	Q	134	1,771	621	1,466	109.5	159.2	91.5
Packaged Air Conditioning Units	268	191	266	3,325	1,655	3,826	80.6	115.2	69.6
Swamp Coolers	Q	85	50	Q	874	468	Q	96.9	105.9
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	115	135	97	1,675	1,133	1,455	68.7	118.7	67.0
Cooling	167	161	135	2,245	1,356	2,018	74.4	118.5	66.7

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Water Heating Equipment									
Centralized System	366	194	316	3,998	1,928	3,712	91.6	100.4	85.2
Distributed System	100	47	70	1,664	566	1,415	60.2	82.5	49.5
Combination of Centralized and Distributed System	76	132	120	679	928	1,299	112.4	142.4	92.5
Lighting Equipment Types (more than one may apply)									
Incandescent	379	274	330	4,033	2,443	3,965	94.0	112.3	83.2
Standard Fluorescent	557	376	515	6,955	3,534	7,066	80.0	106.5	72.9
Compact Fluorescent	305	211	345	2,764	1,748	4,024	110.5	120.9	85.6
High Intensity Discharge	125	101	181	1,470	977	2,438	84.9	103.1	74.3
Halogen	177	124	179	2,099	993	2,275	84.2	125.1	78.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	520	335	469	6,018	3,028	5,919	86.4	110.8	79.2
Commercial Refrigeration	374	193	276	3,067	1,398	2,674	121.9	137.8	103.4
Walk-In Units	317	162	242	2,284	1,073	2,059	138.7	151.3	117.4
Cases or Cabinets	316	164	238	2,425	1,093	2,185	130.4	149.6	109.1
Residential-Type Units	334	216	303	4,285	2,232	4,410	77.9	97.0	68.6
Vending Machines	381	256	311	4,412	2,058	3,783	86.2	124.2	82.2
No Refrigeration	55	46	61	1,819	647	1,715	30.3	71.2	35.6
Office Equipment (more than one may apply)									
Computers	535	357	501	6,507	3,282	6,698	82.2	108.8	74.8
With Flat Screen Monitors	310	173	289	3,053	1,365	3,575	101.6	127.1	80.9
Dedicated Servers	359	228	353	4,204	1,959	4,335	85.3	116.6	81.3
Laser Printers	278	227	297	3,694	2,165	3,723	75.2	105.0	79.6
Inkjet Printers	354	212	304	3,840	1,901	4,108	92.1	111.5	74.1
FAX Machines	521	333	456	6,258	2,983	6,140	83.2	111.5	74.3
Photocopiers	407	303	396	5,281	2,753	5,439	77.0	110.1	72.8
Number of Computers									
None	40	24	28	1,330	393	937	30.3	61.8	30.2
1 to 4	125	64	79	1,488	707	1,444	83.9	90.0	54.7
5 to 9	46	49	63	864	450	649	53.1	109.5	96.8
10 to 19	49	37	53	910	371	825	53.6	99.2	64.3
20 to 49	63	45	81	780	548	1,006	81.3	81.5	80.8
50 to 99	43	Q	47	490	285	784	87.3	Q	59.4
100 to 249	55	56	65	660	448	869	83.2	124.9	75.0
250 or More	154	Q	114	1,315	473	1,122	117.4	Q	101.2
Number of Dedicated Servers									
None	217	153	177	3,633	1,716	3,299	59.6	89.3	53.7
1 to 4	193	140	210	2,782	1,428	2,665	69.4	98.2	78.9
5 to 9	Q	Q	54	Q	Q	601	Q	Q	89.5
10 to 19	Q	Q	37	Q	Q	414	Q	Q	90.3
20 to 49	Q	Q	Q	Q	Q	Q	Q	Q	Q
50 or More	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Number of Photocopiers									
None	168	78	134	2,557	921	2,196	65.8	84.9	60.9
One	98	84	108	1,833	995	1,757	53.4	84.6	61.6
2 to 4	118	81	112	1,799	887	1,706	65.3	90.9	65.5
5 to 9	Q	Q	58	405	Q	634	Q	Q	91.4
10 or More	146	121	118	1,243	690	1,341	117.7	174.6	88.0
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	324	156	239	2,628	1,209	2,269	123.1	129.4	105.4
Activities with Large Amounts of Hot Water	222	182	239	1,776	1,384	2,048	124.9	131.3	116.8
Separate Computer Area	290	196	262	3,132	1,607	3,462	92.5	121.9	75.6
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	277	155	208	2,743	1,236	2,232	101.1	125.1	93.0
Economizer Cycle	232	184	252	1,988	1,383	3,069	116.9	133.1	82.2
HVAC Maintenance	512	333	488	5,836	3,065	6,282	87.7	108.8	77.8
Energy Management and Control System (EMCS)	197	117	178	1,834	857	2,170	107.6	136.6	82.0
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	321	289	240	3,429	2,656	2,880	93.7	108.9	83.4
Tinted Window Glass	356	218	280	4,283	1,617	4,043	83.1	134.9	69.3
Reflective Window Glass	118	41	99	1,098	489	1,219	107.0	83.3	80.8
External Overhangs or Awnings	191	171	158	1,950	1,521	2,025	97.7	112.4	78.2
Skylights or Atriums	163	132	115	1,656	1,001	1,465	98.5	131.6	78.8
Daylighting Sensors	Q	Q	79	Q	Q	674	Q	Q	117.9
Specular Reflectors	239	176	236	2,533	1,307	3,396	94.2	134.5	69.4
Electronic Ballasts	472	331	430	5,446	2,905	5,621	86.7	113.9	76.5
Energy Management and Control System (EMCS) For Lighting	Q	Q	87	629	Q	923	Q	Q	94.8

Table C9. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels for Non-Mall Buildings, 2003: Part 3

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	575	381	530	7,837	3,675	7,635	73.4	103.8	69.4
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	376	261	352	4,688	2,456	5,183	80.3	106.4	67.9
Cooling	411	269	380	5,241	2,449	5,380	78.5	109.8	70.6
Lighting	398	222	354	5,715	2,608	5,674	69.6	85.0	62.3
Office Equipment	109	88	125	2,255	1,030	2,260	48.4	85.9	55.2

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Building Floorspace (Square Feet)															
1,001 to 5,000	143	187	90	170	95	1,313	1,709	1,010	1,915	975	108.7	109.6	88.8	89.0	97.9
5,001 to 10,000	110	137	91	156	69	1,248	1,725	1,077	2,024	959	88.1	79.3	84.6	77.1	71.7
10,001 to 25,000	183	286	146	166	118	2,406	3,506	1,498	3,176	2,073	75.9	81.6	97.6	52.3	56.9
25,001 to 50,000	146	212	125	152	107	1,547	2,424	1,382	2,381	1,647	94.4	87.6	90.3	63.7	64.8
50,001 to 100,000	149	273	183	191	118	1,480	2,780	2,011	2,352	1,668	100.8	98.0	90.8	81.2	70.6
100,001 to 200,000	117	336	187	283	141	1,311	2,889	1,881	2,597	1,538	89.4	116.3	99.2	109.1	91.7
200,001 to 500,000	129	226	168	136	94	1,150	2,007	1,678	1,612	1,047	111.8	112.5	99.8	84.1	89.6
Over 500,000	Q	272	254	132	Q	1,073	1,766	1,966	1,573	1,282	Q	153.8	129.4	83.9	Q
Principal Building Activity															
Education	141	238	131	186	123	1,537	2,800	1,403	2,435	1,698	91.6	85.2	93.5	76.6	72.6
Food Sales	Q	Q	Q	Q	Q	271	368	Q	273	Q	Q	Q	Q	Q	Q
Food Service	52	96	Q	134	Q	227	400	219	440	366	230.1	238.7	Q	305.4	Q
Health Care	96	161	108	145	83	475	784	564	844	496	202.4	205.8	191.4	171.9	167.7
Inpatient	65	127	Q	127	Q	262	450	323	592	278	246.1	283.3	Q	215.0	Q
Outpatient	Q	34	Q	Q	Q	213	334	240	252	218	Q	101.5	Q	Q	Q
Lodging	69	174	110	104	Q	768	1,314	1,132	1,275	608	90.1	132.1	Q	81.4	Q
Retail (Other Than Mall)	73	64	54	74	55	710	865	695	1,454	592	103.0	73.5	77.7	50.7	92.0
Office	145	364	298	162	165	1,593	3,165	3,125	2,341	1,985	90.7	114.9	95.4	69.3	83.2
Public Assembly	90	74	70	101	35	876	818	806	910	529	102.2	90.8	Q	111.1	65.8
Public Order and Safety	Q	Q	Q	Q	Q	Q	360	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	26	62	26	31	19	408	1,320	499	1,039	488	62.9	46.9	52.8	29.4	38.2
Service	95	84	64	49	Q	944	1,185	644	969	308	100.4	71.2	99.5	50.3	Q
Warehouse and Storage	78	201	73	73	31	1,704	2,639	1,479	2,419	1,836	45.7	76.1	49.5	30.1	16.9
Other	Q	Q	Q	Q	Q	334	467	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	543	849	Q	569	318	Q	Q	Q	Q	Q
Year Constructed															
Before 1920	109	99	Q	Q	Q	1,227	1,413	731	290	Q	88.6	70.2	89.0	Q	Q
1920 to 1945	86	262	199	57	Q	1,089	2,266	1,985	1,239	405	79.3	115.5	100.2	45.7	Q
1946 to 1959	86	236	124	114	28	1,093	2,508	1,446	1,663	552	78.7	94.2	86.0	68.3	49.9
1960 to 1969	156	254	158	141	81	1,447	2,576	1,576	1,997	1,046	108.0	98.8	100.3	70.5	77.7
1970 to 1979	274	344	212	217	143	2,496	3,259	1,942	2,783	1,796	109.8	105.7	109.2	77.9	79.9
1980 to 1989	110	343	222	354	217	1,123	2,808	2,110	3,850	2,576	98.2	122.2	105.3	91.9	84.3
1990 to 1999	195	266	164	371	264	2,120	2,655	1,764	4,207	3,235	92.2	100.3	93.1	88.3	81.6
2000 to 2003	69	124	98	112	108	934	1,322	949	1,601	1,456	73.6	93.5	103.3	70.0	74.4
Census Region and Division															
Northeast	211	597	588	N	N	2,567	5,989	5,440	N	N	82.2	99.8	108.0	N	N
New England	62	282	N	N	N	Q	2,463	N	N	N	63.1	114.5	N	N	N
Middle Atlantic	Q	315	588	N	N	1,577	3,526	5,440	N	N	94.2	89.4	108.0	N	N
Midwest	573	1,112	114	N	N	5,910	10,584	1,609	N	N	97.0	105.1	70.5	N	N
East North Central	333	1,010	N	N	N	3,208	9,215	N	N	N	103.8	109.6	N	N	N
West North Central	240	102	114	N	N	2,702	Q	1,609	N	N	88.9	74.6	70.5	N	N
South	N	N	472	997	796	N	N	4,736	11,506	10,497	N	N	99.7	86.6	75.8
South Atlantic	N	N	311	635	296	N	N	3,065	7,126	3,807	N	N	101.4	89.0	77.7
East South Central	N	N	Q	Q	Q	N	N	Q	Q	Q	N	N	112.3	78.5	98.9
West South Central	N	N	Q	195	457	N	N	Q	2,255	6,258	N	N	Q	86.7	73.0
West	302	219	Q	389	84	3,052	2,234	718	6,125	692	99.0	98.2	96.4	63.5	121.0
Mountain	244	136	N	N	65	2,446	1,181	N	N	580	99.9	115.5	N	N	112.9
Pacific	Q	83	Q	389	Q	Q	Q	718	6,125	Q	95.1	78.8	96.4	63.5	Q

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Number of Floors															
One	320	588	247	484	298	3,750	6,253	3,156	8,011	4,810	85.4	94.1	78.2	60.4	61.9
Two	275	383	243	271	139	3,146	4,867	2,623	3,423	2,210	87.5	78.7	92.5	79.1	62.9
Three	143	220	101	123	32	1,664	2,643	1,228	1,473	492	86.1	83.4	82.6	83.4	64.0
Four to Nine	206	393	328	264	145	1,731	2,525	2,744	1,982	1,103	119.3	155.7	119.5	133.2	131.2
Ten or More	Q	176	215	71	Q	330	1,047	1,752	850	968	Q	168.0	122.5	83.5	Q
Elevators and Escalators (more than one may apply)															
Any Elevators	422	842	659	556	348	4,047	6,462	5,728	4,967	3,413	104.2	130.3	115.0	111.9	101.9
Number of Elevators															
One	162	246	146	114	63	1,714	2,647	1,539	1,272	1,048	94.5	93.1	95.0	89.5	60.4
Two to Five	185	335	234	272	131	1,906	2,479	2,282	2,263	1,199	97.3	135.2	102.5	120.3	109.2
Six or More	74	261	278	170	154	427	1,336	1,908	1,431	1,166	173.9	195.1	146.0	118.5	131.8
Any Escalators	Q	Q	Q	Q	Q	Q	Q	788	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)															
Fewer than 5	164	348	93	140	72	2,699	4,857	1,755	4,076	2,106	60.9	71.7	53.1	34.2	34.1
5 to 9	83	139	79	109	59	1,035	1,529	1,013	1,646	944	79.9	91.0	77.9	65.9	62.9
10 to 19	124	166	103	112	89	1,374	2,155	1,359	1,599	1,317	90.5	76.8	75.9	70.3	67.6
20 to 49	220	254	232	226	118	2,014	2,709	2,132	2,498	1,635	109.3	93.6	109.0	90.4	72.2
50 to 99	152	222	128	157	68	1,673	2,166	1,316	1,812	966	91.2	102.4	97.3	86.5	70.7
100 to 249	118	232	145	262	81	996	1,561	1,434	2,109	771	118.0	148.9	100.9	124.4	104.5
250 or More	128	399	353	207	237	832	2,357	2,495	1,999	1,845	154.2	169.5	141.6	103.6	128.3
Weekly Operating Hours															
Fewer than 40	43	83	24	48	28	977	2,330	658	1,903	994	44.5	35.6	37.1	25.4	28.5
40 to 48	113	282	122	162	94	1,549	3,147	1,983	3,017	1,926	73.1	89.6	61.5	53.6	49.1
49 to 60	222	400	206	201	150	3,094	4,123	2,380	3,589	2,537	71.8	97.0	86.6	56.0	59.2
61 to 84	168	260	177	212	107	1,586	2,887	1,897	2,557	1,407	106.1	90.2	93.2	82.8	76.1
85 to 167	199	218	174	180	118	1,552	1,665	1,386	1,384	1,105	128.2	131.0	125.7	130.0	107.0
Open Continuously	244	517	430	410	225	1,863	3,184	3,200	3,288	1,615	130.9	162.5	134.4	124.7	139.5
Ownership and Occupancy															
Nongovernment Owned	704	1,177	885	904	533	8,063	12,350	9,204	12,409	7,396	87.3	95.3	96.1	72.9	72.0
Owner Occupied	314	633	464	415	235	3,894	6,510	4,791	5,496	2,899	80.5	97.2	96.8	75.6	81.0
Nonowner Occupied	388	529	414	487	297	3,972	5,030	4,244	6,439	4,228	97.6	105.2	97.6	75.6	70.1
Unoccupied	Q	Q	Q	Q	Q	Q	810	Q	473	Q	Q	Q	Q	Q	Q
Government Owned	285	583	249	309	191	2,558	4,985	2,300	3,330	2,189	111.6	117.0	108.1	92.6	87.3
Federal	Q	Q	Q	Q	Q	167	1,135	Q	144	Q	Q	Q	169.3	Q	Q
State	115	101	80	153	Q	696	709	692	1,247	Q	165.0	142.6	115.5	123.0	Q
Local	151	290	97	142	120	1,695	3,141	1,182	1,939	1,642	89.4	92.3	81.8	73.3	73.2
Vacancy Status															
Completely Vacant	Q	Q	Q	Q	Q	Q	821	Q	491	303	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	188	362	243	134	158	2,295	3,261	2,606	2,179	2,041	82.1	111.0	93.2	61.6	77.6
Not At All Vacant	882	1,547	986	1,249	719	8,690	14,697	9,609	14,882	8,830	101.4	105.3	102.6	83.9	81.4
Number of Establishments															
One	696	1,333	777	896	465	7,138	12,514	7,713	11,616	6,163	97.6	106.5	100.7	77.1	75.5
2 to 5	252	321	196	276	117	2,527	3,217	2,021	3,008	1,792	99.8	99.6	96.8	91.6	65.4
6 to 10	57	117	60	51	93	584	867	530	586	791	97.8	135.0	113.5	86.7	117.6
11 to 20	Q	80	64	72	68	Q	747	793	694	723	Q	106.9	80.5	104.3	94.7
More than 20	Q	Q	Q	89	134	538	641	1,227	1,236	1,417	Q	Q	Q	72.4	94.7
Currently Unoccupied	Q	Q	Q	Q	Q	Q	821	Q	491	303	Q	Q	Q	Q	Q

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Predominant Exterior Wall Material															
Brick, Stone or Stucco	458	1,096	621	668	342	4,477	9,905	6,068	8,295	4,071	102.4	110.7	102.4	80.6	83.9
Concrete (Block or Poured)	216	222	213	191	132	2,023	2,599	1,840	2,428	1,942	106.6	85.4	115.9	78.8	68.0
Concrete Panels	109	160	121	124	154	895	1,252	1,219	1,431	1,762	121.7	127.4	99.2	86.9	87.1
Siding or Shingles	83	81	22	72	Q	1,294	1,319	443	849	214	64.3	61.6	49.0	84.3	Q
Metal Panels	102	112	84	134	32	1,665	1,492	1,287	2,394	1,074	61.0	74.8	65.2	56.1	29.5
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	351	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material															
Built-Up	343	592	433	432	283	3,311	5,174	3,862	5,283	3,540	103.6	114.5	112.2	81.8	79.8
Shingles (Not Wood)	161	264	156	184	58	1,788	3,309	1,498	2,657	943	90.3	79.6	103.8	69.1	61.9
Metal Surfacing	146	128	88	184	84	2,396	2,091	1,620	3,390	2,448	60.9	61.2	54.4	54.2	34.3
Synthetic or Rubber	279	577	334	246	214	2,530	5,225	2,847	2,561	1,566	110.1	110.3	117.3	96.0	136.7
Slate or Tile	Q	50	40	72	30	145	478	451	972	416	Q	103.6	88.0	74.1	71.9
Wooden Materials	Q	Q	Q	Q	Q	Q	217	Q	254	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	320	394	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)															
Any Type of Renovation Since 1980	387	578	411	267	124	3,793	5,445	4,025	3,157	1,424	102.0	106.1	102.1	84.4	87.0
Addition or Annex	205	215	152	107	54	1,800	1,798	1,489	930	533	113.6	119.6	102.0	115.0	101.8
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	307	418	304	196	93	2,780	3,719	3,124	2,449	1,047	110.5	112.3	97.2	80.0	88.7
Wall or Roof Replacement	182	233	211	97	54	1,723	2,178	2,280	1,316	573	105.7	107.1	92.5	73.7	94.5
Interior Wall Re-Configuration	219	285	224	125	58	1,983	2,300	2,297	1,388	550	110.4	124.1	97.4	89.8	106.2
HVAC Equipment Upgrade	262	345	292	187	72	2,415	3,076	2,660	1,879	738	108.4	112.0	109.6	99.4	97.2
Lighting Upgrade	274	339	263	148	61	2,492	3,124	2,353	1,707	600	110.1	108.6	111.7	86.8	101.1
Window Replacement	133	234	175	53	Q	1,384	2,142	1,938	650	241	96.0	109.1	90.1	81.3	Q
Plumbing System Upgrade	184	230	189	106	Q	1,616	1,939	1,948	1,204	437	113.5	118.7	97.1	88.1	Q
Insulation Upgrade	90	110	105	55	Q	907	1,181	1,079	583	265	99.5	93.3	97.6	93.8	Q
Other Renovation	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
No Renovations Since 1980	282	536	306	239	119	3,217	5,893	3,291	4,329	1,983	87.5	91.0	92.9	55.3	59.8
Building Newer than 1980	375	733	485	837	590	4,177	6,785	4,823	9,658	7,267	89.7	108.0	100.5	86.7	81.1
Energy Sources (more than one may apply)															
Electricity	1,086	1,929	1,243	1,386	879	11,300	18,549	12,374	17,064	10,894	96.1	104.0	100.4	81.2	80.7
Natural Gas	893	1,551	990	1,054	555	8,486	14,122	8,970	11,796	5,098	105.2	109.8	110.3	89.3	108.9
Fuel Oil	303	529	539	284	212	2,624	4,285	4,950	2,528	1,878	115.6	123.4	108.8	112.3	112.9
District Heat	Q	Q	228	Q	Q	825	1,917	1,349	1,025	460	Q	Q	168.7	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	350	698	514	659	633	Q	Q	Q	Q	Q
Propane	118	214	71	123	57	1,607	2,036	1,102	1,403	928	73.7	105.2	64.7	87.8	61.9
Other	45	33	Q	Q	Q	483	378	268	223	Q	94.1	87.6	Q	Q	Q

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Space-Heating Energy Sources (more than one may apply)															
Electricity	406	663	577	615	551	4,620	6,930	5,818	8,674	7,156	88.0	95.7	99.2	70.9	77.0
Natural Gas	818	1,335	757	903	330	7,970	12,658	7,002	10,350	3,128	102.7	105.5	108.1	87.3	105.4
Fuel Oil	149	161	242	Q	Q	1,563	1,687	2,418	385	Q	95.3	95.7	Q	Q	Q
District Heat	Q	Q	222	Q	Q	818	1,882	1,281	918	432	Q	Q	173.0	Q	Q
Propane	34	24	Q	Q	Q	849	650	Q	755	Q	39.5	36.7	37.7	Q	Q
Other	Q	Q	Q	Q	Q	339	208	Q	Q	Q	79.7	Q	Q	Q	Q
Primary Space-Heating Energy Source															
Electricity	171	266	230	376	450	1,984	3,236	2,859	5,863	6,274	86.4	82.1	80.3	64.2	71.8
Natural Gas	738	1,209	688	781	280	7,264	11,744	6,310	8,738	2,616	101.6	103.0	109.0	89.4	107.2
Fuel Oil	79	99	Q	Q	Q	962	1,283	1,587	Q	Q	82.3	77.3	Q	Q	Q
District Heat	Q	Q	212	Q	Q	752	1,771	1,231	883	Q	Q	Q	172.6	Q	Q
Propane	11	14	Q	Q	Q	394	492	Q	423	Q	29.1	29.2	35.4	Q	Q
Other	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
Cooling Energy Sources (more than one may apply)															
Electricity	944	1,605	1,099	1,267	790	9,092	15,265	11,279	15,330	9,974	103.9	105.1	97.4	82.7	79.2
Natural Gas	Q	Q	Q	Q	Q	Q	358	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	350	698	514	659	633	Q	Q	Q	Q	Q
Water-Heating Energy Sources (more than one may apply)															
Electricity	383	673	503	626	453	4,685	7,610	5,923	8,077	6,274	81.7	88.4	85.0	77.5	72.2
Natural Gas	663	1,067	661	797	416	6,152	9,299	5,421	8,047	3,393	107.8	114.7	121.9	99.1	122.5
Fuel Oil	48	53	Q	Q	Q	389	505	933	Q	Q	124.1	105.6	Q	Q	Q
District Heat	Q	Q	178	Q	Q	582	787	1,073	695	Q	Q	Q	165.9	Q	Q
Propane	Q	Q	Q	Q	Q	341	312	Q	260	Q	Q	Q	44.9	Q	Q
Cooking Energy Sources (more than one may apply)															
Electricity	256	513	279	288	243	2,123	4,210	2,235	2,472	2,120	120.6	121.8	125.0	116.3	114.8
Natural Gas	298	568	470	454	283	2,217	4,071	3,464	3,518	2,167	134.4	139.6	135.8	129.1	130.6
Propane	27	Q	Q	Q	Q	354	259	Q	387	Q	75.5	Q	Q	Q	Q
Energy End Uses (more than one may apply)															
Buildings with Space Heating	986	1,750	1,127	1,168	674	10,109	16,720	11,239	13,965	7,995	97.5	104.7	100.2	83.7	84.3
Buildings with Cooling	906	1,553	1,106	1,178	721	8,550	14,524	10,946	13,977	8,943	105.9	106.9	101.1	84.3	80.7
Buildings with Water Heating	966	1,571	1,116	1,160	686	9,474	15,160	10,785	13,192	7,867	102.0	103.6	103.4	87.9	87.2
Buildings with Cooking	408	805	586	538	374	3,302	6,369	4,736	4,621	3,208	123.7	126.4	123.8	116.5	116.6
Buildings with Manufacturing	61	64	79	44	Q	855	729	772	608	Q	71.5	88.2	102.9	73.1	Q
Buildings with Electricity Generation	240	571	396	296	190	1,764	3,862	2,973	2,583	1,639	135.9	147.8	133.3	114.7	115.8
Percent of Floorspace Heated															
Not Heated	100	178	116	217	205	1,420	2,088	1,263	3,665	3,194	70.5	85.5	91.9	59.3	64.3
1 to 50	42	62	73	84	37	1,111	1,109	1,325	1,845	1,460	38.2	56.0	55.3	45.3	25.3
51 to 99	139	168	160	180	100	1,377	1,735	1,713	2,349	932	100.6	96.6	93.5	76.6	107.4
100	805	1,521	893	905	537	7,620	13,876	8,202	9,772	5,602	105.6	109.6	108.9	92.6	95.9

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Percent of Floorspace Cooled															
Not Cooled	180	376	137	208	158	2,979	4,283	1,557	3,654	2,245	60.5	87.8	87.7	56.8	70.4
1 to 50	270	325	218	166	49	3,133	4,657	3,422	3,480	1,906	86.0	69.7	63.6	47.6	25.5
51 to 99	255	425	375	233	126	2,327	3,568	3,297	2,803	1,215	109.5	119.0	113.6	83.2	103.3
100	381	804	514	779	547	3,089	6,300	4,227	7,693	5,822	123.5	127.6	121.6	101.3	94.0
Percent Lit When Open															
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	129	166	112	75	58	1,956	2,667	2,132	2,066	1,382	65.8	62.3	52.6	36.5	41.7
51 to 99	346	488	378	286	238	3,666	4,929	3,133	3,804	2,756	94.4	99.1	120.5	75.2	86.3
100	505	1,081	634	845	425	4,362	8,654	5,924	8,979	4,870	115.7	124.9	107.0	94.1	87.3
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	597	1,064	282	808	459	Q	Q	Q	Q	Q
Percent Lit When Closed															
Zero	236	396	148	212	141	3,536	4,589	2,252	4,370	2,637	66.7	86.2	65.7	48.5	53.5
1 to 50	478	777	502	557	312	4,772	8,916	5,541	7,172	4,546	100.2	87.1	90.6	77.7	68.6
51 to 100	Q	Q	Q	Q	45	263	409	442	478	501	Q	Q	Q	Q	90.7
Building Never Closed/ Electricity Not Used	244	518	430	410	225	2,051	3,421	3,269	3,718	1,899	119.0	151.3	131.6	110.3	118.6
Heating Equipment (more than one may apply)															
Heat Pumps	75	176	213	222	119	727	1,471	1,971	3,283	1,361	102.8	119.7	108.2	67.5	87.6
Packaged Heat Pumps	Q	Q	144	125	93	433	995	1,267	1,749	997	Q	112.6	113.5	71.2	93.4
Split-System Heat Pumps	Q	Q	Q	66	29	Q	227	686	1,140	419	Q	Q	112.4	58.0	69.1
Individual Room Heat Pumps	Q	Q	56	64	Q	Q	497	537	1,021	287	Q	Q	105.0	62.6	Q
Furnaces	370	512	207	286	118	4,587	6,411	2,648	4,313	1,658	80.6	79.9	78.0	66.4	71.1
Individual Space Heaters	236	314	247	166	60	3,014	3,582	2,524	2,569	856	78.4	87.7	98.0	64.5	70.2
District Heat	Q	Q	218	Q	Q	801	1,749	1,266	918	432	Q	Q	171.9	Q	Q
Boilers	435	740	533	381	155	4,060	6,835	4,693	3,334	1,500	107.1	108.3	113.5	114.3	103.6
Packaged Heating Units	239	441	326	435	287	2,126	3,708	3,204	5,619	3,365	112.5	119.0	101.6	77.5	85.4
Other	63	58	Q	25	48	816	674	497	525	750	77.4	85.4	Q	47.3	63.9
Cooling Equipment (more than one may apply)															
Residential-Type Central Air Conditioners	197	273	219	152	83	1,971	3,078	2,207	2,056	1,723	99.9	88.7	99.1	73.8	48.4
Heat Pumps	76	182	221	233	125	739	1,542	1,998	3,398	1,365	102.8	118.1	110.5	68.6	91.7
Packaged Heat Pumps	50	Q	155	118	90	453	1,033	1,337	1,679	924	110.3	112.8	115.6	70.2	97.0
Split-System Heat Pumps	Q	Q	Q	70	31	Q	247	703	1,127	458	Q	Q	111.6	61.7	68.0
Individual Room Heat Pumps	Q	Q	55	78	Q	377	510	523	1,190	340	Q	Q	104.7	65.2	Q
Individual Air Conditioners	234	358	210	192	86	2,321	3,633	2,786	2,565	1,253	100.8	98.5	75.5	74.7	68.7
District Chilled Water	Q	Q	Q	Q	Q	350	698	514	659	633	Q	Q	Q	Q	Q
Central Chillers	200	433	348	326	225	1,604	2,658	2,473	2,695	2,205	124.7	162.8	140.7	120.9	101.8
Packaged Air Conditioning Units	505	858	588	600	312	4,565	7,740	6,076	7,703	3,884	110.6	110.8	96.8	77.8	80.4
Swamp Coolers	57	38	Q	Q	Q	515	468	Q	346	Q	111.7	81.6	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	336	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)															
Heating	263	481	273	229	122	3,263	4,981	3,204	3,195	1,759	80.5	96.5	85.1	71.7	69.4
Cooling	361	656	452	288	192	3,555	5,895	4,827	4,112	2,606	101.7	111.2	93.6	70.0	73.7

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Water Heating Equipment															
Centralized System	684	958	683	697	411	6,315	9,553	6,774	7,444	4,585	108.4	100.3	100.8	93.6	89.6
Distributed System	102	244	167	187	134	1,468	2,954	2,015	3,009	2,094	69.8	82.6	83.0	62.2	64.2
Combination of Centralized and Distributed System	180	369	266	276	141	1,691	2,654	1,996	2,739	1,187	106.1	139.0	133.2	100.7	118.4
Lighting Equipment Types (more than one may apply)															
Incandescent	674	1,156	854	770	461	7,016	10,308	8,192	7,939	5,073	96.1	112.2	104.3	97.0	90.9
Standard Fluorescent	965	1,696	1,107	1,178	698	9,783	16,090	10,871	14,316	8,627	98.7	105.4	101.8	82.3	80.9
Compact Fluorescent	529	882	745	693	358	4,667	6,835	6,292	6,439	3,339	113.5	129.1	118.5	107.6	107.3
High Intensity Discharge	395	738	439	343	226	3,955	6,149	4,385	3,863	2,292	99.9	120.0	100.0	88.9	98.7
Halogen	356	550	417	434	225	2,762	4,485	3,903	4,117	2,435	128.8	122.5	106.9	105.5	92.2
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	142.6	198.5	Q
Refrigeration Equipment (more than one may apply)[b]															
Any Refrigeration	887	1,526	1,030	1,102	669	8,673	14,438	9,893	12,329	7,640	102.2	105.7	104.1	89.4	87.6
Commercial Refrigeration	504	975	705	711	441	4,106	7,355	5,702	5,784	3,821	122.8	132.5	123.7	122.9	115.3
Walk-In Units	408	788	565	630	375	3,188	5,353	4,341	4,490	2,882	127.9	147.2	130.2	140.3	130.0
Cases or Cabinets	401	776	575	572	378	2,950	5,523	4,191	4,586	3,174	135.9	140.5	137.3	124.8	119.0
Residential-Type Units	632	1,076	689	635	435	6,713	10,957	7,367	8,479	5,369	94.1	98.2	93.6	74.8	80.9
Vending Machines	609	1,102	729	782	499	5,824	9,186	6,729	8,220	5,375	104.7	119.9	108.3	95.1	92.8
No Refrigeration	103	235	104	111	55	1,949	2,897	1,611	3,410	1,944	53.0	81.1	64.3	32.5	28.1
Office Equipment (more than one may apply)															
Computers	919	1,595	1,078	1,100	684	8,976	14,756	10,556	13,086	8,253	102.3	108.1	102.2	84.0	82.8
With Flat Screen Monitors	413	828	742	585	398	3,629	6,548	6,204	6,118	3,919	113.9	126.5	119.5	95.6	101.5
Dedicated Servers	592	1,099	851	762	456	5,673	9,426	7,813	8,157	5,269	104.4	116.6	108.9	93.4	86.6
Laser Printers	558	924	565	585	377	5,811	8,950	5,910	7,675	4,666	95.9	103.3	95.6	76.2	80.9
Inkjet Printers	599	861	696	706	440	5,523	7,781	6,220	7,556	5,130	108.5	110.7	111.8	93.4	85.8
FAX Machines	865	1,450	1,056	1,067	653	8,446	13,443	10,336	12,438	7,710	102.5	107.8	102.2	85.8	84.7
Photocopiers	744	1,312	935	919	555	7,181	12,244	9,222	10,780	6,828	103.6	107.1	101.4	85.3	81.3
Number of Computers															
None	71	165	55	113	40	1,646	2,579	948	2,652	1,331	43.2	64.1	58.1	42.6	30.1
1 to 4	201	324	134	220	136	2,242	3,537	1,801	3,206	1,608	89.6	91.6	74.5	68.6	84.8
5 to 9	123	157	96	95	74	1,392	1,946	1,206	1,572	1,063	88.3	80.5	80.0	60.7	69.8
10 to 19	106	153	90	106	59	1,057	1,724	1,032	1,568	1,228	100.4	89.0	87.2	67.6	48.4
20 to 49	126	186	154	168	71	1,239	2,045	1,441	1,729	960	102.1	91.2	107.0	97.4	74.5
50 to 99	84	119	93	148	69	740	1,124	1,078	1,547	887	113.1	105.9	Q	95.9	77.3
100 to 249	141	191	148	160	74	1,266	1,554	1,389	1,626	855	111.3	123.2	106.3	98.5	86.1
250 or More	138	464	363	201	200	1,040	2,825	2,610	1,837	1,652	132.5	164.4	139.1	109.6	121.0
Number of Dedicated Servers															
None	398	662	283	450	268	4,949	7,909	3,691	7,581	4,315	80.3	83.7	76.6	59.4	62.0
1 to 4	433	600	471	492	237	4,305	6,249	4,591	5,624	3,346	100.6	96.0	102.6	87.6	70.9
5 to 9	35	117	Q	90	Q	516	980	1,078	884	405	67.7	119.5	112.8	101.3	Q
10 to 19	62	160	59	82	Q	412	965	455	724	472	150.2	165.6	129.6	113.0	Q
20 to 49	Q	Q	Q	Q	Q	252	428	586	604	713	Q	Q	Q	Q	Q
50 or More	Q	155	119	Q	Q	Q	804	1,102	321	Q	Q	192.7	107.7	Q	Q

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5
Number of Photocopiers															
None	246	449	198	293	168	3,440	5,090	2,281	4,958	2,756	71.4	88.1	86.9	59.2	61.1
One	243	343	177	246	121	2,653	4,546	2,337	3,806	2,133	91.6	75.4	75.6	64.7	56.9
2 to 4	256	369	244	302	164	2,655	3,694	2,833	3,554	2,345	96.2	99.9	86.0	85.0	69.9
5 to 9	95	181	119	132	85	863	1,386	1,219	1,326	721	110.2	130.5	97.4	99.7	117.8
10 or More	150	419	396	239	185	1,010	2,619	2,833	2,093	1,629	148.9	160.1	139.9	113.9	113.5
Energy-Related Space Functions (more than one may apply)															
Commercial Food Preparation	408	804	586	538	374	3,302	6,358	4,736	4,620	3,208	123.7	126.4	123.8	116.5	116.6
Activities with Large Amounts of Hot Water	424	727	485	570	259	3,451	5,260	4,091	4,479	2,200	122.8	138.2	118.5	127.4	117.9
Separate Computer Area	414	877	683	580	340	3,713	7,143	5,988	6,266	3,763	111.6	122.8	114.0	92.6	90.5
HVAC Conservation Features (more than one may apply)															
Variable Air-Volume System	364	672	516	488	340	2,985	4,852	4,086	4,201	3,473	122.0	138.5	126.3	116.1	98.0
Economizer Cycle	447	780	591	489	282	3,804	5,533	4,736	4,630	2,406	117.5	141.0	124.8	105.6	117.1
HVAC Maintenance	829	1,595	1,017	1,064	665	8,045	14,309	9,597	11,542	7,670	103.0	111.5	105.9	92.2	86.7
Energy Management and Control System (EMCS)	282	495	424	327	254	2,438	3,834	3,284	3,546	2,528	115.8	129.2	129.2	92.1	100.4
Window and Interior Lighting Features (more than one may apply)															
Multipaned Windows	811	1,288	787	696	348	8,109	11,763	7,855	7,264	3,919	100.0	109.5	100.2	95.8	88.9
Tinted Window Glass	417	941	629	648	464	3,628	7,587	5,356	7,883	5,434	114.9	124.0	117.4	82.2	85.3
Reflective Window Glass	127	258	217	194	131	1,259	2,139	1,733	2,066	1,347	100.5	120.6	125.4	94.0	96.9
External Overhangs or Awnings	288	486	304	401	257	2,640	4,510	3,003	4,424	2,665	109.1	107.8	101.3	90.6	96.5
Skylights or Atriums	253	407	278	213	156	2,164	3,572	2,573	2,596	1,640	116.8	114.0	108.1	82.0	95.1
Daylighting Sensors	80	Q	Q	60	Q	574	837	413	618	426	138.6	147.4	Q	97.6	Q
Specular Reflectors	493	931	603	521	281	4,446	7,579	5,238	5,892	2,961	110.9	122.8	115.2	88.4	94.7
Electronic Ballasts	859	1,357	948	975	608	8,390	11,771	8,922	10,876	6,923	102.3	115.3	106.2	89.7	87.8
Energy Management and Control System (EMCS) For Lighting	84	148	134	77	95	756	1,249	881	899	997	111.8	118.8	151.8	85.4	95.5
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[b]															
Heating	635	1,096	843	736	431	6,995	11,651	8,469	10,227	5,380	90.7	94.1	99.5	71.9	80.1
Cooling	621	1,053	858	777	535	6,309	10,745	8,843	10,627	6,681	98.4	98.0	97.1	73.1	80.1
Lighting	711	1,203	662	771	471	7,959	12,889	7,802	11,312	7,025	89.3	93.3	84.9	68.2	67.1
Office Equipment	296	489	257	254	168	3,401	5,473	3,238	4,319	2,966	87.0	89.4	79.5	58.9	56.8

Table C10. Consumption and Gross Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)					Total Floorspace of Buildings (million square feet)					Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	990	1,761	1,134	1,213	724	10,622	17,335	11,504	15,739	9,584	93.2	101.6	98.5	77.0	75.5

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] Climate zone (30-year average) definitions: Zone 1 = Under 2,000 CDD and more than 7,000 HDD; Zone 2 = Under 2,000 CDD and 5,500-7,000 HDD; Zone 3 = Under 2,000 CDD and 4,000-5,499 HDD; Zone 4 = Under 2,000 CDD and fewer than 4,000 HDD; Zone 5 = 2,000 CDD or more and fewer than 4,000 HDD. (See "Glossary" for definitions of CDD and HDD.)

[b] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Principal Building Activity									
Education	63	423	334	808	5,378	3,687	78.3	78.6	90.7
Food Sales	144	Q	Q	765	467	Q	188.5	Q	Q
Food Service	318	108	Q	986	664	Q	322.9	163.2	Q
Health Care	32	104	457	445	835	1,883	71.8	125.1	242.9
Inpatient	N	Q	436	N	182	1,723	N	Q	252.9
Outpatient	32	66	Q	445	652	160	71.8	100.5	Q
Lodging	29	207	273	260	2,274	2,563	111.0	91.2	106.7
Retail (Other Than Mall)	110	137	72	1,363	2,133	821	80.9	64.1	87.8
Office	171	412	551	2,320	4,602	5,286	73.5	89.5	104.2
Public Assembly	59	150	Q	854	1,851	1,233	69.5	80.8	Q
Public Order and Safety	22	Q	Q	231	390	Q	94.3	Q	Q
Religious Worship	54	100	Q	1,160	2,391	Q	46.5	41.8	Q
Service	120	144	Q	1,755	1,862	Q	68.4	77.2	Q
Warehouse and Storage	47	157	253	1,763	4,601	3,714	26.4	34.1	68.0
Other	Q	100	Q	215	601	922	Q	166.8	Q
Vacant	Q	Q	Q	447	1,211	909	Q	Q	Q
Year Constructed									
Before 1920	77	162	Q	991	1,972	805	77.7	82.4	Q
1920 to 1945	130	175	314	1,623	2,466	2,781	80.2	71.2	113.0
1946 to 1959	114	220	231	1,503	3,283	2,258	76.1	66.9	102.4
1960 to 1969	133	350	254	1,555	4,177	2,369	85.4	83.7	107.3
1970 to 1979	206	367	450	2,297	4,735	3,740	89.8	77.5	120.3
1980 to 1989	182	342	509	1,870	4,211	4,251	97.4	81.3	119.8
1990 to 1999	274	401	423	2,533	5,798	4,029	108.0	69.2	105.0
2000 to 2003	71	191	180	1,001	2,618	1,915	70.8	72.8	93.8
Census Region and Division									
Northeast	220	458	594	2,149	5,303	5,454	102.4	86.3	108.8
New England	71	134	Q	719	1,416	829	98.4	94.8	Q
Middle Atlantic	149	323	505	1,430	3,887	4,624	104.4	83.2	109.2
Midwest	322	687	680	3,460	7,925	5,695	93.2	86.7	119.5
East North Central	219	451	583	1,816	5,170	4,608	120.5	87.3	126.5
West North Central	104	235	97	1,644	2,755	1,086	63.0	85.4	89.5
South	425	711	813	5,191	10,981	7,317	81.9	64.7	111.1
South Atlantic	219	361	484	2,593	5,382	4,282	84.5	67.1	112.9
East South Central	59	159	92	931	1,958	505	63.0	81.2	181.5
West South Central	147	190	237	1,667	3,640	2,530	88.4	52.3	93.8
West	220	353	338	2,574	5,052	3,684	85.5	69.9	91.8
Mountain	80	155	147	883	1,716	1,076	90.9	90.1	136.4
Pacific	140	198	191	1,692	3,335	2,608	82.7	59.5	73.4
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	245	427	318	2,504	4,981	3,137	98.0	85.7	101.2
5,500-7,000 HDD	312	673	775	3,306	7,971	6,058	94.4	84.5	128.0
4,000-5,499 HDD	164	407	562	1,969	4,516	5,018	83.1	90.2	112.1
Fewer than 4,000 HDD	309	427	477	3,769	7,033	4,936	82.1	60.7	96.6
2,000 CDD or More and --									
Fewer than 4,000 HDD	157	274	293	1,826	4,759	2,999	86.1	57.5	97.6

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Number of Floors									
One	828	802	307	9,342	12,643	3,996	88.7	63.4	76.9
Two	264	732	315	3,030	9,194	4,045	87.1	79.6	77.9
Three	81	322	216	846	4,227	2,428	96.2	76.3	88.8
Four to Nine	Q	340	983	155	3,078	6,851	Q	110.4	143.4
Ten or More	N	Q	604	N	Q	4,828	N	Q	125.1
Elevators and Escalators (more than one may apply)									
Any Elevators	Q	789	2,005	286	8,036	16,296	Q	98.2	123.0
Number of Elevators									
One	Q	482	218	286	5,190	2,745	Q	92.8	79.4
Two to Five	N	303	855	N	2,799	7,329	N	108.1	116.6
Six or More	N	Q	932	N	Q	6,222	N	Q	149.8
Any Escalators	Q	Q	275	Q	Q	2,257	Q	Q	121.9
Number of Workers (main shift)									
Fewer than 5	496	194	Q	7,981	5,932	1,579	62.2	32.7	Q
5 to 9	278	175	Q	2,637	3,202	Q	105.6	54.7	Q
10 to 19	248	284	Q	1,798	4,940	1,066	138.0	57.6	Q
20 to 49	136	751	163	844	7,898	2,247	160.5	95.1	72.7
50 to 99	Q	437	275	Q	4,492	3,368	Q	97.3	81.6
100 to 249	Q	313	511	Q	2,377	4,455	Q	131.7	114.7
250 or More	N	53	1,271	N	419	9,109	N	127.4	139.6
Weekly Operating Hours									
Fewer than 40	117	79	Q	3,029	2,790	1,044	38.6	28.4	Q
40 to 48	210	378	185	3,415	6,136	2,071	61.5	61.6	89.5
49 to 60	221	518	440	2,909	8,031	4,783	76.1	64.5	92.0
61 to 84	221	437	266	1,578	5,209	3,547	139.9	84.0	75.0
85 to 167	266	330	293	1,222	2,938	2,932	217.6	112.4	100.0
Open Continuously	153	465	1,209	1,221	4,156	7,771	125.0	111.9	155.5
Ownership and Occupancy									
Nongovernment Owned	1,062	1,580	1,561	11,871	22,176	15,374	89.5	71.2	101.5
Owner Occupied	449	736	875	5,540	10,688	7,363	81.1	68.9	118.8
Nonowner Occupied	609	834	672	5,953	10,621	7,339	102.3	78.5	91.5
Unoccupied	Q	Q	Q	377	867	Q	Q	Q	Q
Government Owned	125	628	864	1,504	7,084	6,775	83.3	88.7	127.5
Federal	Q	Q	255	Q	402	1,471	Q	Q	173.1
State	Q	199	278	302	1,755	1,751	Q	113.3	158.8
Local	83	386	331	1,119	4,927	3,553	74.5	78.4	93.1
Vacancy Status									
Completely Vacant	Q	Q	Q	405	918	838	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	83	350	652	1,443	4,519	6,420	57.8	77.5	101.6
Not At All Vacant	1,099	1,833	1,749	11,484	23,530	14,820	95.7	77.9	118.0

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Number of Establishments									
One	1,035	1,657	1,474	10,917	21,123	13,104	94.8	78.5	112.5
2 to 5	140	390	462	1,947	5,307	3,705	71.9	73.5	124.7
6 to 10	Q	87	121	Q	1,011	872	Q	86.5	139.3
11 to 20	Q	44	108	Q	624	1,325	Q	70.4	81.2
More than 20	Q	Q	238	Q	277	2,305	Q	Q	103.1
Currently Unoccupied	Q	Q	Q	405	918	838	Q	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	652	1,263	1,271	5,838	15,926	11,052	111.7	79.3	115.0
Concrete (Block or Poured)	201	430	343	2,074	5,357	3,402	96.9	80.3	100.8
Concrete Panels	Q	166	468	275	2,014	4,270	Q	82.3	109.5
Siding or Shingles	173	80	Q	2,274	1,555	Q	76.0	51.6	Q
Metal Panels	108	223	131	2,668	3,819	1,425	40.5	58.5	92.3
Window Glass	Q	Q	74	Q	231	762	Q	Q	97.3
Other	Q	Q	Q	Q	229	770	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	348	783	953	2,725	9,595	8,850	127.5	81.6	107.7
Shingles (Not Wood)	322	357	Q	3,901	4,888	1,406	82.5	72.9	Q
Metal Surfacing	186	319	124	4,021	6,356	1,567	46.3	50.2	79.3
Synthetic or Rubber	205	553	891	1,352	5,667	7,710	151.3	97.6	115.6
Slate or Tile	76	99	Q	776	1,296	391	97.3	76.0	Q
Wooden Materials	24	Q	Q	336	403	Q	72.6	Q	Q
Concrete	Q	Q	Q	158	455	1,618	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	280	699	788	2,924	8,005	6,916	95.7	87.3	113.9
Addition or Annex	75	260	398	668	2,805	3,079	112.9	92.6	129.2
Reduction In Floorspace	Q	Q	Q	Q	420	550	Q	Q	Q
Cosmetic Improvements	201	515	601	2,107	5,906	5,105	95.6	87.2	117.7
Wall or Roof Replacement	99	262	416	1,177	2,989	3,904	84.2	87.8	106.5
Interior Wall Re-Configuration	109	287	515	1,181	3,222	4,115	92.2	89.1	125.2
HVAC Equipment Upgrade	114	431	611	1,175	4,662	4,931	97.4	92.5	123.9
Lighting Upgrade	103	426	556	1,204	4,417	4,654	85.9	96.3	119.5
Window Replacement	77	250	286	873	2,847	2,633	88.0	87.9	108.5
Plumbing System Upgrade	87	245	416	890	2,735	3,519	97.4	89.6	118.3
Insulation Upgrade	46	150	184	640	1,655	1,719	72.6	90.6	107.1
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	381	576	525	5,047	8,629	5,038	75.5	66.7	104.2
Building Newer than 1980	527	934	1,112	5,404	12,627	10,195	97.5	74.0	109.1

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Energy Sources (more than one may apply)									
Electricity	1,187	2,208	2,425	12,543	28,786	21,977	94.7	76.7	110.3
Natural Gas	852	1,736	1,903	6,776	19,761	16,931	125.7	87.9	112.4
Fuel Oil	123	352	1,285	1,317	3,532	10,308	93.6	99.6	124.7
District Heat	Q	239	763	Q	1,232	4,111	Q	194.3	185.6
District Chilled Water	Q	121	411	Q	694	2,111	Q	174.0	194.5
Propane	102	155	327	1,531	2,577	2,968	66.5	60.3	110.3
Other	17	59	Q	429	583	388	39.6	101.1	Q
Space-Heating Energy Sources (more than one may apply)									
Electricity	424	961	989	4,927	13,154	10,519	86.0	73.0	94.0
Natural Gas	745	1,511	1,425	6,187	17,733	13,038	120.5	85.2	109.3
Fuel Oil	108	128	355	1,183	1,760	3,045	91.1	72.4	116.7
District Heat	Q	235	744	Q	1,173	3,924	Q	200.3	189.7
Propane	58	49	Q	1,194	1,305	Q	48.5	37.8	Q
Other	13	32	Q	410	347	Q	32.0	91.7	Q
Primary Space-Heating Energy Source									
Electricity	289	492	308	3,465	7,876	4,656	83.3	62.5	66.2
Natural Gas	681	1,338	1,261	5,741	15,927	11,302	118.6	84.0	111.6
Fuel Oil	94	89	Q	913	1,268	1,637	103.3	70.5	Q
District Heat	Q	226	710	Q	1,112	3,695	Q	203.6	192.2
Propane	45	24	Q	1,009	858	Q	44.9	27.5	Q
Other	Q	Q	Q	226	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	1,073	2,013	1,935	10,360	25,385	18,575	103.6	79.3	104.2
Natural Gas	Q	Q	118	Q	298	683	Q	Q	173.6
District Chilled Water	Q	121	411	Q	694	2,111	Q	174.0	194.5
Water-Heating Energy Sources (more than one may apply)									
Electricity	463	893	788	5,669	12,392	9,430	81.7	72.1	83.6
Natural Gas	593	1,277	1,336	3,995	13,529	11,296	148.4	94.4	118.3
Fuel Oil	Q	48	112	285	694	900	Q	69.1	Q
District Heat	Q	Q	465	Q	555	2,507	Q	Q	185.4
Propane	Q	39	Q	374	853	Q	Q	45.2	Q
Cooking Energy Sources (more than one may apply)									
Electricity	215	444	920	1,114	4,754	7,292	193.1	93.5	126.1
Natural Gas	333	537	1,203	1,190	4,975	9,273	280.3	107.9	129.8
Propane	Q	43	Q	295	714	Q	Q	60.4	Q

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Energy End Uses (more than one may apply)									
Buildings with Space Heating	1,130	2,181	2,394	11,454	27,165	21,408	98.6	80.3	111.8
Buildings with Cooling	1,079	2,101	2,284	10,416	26,030	20,495	103.6	80.7	111.4
Buildings with Water Heating	1,093	2,126	2,280	10,107	25,708	20,663	108.1	82.7	110.3
Buildings with Cooking	452	769	1,492	2,133	8,041	12,063	211.8	95.6	123.7
Buildings with Manufacturing	21	109	124	330	1,326	1,482	64.8	81.9	83.9
Buildings with Electricity Generation	Q	388	1,284	199	3,074	9,547	Q	126.3	134.5
Percent of Floorspace Heated									
Not Heated	58	27	Q	1,920	2,095	740	30.0	13.0	Q
1 to 50	92	150	57	1,627	3,499	1,723	56.3	42.9	32.8
51 to 99	153	246	348	1,455	3,286	3,365	104.9	74.8	103.4
100	886	1,785	1,990	8,372	20,380	16,320	105.8	87.6	121.9
Percent of Floorspace Cooled									
Not Cooled	108	107	Q	2,959	3,231	1,654	36.6	33.1	Q
1 to 50	205	534	287	2,909	8,811	4,877	70.3	60.6	58.9
51 to 99	215	469	729	1,775	5,265	6,170	120.9	89.2	118.1
100	660	1,098	1,268	5,731	11,953	9,447	115.2	91.8	134.2
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	155	260	125	2,495	5,662	2,046	62.2	45.8	61.3
51 to 99	279	680	777	3,154	8,556	6,579	88.5	79.4	118.1
100	740	1,251	1,499	6,390	13,779	12,620	115.8	90.8	118.8
Building Never Open/ Electricity Not Used	Q	Q	Q	1,186	1,130	893	Q	Q	Q
Percent Lit When Closed									
Zero	382	476	274	5,839	8,570	2,976	65.4	55.5	92.1
1 to 50	608	1,173	845	5,314	15,218	10,415	114.5	77.1	81.1
51 to 100	44	94	97	361	891	841	122.3	105.5	115.3
Building Never Closed/ Electricity Not Used	153	465	1,209	1,860	4,581	7,916	82.2	101.6	152.7
Heating Equipment (more than one may apply)									
Heat Pumps	91	327	387	1,147	4,074	3,593	79.4	80.2	107.7
Packaged Heat Pumps	62	192	269	686	2,402	2,354	89.8	79.8	114.4
Split-System Heat Pumps	26	98	Q	420	1,293	868	60.8	76.1	85.5
Individual Room Heat Pumps	Q	98	151	Q	1,113	1,509	Q	88.2	100.2
Furnaces	530	624	340	5,794	9,501	4,320	91.4	65.7	78.6
Individual Space Heaters	158	445	420	2,329	5,696	4,520	67.7	78.2	93.0
District Heat	Q	233	739	Q	1,162	3,903	Q	200.1	189.2
Boilers	156	821	1,267	1,234	8,490	10,699	126.2	96.7	118.4
Packaged Heating Units	365	730	634	2,758	8,541	6,722	132.2	85.4	94.3
Other	34	95	102	549	1,325	1,388	62.2	71.5	73.3

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	274	385	265	3,091	5,245	2,699	88.6	73.4	98.1
Heat Pumps	105	329	403	1,239	4,036	3,766	85.1	81.5	106.9
Packaged Heat Pumps	70	194	264	761	2,370	2,295	92.5	82.0	115.0
Split-System Heat Pumps	31	99	Q	436	1,289	880	70.9	76.7	84.5
Individual Room Heat Pumps	Q	97	175	Q	1,096	1,774	Q	88.5	98.6
Individual Air Conditioners	155	454	471	1,984	5,999	4,576	77.9	75.7	102.9
District Chilled Water	Q	121	411	Q	694	2,111	Q	174.0	194.5
Central Chillers	Q	350	1,173	Q	2,907	8,666	Q	120.3	135.4
Packaged Air Conditioning Units	597	1,179	1,087	4,698	14,256	11,016	127.0	82.7	98.7
Swamp Coolers	46	76	Q	385	776	399	119.1	98.1	Q
Other	Q	Q	Q	Q	445	700	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	312	660	395	3,379	8,613	4,411	92.3	76.7	89.6
Cooling	402	835	712	3,903	10,012	7,080	102.9	83.4	100.5
Water Heating Equipment									
Centralized System	876	1,395	1,161	7,606	16,799	10,266	115.2	83.0	113.1
Distributed System	190	365	281	2,263	5,582	3,695	83.8	65.4	75.9
Combination of Centralized and Distributed System	Q	365	838	239	3,327	6,702	Q	109.8	125.1
Lighting Equipment Types (more than one may apply)									
Incandescent	614	1,457	1,846	5,979	16,896	15,653	102.7	86.2	117.9
Standard Fluorescent	1,125	2,138	2,381	11,305	27,126	21,256	99.5	78.8	112.0
Compact Fluorescent	316	1,078	1,814	2,232	10,936	14,403	141.5	98.5	126.0
High Intensity Discharge	127	670	1,344	998	7,559	12,086	127.5	88.7	111.2
Halogen	211	624	1,147	1,385	6,585	9,734	152.2	94.8	117.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	1,001	1,955	2,257	9,071	23,752	20,150	110.4	82.3	112.0
Commercial Refrigeration	561	976	1,799	2,716	9,350	14,702	206.5	104.4	122.3
Walk-In Units	466	706	1,594	1,824	5,937	12,493	255.5	118.8	127.6
Cases or Cabinets	485	767	1,450	2,216	7,057	11,151	219.0	108.7	130.0
Residential-Type Units	526	1,339	1,601	6,783	17,774	14,328	77.5	75.4	111.8
Vending Machines	248	1,411	2,061	2,237	15,323	17,775	110.9	92.1	116.0
No Refrigeration	186	253	Q	4,303	5,508	1,998	43.3	46.0	Q

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Office Equipment (more than one may apply)									
Computers	920	2,120	2,335	8,727	26,064	20,837	105.4	81.3	112.1
With Flat Screen Monitors	238	983	1,745	2,173	10,178	14,065	109.6	96.6	124.0
Dedicated Servers	328	1,406	2,027	2,790	15,713	17,835	117.4	89.5	113.6
Laser Printers	577	1,244	1,188	5,598	16,584	10,830	103.0	75.0	109.7
Inkjet Printers	402	1,292	1,608	3,821	14,731	13,658	105.2	87.7	117.7
FAX Machines	806	2,004	2,282	7,520	24,274	20,580	107.2	82.5	110.9
Photocopiers	422	1,827	2,217	5,167	21,434	19,657	81.7	85.2	112.8
Number of Computers									
None	267	88	Q	4,647	3,197	1,312	57.5	27.5	Q
1 to 4	564	345	Q	5,366	5,844	1,185	105.2	59.1	Q
5 to 9	193	300	Q	1,725	4,428	1,027	111.9	67.8	Q
10 to 19	93	324	98	1,031	4,055	1,524	89.8	80.0	64.3
20 to 49	64	449	194	569	4,639	2,207	112.0	96.8	88.0
50 to 99	Q	296	212	Q	3,297	2,045	Q	89.8	103.9
100 to 249	Q	324	388	Q	3,165	3,522	Q	102.3	110.1
250 or More	N	81	1,285	N	636	9,327	N	127.8	137.8
Number of Dedicated Servers									
None	860	802	398	10,585	13,547	4,314	81.2	59.2	92.2
1 to 4	309	1,103	822	2,667	13,017	8,432	115.7	84.7	97.5
5 to 9	Q	153	238	Q	1,491	2,305	Q	102.4	103.4
10 to 19	Q	88	340	Q	603	2,370	Q	145.5	143.3
20 to 49	N	Q	257	N	482	2,101	N	Q	122.2
50 or More	N	Q	370	N	Q	2,627	N	Q	140.9
Number of Photocopiers									
None	765	381	208	8,208	7,827	2,492	93.3	48.7	83.4
One	301	658	171	3,817	8,993	2,665	78.8	73.2	64.1
2 to 4	105	791	438	1,257	8,908	4,917	83.4	88.8	89.1
5 to 9	Q	223	372	Q	2,032	3,390	Q	109.9	109.8
10 or More	N	154	1,236	N	1,500	8,685	N	102.6	142.3
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	452	767	1,492	2,131	8,029	12,063	212.0	95.6	123.7
Activities with Large Amounts of Hot Water	303	757	1,405	1,477	7,554	10,451	204.9	100.3	134.5
Separate Computer Area	87	959	1,849	969	10,433	15,471	89.8	92.0	119.5
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	162	690	1,529	1,048	6,736	11,813	154.5	102.4	129.4
Economizer Cycle	168	812	1,609	1,102	7,217	12,789	152.2	112.6	125.8
HVAC Maintenance	837	1,939	2,394	7,133	23,011	21,019	117.4	84.3	113.9
Energy Management and Control System (EMCS)	53	523	1,206	364	4,973	10,294	146.3	105.2	117.1

Table C11. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/ square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
**All Buildings* ..... **	1,188	2,208	2,425	13,374	29,260	22,149	88.8	75.5	109.5
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	677	1,478	1,774	6,243	17,321	15,346	108.4	85.3	115.6
Tinted Window Glass	406	980	1,712	3,791	12,179	13,917	107.0	80.5	123.0
Reflective Window Glass	75	285	567	697	2,932	4,915	107.1	97.3	115.3
External Overhangs or Awnings	436	643	658	3,655	7,868	5,720	119.3	81.7	115.0
Skylights or Atriums	77	355	875	758	4,618	7,170	101.2	76.9	122.0
Daylighting Sensors	Q	77	272	216	789	1,864	Q	97.4	145.8
Specular Reflectors	241	923	1,665	2,184	10,058	13,875	110.2	91.8	120.0
Electronic Ballasts	762	1,750	2,234	7,346	20,431	19,105	103.7	85.6	117.0
Energy Management and Control System (EMCS) For Lighting	Q	131	393	Q	1,172	3,537	Q	112.1	111.1
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	740	1,471	1,529	8,161	19,476	15,084	90.7	75.5	101.4
Cooling	742	1,500	1,602	7,797	19,738	15,670	95.1	76.0	102.3
Lighting	995	1,668	1,155	10,689	23,175	13,123	93.1	72.0	88.0
Office Equipment	378	672	416	4,483	10,317	4,597	84.3	65.1	90.4

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Building Floorspace (Square Feet)									
1,001 to 5,000	191	290	190	2,146	2,805	1,838	89.1	103.5	103.5
5,001 to 10,000	131	231	154	1,972	2,917	1,696	66.2	79.2	91.0
10,001 to 25,000	235	351	191	3,213	4,976	3,346	73.1	70.5	57.0
25,001 to 50,000	172	328	173	2,449	4,128	2,091	70.4	79.4	82.5
50,001 to 100,000	150	380	228	2,060	4,018	2,979	73.0	94.6	76.7
100,001 to 200,000	214	438	281	2,124	3,947	2,993	100.7	111.1	94.0
200,001 to 500,000	219	354	152	2,155	3,427	1,593	101.7	103.2	95.3
Over 500,000	176	421	Q	1,566	2,986	1,357	112.1	141.2	Q
Principal Building Activity									
Education	248	385	187	3,191	4,359	2,324	77.6	88.4	80.6
Food Sales	Q	116	Q	277	587	391	Q	197.0	Q
Food Service	89	152	187	613	524	517	144.4	290.1	361.2
Health Care	130	361	103	730	1,671	762	177.7	215.8	135.7
Inpatient	Q	311	Q	456	1,218	231	Q	255.3	Q
Outpatient	Q	50	45	273	453	531	Q	109.6	84.4
Lodging	109	286	114	1,236	2,564	1,296	Q	111.7	88.1
Retail (Other Than Mall)	76	115	128	1,026	1,804	1,487	73.9	63.5	86.4
Office	267	641	226	2,852	6,792	2,563	93.6	94.4	88.0
Public Assembly	90	156	124	1,455	1,450	1,035	62.0	107.6	119.7
Public Order and Safety	Q	39	Q	Q	385	453	Q	101.3	Q
Religious Worship	71	53	39	1,522	1,328	904	46.6	39.9	43.3
Service	66	168	78	1,057	1,954	1,040	62.8	85.9	74.8
Warehouse and Storage	166	156	134	2,029	4,014	4,034	81.6	38.8	33.3
Other	Q	142	Q	372	693	673	Q	Q	Q
Vacant	Q	Q	Q	1,073	1,080	415	Q	Q	Q
Census Region and Division									
Northeast	525	548	198	6,004	4,834	2,067	87.4	113.4	95.9
New England	101	135	Q	1,404	1,058	502	72.3	127.6	Q
Middle Atlantic	423	413	141	4,600	3,776	1,565	92.0	109.4	90.2
Midwest	550	748	393	5,679	7,415	3,986	96.8	100.8	98.5
East North Central	426	549	279	4,056	5,064	2,475	105.1	108.3	112.6
West North Central	123	199	114	1,623	2,351	1,511	76.0	84.6	75.4
South	257	969	721	3,659	11,032	8,798	70.4	87.9	82.0
South Atlantic	153	471	440	2,087	5,247	4,924	73.5	89.7	89.3
East South Central	41	182	86	583	1,703	1,108	69.9	107.1	77.7
West South Central	63	316	196	989	4,082	2,766	64.1	77.5	70.7
West	156	529	226	2,343	5,924	3,042	66.6	89.3	74.4
Mountain	51	255	76	524	2,217	934	97.0	114.9	81.2
Pacific	105	274	150	1,819	3,708	2,108	57.9	73.9	71.4
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	279	488	224	3,390	4,652	2,580	82.2	104.8	86.6
5,500-7,000 HDD	583	827	350	6,069	7,626	3,640	96.1	108.5	96.2
4,000-5,499 HDD	380	517	237	4,078	4,911	2,515	93.3	105.2	94.1
Fewer than 4,000 HDD	183	608	422	3,095	7,506	5,137	59.0	81.0	82.1
2,000 CDD or More and --									
Fewer than 4,000 HDD	63	354	307	1,052	4,511	4,021	60.0	78.4	76.3

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Number of Floors									
One	377	863	698	4,849	11,814	9,318	77.7	73.0	74.9
Two	345	628	338	4,548	7,501	4,221	75.8	83.7	80.1
Three	250	241	128	3,470	2,465	1,565	72.1	97.7	82.0
Four to Nine	340	698	299	3,403	4,507	2,175	99.8	154.8	137.5
Ten or More	177	365	Q	1,415	2,919	613	124.9	124.9	Q
Elevators and Escalators (more than one may apply)									
Any Elevators	639	1,491	696	6,588	11,645	6,384	97.0	128.0	109.0
Number of Elevators									
One	171	341	220	2,392	3,249	2,580	71.6	104.9	85.1
Two to Five	260	614	284	2,821	4,792	2,516	92.0	128.1	112.8
Six or More	208	536	193	1,375	3,605	1,288	151.1	148.8	149.5
Any Escalators	Q	193	Q	Q	1,598	Q	Q	120.7	Q
Number of Workers (main shift)									
Fewer than 5	362	295	160	5,370	6,047	4,075	67.5	48.8	39.3
5 to 9	127	220	121	1,766	2,693	1,706	72.1	81.6	71.1
10 to 19	166	235	193	2,429	3,045	2,329	68.5	77.2	82.8
20 to 49	256	480	314	3,158	4,568	3,262	81.2	105.0	96.2
50 to 99	161	347	220	1,781	3,725	2,428	90.2	93.2	90.6
100 to 249	147	459	232	1,284	3,779	1,808	114.2	121.6	128.1
250 or More	268	758	299	1,896	5,347	2,285	141.4	141.7	130.8
Weekly Operating Hours									
Fewer than 40	88	94	46	2,541	2,798	1,525	34.5	33.7	30.0
40 to 48	253	363	157	3,627	5,079	2,917	69.8	71.5	53.8
49 to 60	385	536	259	4,564	7,382	3,777	84.4	72.5	68.5
61 to 84	258	414	252	2,728	4,615	2,991	94.6	89.6	84.3
85 to 167	152	379	359	1,353	2,859	2,880	112.5	132.5	124.5
Open Continuously	352	1,008	467	2,872	6,473	3,803	122.5	155.8	122.7
Ownership and Occupancy									
Nongovernment Owned	1,009	2,054	1,140	12,993	22,391	14,037	77.6	91.7	81.2
Owner Occupied	579	962	519	7,114	10,422	6,055	81.4	92.3	85.7
Nonowner Occupied	423	1,076	616	5,206	11,103	7,604	81.2	96.9	81.0
Unoccupied	Q	Q	Q	673	865	Q	Q	Q	Q
Government Owned	479	740	398	4,692	6,814	3,856	102.1	108.5	103.3
Federal	142	109	Q	843	737	Q	168.6	147.6	Q
State	86	304	123	838	2,122	848	103.1	143.1	145.4
Local	251	327	223	3,011	3,955	2,632	83.3	82.7	84.6
Vacancy Status									
Completely Vacant	Q	Q	Q	905	879	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	319	538	229	3,680	5,693	3,009	86.7	94.4	76.2
Not At All Vacant	1,146	2,231	1,303	12,933	22,432	14,469	88.6	99.5	90.1
Number of Establishments									
One	1,095	1,929	1,143	12,247	19,473	13,424	89.4	99.0	85.2
2 to 5	240	508	245	2,930	5,170	2,860	81.9	98.2	85.6
6 to 10	39	102	75	467	989	501	82.6	103.1	149.3
11 to 20	Q	93	Q	529	974	449	Q	95.3	Q
More than 20	Q	145	Q	607	1,720	Q	Q	84.5	Q
Currently Unoccupied	Q	Q	Q	905	879	Q	Q	Q	Q

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Predominant Exterior Wall Material									
Brick, Stone or Stucco	1,111	1,372	703	12,922	13,061	6,834	86.0	105.0	102.8
Concrete (Block or Poured)	244	500	230	2,696	5,446	2,690	90.4	91.8	85.5
Concrete Panels	Q	419	233	166	3,595	2,798	Q	116.6	83.4
Siding or Shingles	72	105	100	1,186	1,526	1,407	60.4	69.0	70.8
Metal Panels	Q	236	192	524	4,016	3,372	Q	58.9	56.8
Window Glass	Q	60	Q	Q	624	Q	Q	95.5	Q
Other	Q	Q	Q	Q	730	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	578	1,119	386	6,646	10,567	3,957	86.9	105.9	97.6
Shingles (Not Wood)	265	351	207	3,347	4,170	2,678	79.1	84.2	77.1
Metal Surfacing	51	254	325	1,072	4,964	5,908	47.8	51.2	54.9
Synthetic or Rubber	308	822	519	3,530	6,959	4,240	87.3	118.1	122.3
Slate or Tile	91	58	58	1,185	705	572	76.8	82.3	101.9
Wooden Materials	Q	40	Q	314	464	Q	Q	86.5	Q
Concrete	Q	Q	Q	Q	666	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	830	937	N	9,146	8,698	N	90.7	107.7	N
Addition or Annex	290	443	N	3,069	3,482	N	94.3	127.3	N
Reduction In Floorspace	Q	Q	N	501	511	N	Q	Q	N
Cosmetic Improvements	606	712	N	6,751	6,368	N	89.7	111.8	N
Wall or Roof Replacement	343	434	N	4,168	3,903	N	82.3	111.2	N
Interior Wall Re-Configuration	378	534	N	4,191	4,327	N	90.1	123.3	N
HVAC Equipment Upgrade	510	646	N	5,436	5,332	N	93.9	121.2	N
Lighting Upgrade	489	596	N	5,483	4,792	N	89.2	124.4	N
Window Replacement	344	269	N	4,090	2,264	N	84.2	118.6	N
Plumbing System Upgrade	368	380	N	4,013	3,130	N	91.8	121.3	N
Insulation Upgrade	173	207	N	2,212	1,803	N	78.4	115.0	N
Other Renovation	Q	Q	N	451	Q	N	Q	Q	N
No Renovations Since 1980	658	823	N	8,539	10,175	N	77.1	80.9	N
Building Newer than 1980	N	1,034	1,539	N	10,332	17,893	N	100.1	86.0
Energy Sources (more than one may apply)									
Electricity	1,488	2,794	1,538	17,163	28,766	17,378	86.7	97.1	88.5
Natural Gas	1,082	2,175	1,235	12,097	19,763	11,608	89.4	110.1	106.4
Fuel Oil	481	908	370	4,995	6,951	3,211	96.4	130.7	115.3
District Heat	354	490	Q	2,206	2,330	908	160.6	210.4	Q
District Chilled Water	Q	286	Q	510	1,433	910	Q	199.4	Q
Propane	209	233	143	2,025	2,890	2,161	103.2	80.5	66.0
Other	21	84	Q	331	806	263	64.1	104.7	Q

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Space-Heating Energy Sources (more than one may apply)									
Electricity	427	1,222	724	5,769	13,818	9,013	74.1	88.4	80.3
Natural Gas	881	1,793	1,007	10,050	17,081	9,828	87.7	105.0	102.5
Fuel Oil	293	225	73	3,466	1,895	627	84.4	118.8	116.6
District Heat	349	475	Q	2,147	2,171	880	162.4	218.7	Q
Propane	55	60	45	972	1,238	993	56.3	48.2	45.8
Other	Q	30	Q	203	465	Q	Q	64.5	Q
Primary Space-Heating Energy Source									
Electricity	112	587	390	1,886	8,416	5,694	59.2	69.7	68.6
Natural Gas	830	1,581	869	9,431	15,149	8,390	88.1	104.3	103.6
Fuel Oil	179	92	Q	2,583	958	Q	69.4	96.4	Q
District Heat	326	458	Q	2,001	2,044	862	163.0	224.1	Q
Propane	13	22	37	450	777	729	28.4	28.0	50.7
Other	Q	Q	Q	Q	198	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	1,128	2,530	1,363	13,263	25,843	15,214	85.0	97.9	89.6
Natural Gas	Q	Q	Q	Q	419	Q	Q	Q	Q
District Chilled Water	Q	286	Q	510	1,433	910	Q	199.4	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	431	1,105	609	6,039	13,305	8,147	71.4	83.1	74.7
Natural Gas	765	1,507	934	8,044	13,116	7,661	95.0	114.9	122.0
Fuel Oil	92	92	Q	1,047	668	Q	Q	138.5	Q
District Heat	167	331	Q	1,127	1,622	340	148.1	203.9	Q
Propane	Q	29	Q	346	651	426	Q	44.5	Q
Cooking Energy Sources (more than one may apply)									
Electricity	333	834	412	3,320	6,449	3,392	100.4	129.3	121.5
Natural Gas	524	961	588	4,847	6,307	4,284	108.1	152.4	137.4
Propane	Q	50	Q	450	678	332	Q	74.0	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	1,464	2,747	1,495	16,437	27,541	16,049	89.0	99.7	93.1
Buildings with Cooling	1,229	2,719	1,517	13,855	26,933	16,152	88.7	100.9	93.9
Buildings with Water Heating	1,291	2,708	1,500	14,569	26,409	15,499	88.6	102.5	96.8
Buildings with Cooking	694	1,289	729	6,760	9,776	5,701	102.7	131.9	127.9
Buildings with Manufacturing	67	115	72	928	1,480	730	72.7	77.9	98.0
Buildings with Electricity Generation	315	975	403	2,294	6,955	3,572	137.3	140.2	112.9
Percent of Floorspace Heated									
Not Heated	24	47	44	1,248	1,664	1,844	19.6	28.1	23.7
1 to 50	75	104	120	1,960	2,608	2,281	38.2	39.9	52.4
51 to 99	222	332	192	2,611	3,476	2,020	85.0	95.5	95.2
100	1,167	2,311	1,183	11,866	21,458	11,748	98.3	107.7	100.7

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Percent of Floorspace Cooled									
Not Cooled	259	75	22	3,830	2,272	1,741	67.6	33.1	12.5
1 to 50	376	432	218	5,393	7,014	4,191	69.8	61.5	52.0
51 to 99	348	693	372	3,663	6,171	3,377	94.9	112.3	110.2
100	505	1,594	927	4,799	13,748	8,584	105.2	115.9	108.0
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	227	191	122	3,977	3,766	2,461	57.1	50.6	49.7
51 to 99	433	888	415	4,889	9,002	4,398	88.5	98.7	94.3
100	804	1,692	993	7,611	15,221	9,957	105.6	111.2	99.8
Building Never Open/ Electricity Not Used	Q	Q	Q	1,155	1,172	883	Q	Q	Q
Percent Lit When Closed									
Zero	400	431	302	5,199	7,017	5,169	76.9	61.4	58.4
1 to 50	716	1,253	657	8,854	14,432	7,662	80.9	86.8	85.7
51 to 100	Q	101	113	238	961	894	Q	105.4	126.7
Building Never Closed/ Electricity Not Used	352	1,008	467	3,394	6,795	4,168	103.7	148.4	112.0
Heating Equipment (more than one may apply)									
Heat Pumps	136	422	247	1,617	4,223	2,973	83.9	99.9	83.1
Packaged Heat Pumps	78	307	138	796	3,059	1,587	98.5	100.3	86.7
Split-System Heat Pumps	23	104	71	364	1,214	1,003	63.6	85.7	70.8
Individual Room Heat Pumps	62	113	80	753	1,050	888	82.3	107.6	89.8
Furnaces	423	655	415	5,910	8,376	5,329	71.5	78.2	77.9
Individual Space Heaters	246	506	272	3,650	5,661	3,233	67.3	89.3	84.2
District Heat	349	467	Q	2,147	2,139	880	162.4	218.1	Q
Boilers	734	1,100	410	7,751	9,099	3,573	94.7	120.9	114.8
Packaged Heating Units	243	869	617	2,791	9,252	5,978	87.2	93.9	103.1
Other	Q	128	74	386	1,662	1,215	Q	77.2	61.0
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	301	389	234	3,470	4,779	2,786	86.6	81.4	84.1
Heat Pumps	150	418	269	1,699	4,241	3,102	88.0	98.7	86.8
Packaged Heat Pumps	90	301	138	860	2,997	1,569	104.4	100.3	88.1
Split-System Heat Pumps	29	103	73	419	1,205	981	68.5	85.2	74.3
Individual Room Heat Pumps	59	120	99	716	1,183	1,041	82.4	101.3	94.9
Individual Air Conditioners	448	456	177	5,406	5,295	1,858	82.8	86.0	95.1
District Chilled Water	Q	286	Q	510	1,433	910	Q	199.4	Q
Central Chillers	299	922	311	2,346	6,900	2,390	127.3	133.6	130.1
Packaged Air Conditioning Units	633	1,376	854	7,068	13,851	9,050	89.5	99.3	94.3
Swamp Coolers	Q	115	Q	221	1,072	269	Q	107.5	Q
Other	Q	Q	Q	416	528	287	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	429	938	N	6,052	10,351	N	70.9	90.7	N
Cooling	633	1,316	N	7,686	13,309	N	82.3	98.9	N

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Water Heating Equipment									
Centralized System	848	1,686	899	8,889	16,543	9,240	95.4	101.9	97.3
Distributed System	195	374	266	3,221	4,871	3,448	60.6	76.9	77.1
Combination of Centralized and Distributed System	248	648	336	2,459	4,996	2,812	100.7	129.6	119.4
Lighting Equipment Types (more than one may apply)									
Incandescent	965	1,997	955	11,094	18,083	9,351	87.0	110.4	102.1
Standard Fluorescent	1,415	2,735	1,493	15,996	27,530	16,161	88.5	99.4	92.4
Compact Fluorescent	687	1,688	833	6,587	13,504	7,480	104.2	125.0	111.4
High Intensity Discharge	498	975	668	4,992	9,231	6,420	99.8	105.7	104.0
Halogen	427	994	561	4,079	8,102	5,522	104.6	122.6	101.7
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	1,230	2,527	1,456	13,973	24,165	14,836	88.0	104.6	98.1
Commercial Refrigeration	772	1,648	916	7,421	12,240	7,107	104.0	134.6	128.9
Walk-In Units	566	1,421	780	5,242	9,625	5,387	107.9	147.6	144.7
Cases or Cabinets	614	1,379	710	5,492	9,628	5,304	111.8	143.2	133.8
Residential-Type Units	912	1,666	888	11,110	17,563	10,211	82.1	94.9	87.0
Vending Machines	775	1,914	1,032	7,833	17,126	10,375	98.9	111.8	99.5
No Refrigeration	258	266	83	3,712	5,040	3,057	69.4	52.8	27.2
Office Equipment (more than one may apply)									
Computers	1,256	2,653	1,467	14,244	25,894	15,490	88.2	102.5	94.7
With Flat Screen Monitors	630	1,568	768	6,001	13,348	7,068	104.9	117.5	108.7
Dedicated Servers	771	1,959	1,031	8,136	17,936	10,265	94.7	109.2	100.4
Laser Printers	766	1,460	783	9,240	15,256	8,516	82.9	95.7	91.9
Inkjet Printers	675	1,675	953	6,987	15,573	9,650	96.5	107.5	98.8
FAX Machines	1,169	2,519	1,403	13,208	24,496	14,669	88.5	102.8	95.7
Photocopiers	1,037	2,248	1,180	11,473	21,832	12,952	90.4	103.0	91.1
Number of Computers									
None	232	141	72	3,441	3,311	2,403	67.3	42.5	30.0
1 to 4	306	392	318	4,022	5,011	3,362	76.0	78.3	94.4
5 to 9	139	237	170	2,124	2,820	2,236	65.7	83.9	75.9
10 to 19	103	253	159	1,268	3,254	2,088	81.1	77.8	76.2
20 to 49	156	332	220	1,808	3,178	2,428	86.0	104.4	90.4
50 to 99	135	276	102	1,607	2,523	1,246	83.8	109.4	81.8
100 to 249	149	362	202	1,507	3,277	1,907	99.2	110.5	106.0
250 or More	269	801	296	1,909	5,832	2,222	140.7	137.4	133.4
Number of Dedicated Servers									
None	717	835	508	9,549	11,269	7,628	75.1	74.1	66.6
1 to 4	470	1,138	625	5,444	11,560	7,112	86.4	98.5	87.9
5 to 9	98	179	129	1,078	1,607	1,180	90.8	111.2	109.2
10 to 19	104	221	107	795	1,468	764	130.8	150.8	139.6
20 to 49	Q	221	Q	239	1,921	423	Q	114.9	Q
50 or More	Q	200	118	581	1,380	787	Q	144.7	149.8

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Number of Photocopiers									
None	451	546	358	6,212	7,374	4,941	72.6	74.0	72.5
One	325	451	354	4,324	6,116	5,035	75.1	73.7	70.3
2 to 4	283	696	355	3,669	7,155	4,258	77.3	97.2	83.4
5 to 9	114	297	201	1,256	2,754	1,505	90.5	107.9	133.6
10 or More	315	804	270	2,224	5,806	2,154	141.7	138.5	125.3
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	693	1,289	729	6,748	9,774	5,701	102.6	131.9	127.9
Activities with Large Amounts of Hot Water	533	1,271	661	4,912	9,140	5,430	108.6	139.1	121.8
Separate Computer Area	630	1,561	703	6,222	13,495	7,156	101.3	115.7	98.3
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	407	1,297	676	3,465	9,798	6,335	117.4	132.4	106.7
Economizer Cycle	424	1,461	703	3,618	11,196	6,294	117.2	130.5	111.7
HVAC Maintenance	1,242	2,501	1,427	13,084	23,507	14,572	94.9	106.4	97.9
Energy Management and Control System (EMCS)	326	985	471	2,975	8,078	4,577	109.6	122.0	102.8
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	850	1,876	1,203	9,646	16,720	12,544	88.1	112.2	95.9
Tinted Window Glass	567	1,669	862	5,566	15,091	9,231	101.9	110.6	93.4
Reflective Window Glass	161	479	286	1,579	4,009	2,956	102.0	119.6	96.8
External Overhangs or Awnings	344	902	491	4,147	8,148	4,947	82.9	110.7	99.1
Skylights or Atriums	245	686	376	2,666	6,130	3,750	91.9	111.8	100.3
Daylighting Sensors	49	197	130	448	1,407	1,014	110.1	140.3	128.4
Specular Reflectors	627	1,410	792	6,340	12,258	7,519	98.9	115.0	105.3
Electronic Ballasts	1,143	2,313	1,290	11,938	21,721	13,223	95.7	106.5	97.6
Energy Management and Control System (EMCS) For Lighting	59	306	174	565	2,606	1,610	103.8	117.5	107.9
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	937	1,836	967	11,574	20,077	11,070	81.0	91.4	87.4
Cooling	911	1,874	1,059	11,103	20,157	11,945	82.1	93.0	88.6
Lighting	1,096	1,701	1,021	13,346	20,951	12,690	82.2	81.2	80.4
Office Equipment	470	598	398	6,195	8,140	5,062	75.8	73.4	78.6

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
All Buildings*	4,404	63,307	14.4	9,168	3,037	890	69,032
Building Floorspace (Square Feet)							
1,001 to 5,000	2,384	6,346	2.7	1,164	386	113	10,348
5,001 to 10,000	834	6,197	7.4	790	262	77	7,296
10,001 to 25,000	727	11,370	15.6	1,229	407	119	10,001
25,001 to 50,000	234	8,385	35.8	1,058	350	103	7,871
50,001 to 100,000	128	9,031	70.5	1,223	405	119	8,717
100,001 to 200,000	65	9,018	139.0	1,458	483	141	9,500
200,001 to 500,000	24	7,051	289.8	1,090	361	106	7,323
Over 500,000	7	5,908	896.1	1,157	383	112	7,977
Principal Building Activity							
Education	384	9,871	25.7	1,121	371	109	8,111
Food Sales	221	1,237	5.6	629	208	61	4,627
Food Service	297	1,654	5.6	654	217	63	5,176
Health Care	129	3,163	24.6	748	248	73	4,882
Inpatient	8	1,905	241.4	539	178	52	3,198
Outpatient	121	1,258	10.4	209	69	20	1,684
Lodging	142	5,096	35.8	709	235	69	5,288
Retail (Other Than Mall)	443	4,317	9.7	637	211	62	5,132
Office	824	12,208	14.8	2,170	719	211	17,050
Public Assembly	274	3,935	14.4	506	167	49	3,943
Public Order and Safety	71	1,090	15.5	172	57	17	1,216
Religious Worship	370	3,754	10.1	188	62	18	1,628
Service	601	3,982	6.6	451	149	44	3,485
Warehouse and Storage	464	9,425	20.3	738	244	72	5,034
Other	76	1,729	22.7	401	133	39	3,049
Vacant	106	1,846	17.3	46	15	4	412
Year Constructed							
Before 1920	318	3,730	11.7	271	90	26	2,319
1920 to 1945	499	6,595	13.2	626	208	61	5,123
1946 to 1959	541	6,838	12.6	696	231	68	5,729
1960 to 1969	571	8,057	14.1	989	327	96	7,714
1970 to 1979	700	10,555	15.1	1,726	572	168	12,637
1980 to 1989	668	10,154	15.2	1,892	627	184	13,902
1990 to 1999	809	12,078	14.9	2,082	690	202	15,236
2000 to 2003	298	5,299	17.8	884	293	86	6,373
Census Region and Division							
Northeast	710	12,809	18.0	1,519	503	147	14,262
New England	228	2,942	12.9	326	108	32	3,125
Middle Atlantic	482	9,867	20.5	1,192	395	116	11,137
Midwest	1,189	16,701	14.0	2,224	737	216	14,172
East North Central	659	11,373	17.3	1,580	524	153	10,220
West North Central	531	5,328	10.0	643	213	62	3,952
South	1,654	22,766	13.8	3,858	1,278	375	25,540
South Atlantic	835	12,097	14.5	2,166	717	210	14,155
East South Central	312	3,220	10.3	515	171	50	3,348
West South Central	507	7,449	14.7	1,177	390	114	8,037
West	851	11,030	13.0	1,568	519	152	15,057
Mountain	285	3,633	12.7	576	191	56	4,272
Pacific	565	7,397	13.1	992	329	96	10,786

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Climate Zone: 30-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	809	10,393	12.8	1,232	408	120	9,135
5,500-7,000 HDD	1,129	17,076	15.1	2,305	763	224	16,298
4,000-5,499 HDD	642	11,375	17.7	1,713	567	166	13,354
Fewer than 4,000 HDD	1,193	15,172	12.7	2,259	748	219	18,211
2,000 CDD or More and --							
Fewer than 4,000 HDD	631	9,290	14.7	1,659	549	161	12,034
Number of Floors							
One	2,919	24,935	8.5	3,442	1,140	334	26,809
Two	1,011	15,978	15.8	2,080	689	202	16,066
Three	333	7,381	22.1	863	286	84	6,389
Four to Nine	128	10,065	78.7	1,796	595	174	12,517
Ten or More	12	4,947	420.0	987	327	96	7,251
Elevators and Escalators (more than one may apply)							
Any Elevators	305	24,495	80.3	4,289	1,421	416	30,227
Number of Elevators							
One	205	8,107	39.6	1,069	354	104	7,712
Two to Five	88	10,120	115.3	1,767	585	172	12,340
Six or More	13	6,268	491.5	1,453	481	141	10,175
Any Escalators	6	2,350	388.7	583	193	57	4,096
Number of Workers (main shift)							
Fewer than 5	2,415	14,061	5.8	1,122	372	109	9,503
5 to 9	775	6,147	7.9	749	248	73	6,390
10 to 19	563	7,803	13.9	915	303	89	7,647
20 to 49	397	10,962	27.6	1,581	524	154	11,966
50 to 99	147	7,934	53.8	1,218	403	118	8,532
100 to 249	77	6,871	89.7	1,388	460	135	9,768
250 or More	30	9,528	320.4	2,195	727	213	15,224
Weekly Operating Hours							
Fewer than 40	866	5,900	6.8	272	90	26	2,489
40 to 48	1,105	11,571	10.5	1,199	397	116	9,577
49 to 60	1,055	15,702	14.9	1,805	598	175	14,232
61 to 84	580	10,312	17.8	1,500	497	146	11,559
85 to 167	376	6,941	18.5	1,579	523	153	11,188
Open Continuously	422	12,881	30.5	2,813	932	273	19,987
Ownership and Occupancy							
Nongovernment Owned	3,783	48,012	12.7	6,944	2,300	674	54,122
Owner Occupied	1,817	23,454	12.9	3,280	1,086	318	25,441
Nonowner Occupied	1,885	23,258	12.3	3,639	1,205	353	28,446
Unoccupied	81	1,299	16.0	25	8	2	Q
Government Owned	620	15,295	24.7	2,224	737	216	14,910
Federal	46	1,951	42.8	395	131	38	2,159
State	163	3,786	23.2	616	204	60	3,973
Local	411	9,558	23.2	1,213	402	118	8,777

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Vacancy Status							
Completely Vacant	85	1,489	17.5	28	9	3	258
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	499	12,199	24.4	1,736	575	169	13,209
Not At All Vacant	3,798	49,262	13.0	7,386	2,446	717	55,411
Number of Establishments							
One	3,591	44,379	12.4	6,454	2,138	627	48,376
2 to 5	635	10,921	17.2	1,517	502	147	11,440
6 to 10	55	1,958	35.7	348	115	34	2,632
11 to 20	23	1,951	85.7	295	98	29	2,268
More than 20	14	2,609	181.1	526	174	51	4,057
Currently Unoccupied	85	1,489	17.5	28	9	3	258
Predominant Exterior Wall Material							
Brick, Stone or Stucco	1,991	32,295	16.2	4,549	1,507	442	34,133
Concrete (Block or Poured)	756	10,738	14.2	1,599	530	155	12,417
Concrete Panels	122	6,383	52.2	1,205	399	117	8,417
Siding or Shingles	742	3,975	5.4	452	150	44	4,007
Metal Panels	714	7,377	10.3	897	297	87	6,726
Window Glass	17	1,024	60.1	201	67	20	1,462
Other	44	1,108	25.4	190	63	18	1,416
No One Major Type	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material							
Built-Up	1,008	20,781	20.6	3,143	1,041	305	24,170
Shingles (Not Wood)	1,283	9,871	7.7	1,247	413	121	10,264
Metal Surfacing	1,134	11,234	9.9	1,184	392	115	8,837
Synthetic or Rubber	504	14,711	29.2	2,686	890	261	18,633
Slate or Tile	257	2,438	9.5	313	104	30	2,816
Wooden Materials	119	881	7.4	111	37	11	869
Concrete	61	2,231	36.7	299	99	29	2,029
Other	13	595	44.4	125	41	12	845
No One Major Type	25	565	22.7	61	20	6	568
Renovations in Buildings Constructed Before 1980 (more than one may apply)							
Any Type of Renovation Since 1980	1,006	17,638	17.5	2,356	780	229	17,830
Addition or Annex	256	6,551	25.6	951	315	92	6,501
Reduction In Floorspace	22	1,012	46.1	158	52	15	1,180
Cosmetic Improvements	735	13,002	17.7	1,812	600	176	13,845
Wall or Roof Replacement	365	8,056	22.0	1,046	347	102	8,129
Interior Wall Re-Configuration	407	8,502	20.9	1,212	401	118	9,035
HVAC Equipment Upgrade	440	10,765	24.5	1,591	527	154	11,822
Lighting Upgrade	453	10,273	22.7	1,442	478	140	10,741
Window Replacement	307	6,277	20.5	757	251	73	6,168
Plumbing System Upgrade	313	7,141	22.8	947	314	92	7,360
Insulation Upgrade	225	4,012	17.8	526	174	51	4,065
Other Renovation	19	523	27.3	49	16	5	517
No Renovations Since 1980	1,622	18,137	11.2	1,953	647	190	15,691
Building Newer than 1980	1,776	27,532	15.5	4,859	1,609	472	35,511

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Energy Sources (more than one may apply)							
Electricity	4,404	63,307	14.4	9,168	3,037	890	69,032
Natural Gas	2,390	43,461	18.2	6,524	2,161	633	48,584
Fuel Oil	448	15,142	33.8	2,578	854	250	18,631
District Heat	67	5,443	81.4	1,011	335	98	6,519
District Chilled Water	33	2,853	86.7	580	192	56	3,667
Propane	499	7,067	14.2	1,022	339	99	7,234
Other	126	1,380	11.0	233	77	23	1,539
Space-Heating Energy Sources							
Electricity	1,766	28,600	16.2	4,696	1,555	456	34,865
Electricity Main	1,258	15,996	12.7	2,739	907	266	20,527
Electricity Secondary	507	12,604	24.8	1,957	648	190	14,338
Other Excluding Electricity	2,206	31,391	14.2	4,191	1,388	407	31,387
Buildings without Heating	432	3,315	7.7	281	93	27	2,779
Primary Space-Heating Energy Source							
Electricity	1,258	15,996	12.7	2,739	907	266	20,527
Natural Gas	1,998	32,963	16.5	4,724	1,565	459	35,355
Fuel Oil	282	3,818	13.5	232	77	23	2,246
District Heat	63	4,907	77.4	935	310	91	5,910
Propane	305	1,946	6.4	211	70	20	1,909
Other	65	361	5.5	47	16	5	306
Cooling Energy Sources							
Electricity	3,589	54,321	15.1	8,386	2,778	814	63,402
Other Excluding Electricity	34	2,604	76.5	469	156	46	3,153
Buildings without Cooling	780	6,381	8.2	312	104	30	2,476
Water-Heating Energy Sources							
Electricity	1,910	27,490	14.4	4,146	1,373	402	30,298
Other Excluding Electricity	1,560	28,973	18.6	4,586	1,519	445	35,228
Bldgs without Water Heating	933	6,844	7.3	436	144	42	3,505
Cooking Energy Sources							
Electricity	410	13,161	32.1	2,561	848	249	17,845
Other Excluding Electricity	391	9,076	23.2	1,598	529	155	11,932
Buildings without Cooking	3,603	41,070	11.4	5,010	1,659	486	39,254
Energy End Uses (more than one may apply)							
Buildings with Space Heating	3,971	59,991	15.1	8,887	2,944	863	66,253
Buildings with Cooling	3,623	56,925	15.7	8,855	2,933	860	66,555
Buildings with Water Heating	3,470	56,463	16.3	8,732	2,892	848	65,526
Buildings with Cooking	801	22,237	27.8	4,158	1,377	404	29,777
Buildings with Manufacturing	119	3,138	26.5	426	141	41	3,117
Buildings with Electricity Generation	149	12,821	85.9	2,687	890	261	18,679

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Percent of Floorspace Heated							
Not Heated	432	3,315	7.7	281	93	27	2,779
1 to 50	520	6,829	13.1	565	187	55	4,645
51 to 99	498	8,107	16.3	1,193	395	116	9,096
100	2,953	45,055	15.3	7,129	2,361	692	52,512
Percent of Floorspace Cooled							
Not Cooled	780	6,381	8.2	312	104	30	2,476
1 to 50	983	16,583	16.9	1,339	444	130	10,901
51 to 99	629	13,211	21.0	2,252	746	219	16,916
100	2,011	27,132	13.5	5,265	1,744	511	38,738
Percent Lit When Open							
Zero	Q	Q	Q	Q	Q	Q	Q
1 to 50	929	10,203	11.0	679	225	66	5,942
51 to 99	1,108	18,288	16.5	2,698	894	262	20,893
100	2,176	32,789	15.1	5,740	1,901	557	41,762
Building Never Open/ Electricity Not Used	144	1,733	12.1	37	12	4	325
Percent Lit When Closed							
Zero	1,964	17,385	8.9	1,639	543	159	13,104
1 to 50	1,882	30,948	16.4	4,248	1,407	412	32,796
51 to 100	136	2,093	15.4	468	155	45	3,144
Building Never Closed/ Electricity Not Used	422	12,881	30.5	2,813	932	273	19,987
Heating Equipment (more than one may apply)							
Heat Pumps	476	8,814	18.5	1,578	523	153	11,629
Packaged Heat Pumps	278	5,442	19.6	1,085	359	105	7,929
Split-System Heat Pumps	166	2,581	15.5	410	136	40	2,946
Individual Room Heat Pumps	58	2,691	46.5	448	148	43	3,289
Furnaces	1,860	19,604	10.5	2,298	761	223	17,887
Individual Space Heaters	819	12,540	15.3	1,701	563	165	12,387
District Heat	65	5,166	79.7	958	317	93	6,051
Boilers	579	20,423	35.3	3,045	1,009	296	22,045
Packaged Heating Units	953	18,021	18.9	3,195	1,058	310	24,318
Other	198	3,242	16.4	508	168	49	3,451
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	1,006	11,035	11.0	1,375	455	133	10,746
Heat Pumps	492	9,041	18.4	1,652	547	160	12,060
Packaged Heat Pumps	288	5,426	18.9	1,086	360	105	7,909
Split-System Heat Pumps	174	2,606	15.0	421	139	41	3,005
Individual Room Heat Pumps	58	2,940	50.7	518	171	50	3,721
Individual Air Conditioners	742	12,558	16.9	1,445	479	140	11,268
District Chilled Water	33	2,853	86.7	580	192	56	3,667
Central Chillers	111	11,636	105.1	2,524	836	245	17,065
Packaged Air Conditioning Units	1,613	29,969	18.6	4,765	1,578	463	36,258
Swamp Coolers	122	1,561	12.8	227	75	22	1,808
Other	37	1,217	32.5	225	75	22	1,540

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Main Equipment Replaced Since 1990 (more than one may apply)							
Heating	1,193	16,394	13.7	2,161	716	210	16,626
Cooling	1,356	20,995	15.5	2,947	976	286	22,737
Water Heating Equipment							
Centralized System	2,511	34,656	13.8	5,310	1,759	515	40,871
Distributed System	785	11,540	14.7	1,458	483	142	11,253
Combination of Centralized and Distributed System	175	10,267	58.8	1,964	651	191	13,401
Lighting Equipment Types (more than one may apply)							
Incandescent	2,184	38,528	17.6	6,057	2,006	588	44,422
Standard Fluorescent	3,943	59,688	15.1	8,909	2,951	865	66,864
Compact Fluorescent	941	27,571	29.3	5,027	1,665	488	36,584
High Intensity Discharge	455	20,643	45.4	3,400	1,126	330	23,651
Halogen	565	17,703	31.3	3,226	1,069	313	23,011
Other	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]							
Any Refrigeration.....	3,176	52,974	16.7	8,366	2,771	812	62,357
Commercial Refrigeration	1,007	26,768	26.6	5,397	1,788	524	38,581
Walk-In Units	666	20,254	30.4	4,496	1,489	436	31,769
Cases or Cabinets	825	20,424	24.8	4,349	1,441	422	31,335
Residential-Type Units	2,370	38,884	16.4	5,342	1,769	519	39,936
Vending Machines	996	35,335	35.5	5,992	1,985	582	42,043
No Refrigeration	1,227	10,333	8.4	802	266	78	6,675
Office Equipment (more than one may apply)							
Computers	3,081	55,627	18.1	8,567	2,838	832	64,010
With Flat Screen Monitors	877	26,417	30.1	4,797	1,589	466	34,985
Dedicated Servers	1,175	36,338	30.9	6,143	2,035	596	44,941
Laser Printers	1,970	33,012	16.8	4,679	1,550	454	36,031
Inkjet Printers	1,420	32,210	22.7	5,495	1,820	533	39,920
FAX Machines	2,715	52,373	19.3	8,154	2,701	792	60,928
Photocopiers	1,939	46,257	23.9	7,128	2,361	692	52,409
Number of Computers							
None	1,323	7,679	5.8	601	199	58	5,021
1 to 4	1,670	12,395	7.4	1,578	523	153	12,918
5 to 9	559	7,179	12.8	826	274	80	6,606
10 to 19	370	6,610	17.9	859	285	83	6,741
20 to 49	255	7,414	29.1	1,233	408	120	9,322
50 to 99	110	5,376	48.9	781	259	76	5,664
100 to 249	79	6,690	84.3	1,111	368	108	7,675
250 or More	38	9,963	264.3	2,179	722	212	15,085

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
**All Buildings* ..... **	4,404	63,307	14.4	9,168	3,037	890	69,032
Number of Dedicated Servers							
None	3,229	26,969	8.4	3,025	1,002	294	24,090
1 to 4	1,060	24,116	22.8	3,520	1,166	342	26,074
5 to 9	58	3,864	67.0	756	250	73	5,608
10 to 19	30	3,027	100.1	653	216	63	4,457
20 to 49	17	2,583	150.0	552	183	54	3,685
50 or More	10	2,748	276.6	662	219	64	5,118
Number of Photocopiers							
None	2,464	17,050	6.9	2,040	676	198	16,622
One	1,250	15,475	12.4	1,792	593	174	14,098
2 to 4	549	15,082	27.5	2,132	706	207	15,555
5 to 9	85	5,515	64.7	976	323	95	7,138
10 or More	54	10,185	187.2	2,229	738	216	15,618
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	799	22,223	27.8	4,155	1,376	403	29,771
Activities with Large Amounts of Hot Water	567	19,482	34.4	3,522	1,167	342	24,710
Separate Computer Area	553	26,873	48.6	4,678	1,550	454	33,308
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	466	19,597	42.1	3,827	1,267	371	26,726
Economizer Cycle	508	21,108	41.5	4,251	1,408	413	29,663
HVAC Maintenance	2,576	51,151	19.9	8,161	2,703	792	60,420
Energy Management and Control System (EMCS)	252	15,630	62.0	2,881	954	280	20,451
Window and Interior Lighting Features (more than one may apply)							
Multipaned Windows	2,175	38,727	17.8	6,109	2,024	593	43,784
Tinted Window Glass	1,313	29,625	22.6	5,077	1,682	493	37,166
Reflective Window Glass	305	8,529	27.9	1,576	522	153	11,302
External Overhangs or Awnings	1,220	17,172	14.1	2,900	961	282	21,798
Skylights or Atriums	324	12,508	38.6	1,948	645	189	14,007
Daylighting Sensors	74	2,868	38.7	623	206	60	4,847
Specular Reflectors	928	26,118	28.2	4,488	1,487	436	32,092
Electronic Ballasts	2,577	46,882	18.2	7,543	2,498	732	55,837
Energy Management and Control System (EMCS) For Lighting	60	4,781	80.1	939	311	91	6,922
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]							
Heating	2,876	42,707	14.8	5,828	1,930	566	45,100
Cooling	2,759	43,190	15.7	6,132	2,031	595	47,552
Lighting	3,685	46,987	12.7	6,057	2,006	588	46,811
Office Equipment	1,504	19,397	12.9	2,177	721	211	17,466

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
All Buildings*	4,404	63,307	14.4	9,168	3,037	890	69,032
Annual Consumption (kilowatthours)							
10,000 or Less	757	2,861	3.8	39	13	4	476
10,001 to 50,000	1,698	9,228	5.4	463	153	45	4,668
50,001 to 100,000	705	6,461	9.2	532	176	52	5,055
100,001 to 500,000	954	16,111	16.9	2,157	715	209	18,053
500,001 to 1,000,000	142	6,737	47.5	999	331	97	7,735
1,000,001 to 5,000,000	129	13,209	102.6	2,769	917	269	18,537
Over 5,000,000	19	8,699	464.8	2,209	732	214	14,507
Provider of Purchased Electricity (more than one may apply)							
Local Utility	4,225	57,853	13.7	8,151	2,700	791	61,476
Some Other Provider	152	4,945	32.5	930	308	90	7,052

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use electricity.

Notes: ● Site electricity is the amount of electricity delivered to commercial buildings. Primary electricity, which is not included in the "Total of Major Fuels" category, is site electricity plus the conversion losses in the generation, transmission, and distribution processes. ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Building Floorspace (Square Feet)									
1,001 to 5,000	47	17.8	11.4	3.8	8.9	20.3	4.3	1.63	0.092
5,001 to 10,000	92	12.4	10.3	3.8	7.4	14.5	8.7	1.18	0.095
10,001 to 25,000	164	10.5	11.1	2.9	6.3	13.4	13.8	0.88	0.084
25,001 to 50,000	439	12.2	11.6	3.8	8.8	16.2	33.6	0.94	0.077
50,001 to 100,000	927	13.1	14.1	4.5	9.9	17.0	68.0	0.97	0.073
100,001 to 200,000	2,181	15.7	12.2	5.3	13.0	23.4	146.4	1.05	0.067
200,001 to 500,000	4,347	15.0	15.4	5.8	12.1	20.7	301.0	1.04	0.069
Over 500,000	17,034	19.0	12.8	10.0	16.6	25.2	1209.8	1.35	0.071
Principal Building Activity									
Education	283	11.0	8.7	4.9	8.9	13.6	21.1	0.82	0.075
Food Sales	276	49.4	43.0	33.4	48.0	77.0	20.9	3.74	0.076
Food Service	213	38.4	20.3	18.8	37.4	70.3	17.4	3.13	0.082
Health Care	564	22.9	11.5	6.1	12.0	18.4	37.9	1.54	0.067
Inpatient	6,628	27.5	14.1	21.8	24.0	35.6	405.3	1.68	0.061
Outpatient	168	16.1	7.8	5.8	11.3	16.5	13.9	1.34	0.083
Lodging	483	13.5	28.0	6.7	11.9	17.7	37.1	1.04	0.077
Retail (Other Than Mall)	139	14.3	17.8	4.3	9.4	18.4	11.6	1.19	0.083
Office	256	17.3	7.5	6.5	11.5	17.6	20.7	1.40	0.081
Public Assembly	179	12.5	20.5	2.2	5.1	11.3	14.4	1.00	0.080
Public Order and Safety	237	15.3	12.4	4.0	7.9	17.6	17.2	1.12	0.073
Religious Worship	49	4.9	10.7	1.9	3.5	6.0	4.4	0.43	0.089
Service	73	11.0	12.0	3.0	6.3	11.8	5.8	0.88	0.080
Warehouse and Storage	154	7.6	16.7	1.4	3.1	6.2	10.8	0.53	0.070
Other	510	22.5	21.4	3.5	7.2	20.3	40.0	1.76	0.078
Vacant	42	2.4	Q	0.4	1.7	3.8	3.9	0.22	0.092
Year Constructed									
Before 1920	83	7.1	8.7	1.6	3.9	9.6	7.3	0.62	0.088
1920 to 1945	122	9.2	9.9	3.2	6.9	13.9	10.3	0.78	0.084
1946 to 1959	125	9.9	10.2	3.1	6.4	14.3	10.6	0.84	0.085
1960 to 1969	168	11.9	11.0	3.4	7.4	14.7	13.5	0.96	0.080
1970 to 1979	239	15.9	13.3	4.4	9.5	21.4	18.1	1.20	0.075
1980 to 1989	275	18.1	12.2	4.8	10.1	20.5	20.8	1.37	0.076
1990 to 1999	250	16.7	12.5	4.7	10.5	22.6	18.8	1.26	0.075
2000 to 2003	288	16.2	19.2	3.1	7.8	18.3	21.4	1.20	0.074
Census Region and Division									
Northeast	208	11.5	9.9	2.4	6.1	14.2	20.1	1.11	0.097
New England	139	10.8	10.0	1.8	4.3	13.2	13.7	1.06	0.099
Middle Atlantic	240	11.7	9.8	2.9	6.9	15.2	23.1	1.13	0.096
Midwest	182	12.9	13.2	3.5	7.9	15.9	11.9	0.85	0.066
East North Central	233	13.5	13.4	4.2	8.3	19.1	15.5	0.90	0.067
West North Central	118	11.7	12.8	3.0	7.2	13.6	7.4	0.74	0.063
South	226	16.5	13.9	4.1	9.2	19.7	15.4	1.12	0.068
South Atlantic	252	17.4	12.6	4.2	9.7	19.7	17.0	1.17	0.067
East South Central	160	15.5	16.4	3.8	8.4	19.8	10.7	1.04	0.067
West South Central	226	15.3	15.8	4.0	9.0	19.3	15.9	1.08	0.070
West	179	13.8	10.6	4.0	9.2	15.2	17.7	1.37	0.099
Mountain	196	15.4	13.1	4.3	8.6	14.4	15.0	1.18	0.076
Pacific	170	13.0	9.5	3.8	9.3	15.7	19.1	1.46	0.112

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	148	11.5	11.6	2.9	7.2	15.0	11.3	0.88	0.076
5,500-7,000 HDD	198	13.1	12.9	3.2	7.4	15.4	14.4	0.95	0.073
4,000-5,499 HDD	259	14.6	11.9	3.9	8.0	17.6	20.8	1.17	0.080
Fewer than 4,000 HDD	184	14.5	12.8	3.8	8.3	16.4	15.3	1.20	0.083
2,000 CDD or More and --									
Fewer than 4,000 HDD	255	17.3	11.5	4.9	12.7	22.9	19.1	1.30	0.075
Number of Floors									
One	114	13.4	14.1	3.7	8.2	18.0	9.2	1.08	0.080
Two	200	12.6	12.5	3.5	8.3	16.5	15.9	1.01	0.080
Three	251	11.4	10.5	3.1	7.1	14.9	19.2	0.87	0.076
Four to Nine	1,363	17.3	11.0	3.5	10.7	18.3	97.9	1.24	0.072
Ten or More	8,134	19.4	10.6	12.1	18.1	25.2	615.6	1.47	0.076
Elevators and Escalators (more than one may apply)									
Any Elevators	1,365	17.0	11.4	5.8	12.6	20.7	99.1	1.23	0.073
Number of Elevators									
One	508	12.8	11.4	5.2	10.6	18.3	37.7	0.95	0.074
Two to Five	1,955	17.0	10.8	8.1	16.9	25.2	140.6	1.22	0.072
Six or More	11,057	22.5	12.2	12.5	19.0	29.5	797.9	1.62	0.072
Any Escalators	9,366	24.1	14.0	10.4	14.9	22.6	677.6	1.74	0.072
Number of Workers (main shift)									
Fewer than 5	45	7.7	23.9	2.4	5.4	12.3	3.9	0.68	0.087
5 to 9	94	11.8	14.4	5.5	10.3	20.5	8.2	1.04	0.088
10 to 19	158	11.4	12.2	5.9	10.8	20.6	13.6	0.98	0.086
20 to 49	386	14.0	13.0	8.1	13.6	21.3	30.1	1.09	0.078
50 to 99	802	14.9	12.4	8.9	15.0	21.7	57.9	1.08	0.072
100 to 249	1,759	19.6	12.1	10.9	19.1	30.4	127.5	1.42	0.072
250 or More	7,165	22.4	9.1	14.8	22.8	29.4	511.9	1.60	0.071
Weekly Operating Hours									
Fewer than 40	30	4.5	8.0	1.6	3.2	6.5	2.9	0.42	0.094
40 to 48	105	10.1	8.5	4.0	7.5	12.9	8.7	0.83	0.082
49 to 60	166	11.2	9.2	4.2	8.7	15.7	13.5	0.91	0.081
61 to 84	251	14.1	12.5	7.1	13.8	27.1	19.9	1.12	0.079
85 to 167	408	22.1	14.7	13.8	33.4	58.5	29.8	1.61	0.073
Open Continuously	647	21.2	18.8	4.9	13.7	29.5	47.4	1.55	0.073
Ownership and Occupancy									
Nongovernment Owned	178	14.0	12.7	3.4	8.0	17.9	14.3	1.13	0.080
Owner Occupied	175	13.6	11.8	3.5	7.2	15.1	14.0	1.08	0.080
Nonowner Occupied	187	15.2	13.5	3.6	9.4	21.7	15.1	1.22	0.081
Unoccupied	30	1.9	N	0.4	1.7	3.4	2.9	Q	Q
Government Owned	348	14.1	11.1	4.8	9.3	15.3	24.0	0.97	0.069
Federal	842	19.7	15.8	4.3	9.2	17.3	47.3	1.11	0.056
State	366	15.8	8.3	5.9	9.1	14.5	24.3	1.05	0.066
Local	286	12.3	12.0	4.8	9.5	15.8	21.3	0.92	0.075

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Vacancy Status									
Completely Vacant	32	1.8	N	0.4	1.5	3.4	3.0	0.17	0.096
Mostly Vacant	Q	Q	Q	1.4	3.0	8.0	Q	Q	Q
Partially Vacant	338	13.8	9.9	2.9	6.7	14.2	26.5	1.08	0.078
Not At All Vacant	189	14.6	12.9	3.9	8.7	18.3	14.6	1.12	0.077
Number of Establishments									
One	174	14.1	14.2	3.7	8.3	18.2	13.5	1.09	0.077
2 to 5	232	13.5	11.3	3.9	8.7	15.3	18.0	1.05	0.078
6 to 10	616	17.3	5.2	5.5	11.2	18.3	48.0	1.34	0.078
11 to 20	1,259	14.7	8.6	4.7	14.2	19.1	99.6	1.16	0.079
More than 20	3,544	19.6	8.6	3.0	10.5	18.7	281.6	1.56	0.079
Currently Unoccupied	32	1.8	N	0.4	1.5	3.4	3.0	0.17	0.096
Predominant Exterior Wall Material									
Brick, Stone or Stucco	222	13.7	12.0	4.4	9.7	20.3	17.1	1.06	0.077
Concrete (Block or Poured)	205	14.5	14.9	4.0	9.4	20.0	16.4	1.16	0.080
Concrete Panels	956	18.3	10.8	5.8	11.3	26.2	68.8	1.32	0.072
Siding or Shingles	59	11.0	9.6	3.3	7.4	14.1	5.4	1.01	0.091
Metal Panels	122	11.8	14.1	2.1	4.5	9.7	9.4	0.91	0.077
Window Glass	1,148	19.1	10.2	6.6	17.0	27.6	85.8	1.43	0.075
Other	423	16.7	12.0	2.0	9.5	21.6	32.4	1.28	0.077
No One Major Type	Q	Q	Q	1.1	5.4	10.4	Q	Q	Q
Predominant Roof Material									
Built-Up	303	14.7	11.8	4.9	11.3	24.4	24.0	1.16	0.079
Shingles (Not Wood)	94	12.3	11.6	3.2	7.1	14.7	8.0	1.04	0.085
Metal Surfacing	101	10.2	13.7	2.4	5.3	11.1	7.8	0.79	0.077
Synthetic or Rubber	518	17.7	12.6	6.0	12.3	24.5	37.0	1.27	0.071
Slate or Tile	118	12.5	10.1	5.0	9.7	19.6	11.0	1.16	0.093
Wooden Materials	91	12.2	11.1	4.2	8.3	15.7	7.3	0.99	0.081
Concrete	477	Q	14.8	6.2	11.4	24.2	33.4	Q	0.070
Other	908	20.4	18.6	5.8	15.3	39.2	63.2	1.42	0.070
No One Major Type	237	10.4	8.8	3.0	5.8	21.6	22.8	1.01	0.097
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	227	13.0	11.2	3.7	8.2	15.7	17.7	1.01	0.078
Addition or Annex	360	14.1	13.9	4.0	8.7	17.0	25.4	0.99	0.070
Reduction In Floorspace	699	15.2	14.2	7.4	13.1	29.5	53.7	1.17	0.077
Cosmetic Improvements	239	13.5	11.1	3.7	8.0	15.8	18.8	1.06	0.079
Wall or Roof Replacement	278	12.6	10.0	3.2	6.9	15.0	22.2	1.01	0.080
Interior Wall Re-Configuration	289	13.8	10.5	4.1	8.2	17.5	22.2	1.06	0.077
HVAC Equipment Upgrade	351	14.4	11.2	4.3	8.2	16.0	26.9	1.10	0.077
Lighting Upgrade	309	13.6	11.2	3.7	8.0	15.4	23.7	1.05	0.077
Window Replacement	239	11.7	9.8	4.0	7.2	13.5	20.1	0.98	0.084
Plumbing System Upgrade	294	12.9	10.5	3.9	7.9	15.0	23.5	1.03	0.080
Insulation Upgrade	227	12.7	10.2	3.0	6.7	13.2	18.0	1.01	0.080
Other Renovation	246	9.0	9.9	3.7	10.1	24.0	27.0	0.99	0.110
No Renovations Since 1980	117	10.5	11.4	3.1	6.7	14.1	9.7	0.87	0.083
Building Newer than 1980	266	17.1	13.2	4.4	10.0	20.6	20.0	1.29	0.075

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Energy Sources (more than one may apply)									
Electricity	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Natural Gas	265	14.6	12.2	4.3	8.8	18.5	20.3	1.12	0.077
Fuel Oil	558	16.5	12.8	2.2	5.5	14.0	41.5	1.23	0.074
District Heat	1,467	18.0	9.6	6.4	12.6	20.4	97.5	1.20	0.066
District Chilled Water	1,711	19.7	7.8	10.9	15.3	23.1	111.4	1.29	0.065
Propane	199	14.0	16.9	3.3	6.9	14.0	14.5	1.02	0.073
Other	180	16.4	12.1	2.8	5.3	11.2	12.2	1.11	0.068
Space-Heating Energy Sources									
Electricity	258	15.9	13.4	5.5	11.3	20.8	19.7	1.22	0.076
Electricity Main	211	16.6	13.7	6.3	12.6	23.3	16.3	1.28	0.077
Electricity Secondary	375	15.1	13.1	4.7	8.7	16.1	28.3	1.14	0.075
Other Excluding Electricity	184	13.0	11.0	3.3	6.9	14.1	14.2	1.00	0.077
Buildings without Heating	63	8.2	14.0	0.9	2.8	12.2	6.4	0.84	0.102
Primary Space-Heating Energy Source									
Electricity	211	16.6	13.7	6.3	12.6	23.3	16.3	1.28	0.077
Natural Gas	230	13.9	12.5	4.2	8.0	16.0	17.7	1.07	0.077
Fuel Oil	80	5.9	8.4	1.8	3.4	8.2	8.0	0.59	0.100
District Heat	1,432	18.5	9.3	4.9	12.6	20.7	93.3	1.20	0.065
Propane	67	10.5	10.7	2.9	6.2	12.0	6.3	0.98	0.093
Other	70	12.6	15.9	2.5	4.0	9.4	4.7	0.85	0.067
Cooling Energy Sources									
Electricity	227	15.0	12.9	4.9	9.8	19.4	17.7	1.17	0.078
Other Excluding Electricity	1,340	17.5	6.6	7.0	11.2	19.1	92.7	1.21	0.069
Buildings without Cooling	39	4.8	11.8	1.1	2.4	5.1	3.2	0.39	0.082
Water-Heating Energy Sources									
Electricity	211	14.6	12.3	4.4	9.6	18.5	15.9	1.10	0.075
Other Excluding Electricity	285	15.4	12.2	4.8	9.9	20.1	22.6	1.22	0.079
Bldgs without Water Heating	45	6.2	12.1	1.5	3.7	9.1	3.8	0.51	0.083
Cooking Energy Sources									
Electricity	606	18.9	15.5	6.9	18.3	39.5	43.5	1.36	0.072
Other Excluding Electricity	397	17.1	13.8	6.3	15.0	40.7	30.5	1.31	0.077
Buildings without Cooking	135	11.8	10.7	3.3	7.2	14.2	10.9	0.96	0.081
Energy End Uses (more than one may apply)									
Buildings with Space Heating	217	14.4	12.2	4.1	8.7	17.7	16.7	1.10	0.077
Buildings with Cooling	237	15.1	12.3	4.9	9.9	19.4	18.4	1.17	0.077
Buildings with Water Heating	244	15.0	12.2	4.6	9.7	19.2	18.9	1.16	0.077
Buildings with Cooking	504	18.2	14.8	6.6	16.5	40.0	37.2	1.34	0.074
Buildings with Manufacturing	349	13.2	14.4	3.1	6.7	9.9	26.3	0.99	0.075
Buildings with Electricity Generation	1,748	20.3	13.5	9.9	16.7	25.8	125.2	1.46	0.072

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Percent of Floorspace Heated									
Not Heated	63	8.2	14.0	0.9	2.8	12.2	6.4	0.84	0.102
1 to 50	105	8.0	13.3	2.4	4.8	9.2	8.9	0.68	0.085
51 to 99	233	14.3	12.0	4.0	8.4	18.5	18.3	1.12	0.079
100	234	15.4	12.1	4.6	9.7	18.6	17.8	1.17	0.076
Percent of Floorspace Cooled									
Not Cooled	39	4.8	11.8	1.1	2.4	5.1	3.2	0.39	0.082
1 to 50	132	7.8	11.7	3.1	5.7	10.1	11.1	0.66	0.084
51 to 99	348	16.5	13.2	6.1	11.2	22.5	26.9	1.28	0.077
100	254	18.8	12.0	6.2	12.4	23.1	19.3	1.43	0.076
Percent Lit When Open									
Zero	Q	Q	Q	0.8	1.2	1.9	Q	Q	Q
1 to 50	71	6.5	14.9	2.3	4.7	9.7	6.4	0.58	0.090
51 to 99	236	14.3	9.8	4.4	8.8	17.1	18.9	1.14	0.080
100	256	17.0	13.4	5.0	11.1	21.9	19.2	1.27	0.075
Building Never Open/ Electricity Not Used	25	2.1	Q	0.4	1.7	3.8	2.3	0.19	0.090
Percent Lit When Closed									
Zero	81	9.2	8.8	2.5	5.5	11.4	6.7	0.75	0.082
1 to 50	219	13.3	11.0	5.1	10.8	21.5	17.4	1.06	0.080
51 to 100	333	21.7	16.3	6.3	12.9	32.6	23.1	1.50	0.069
Building Never Closed/ Electricity Not Used	647	21.2	18.8	4.9	13.7	29.5	47.4	1.55	0.073
Heating Equipment (more than one may apply)									
Heat Pumps	322	17.4	14.2	6.4	12.2	22.2	24.4	1.32	0.076
Packaged Heat Pumps	379	19.3	14.1	7.4	13.2	24.1	28.5	1.46	0.075
Split-System Heat Pumps	239	15.4	14.4	5.1	9.2	21.0	17.7	1.14	0.074
Individual Room Heat Pumps	751	16.1	14.6	9.8	13.6	20.7	56.9	1.22	0.076
Furnaces	120	11.4	12.0	3.5	7.1	14.1	9.6	0.91	0.080
Individual Space Heaters	202	13.2	12.8	4.0	8.4	14.9	15.1	0.99	0.075
District Heat	1,435	18.0	9.5	4.9	12.6	20.7	93.3	1.17	0.065
Boilers	511	14.5	12.6	3.4	7.9	16.6	38.1	1.08	0.075
Packaged Heating Units	326	17.2	13.7	6.1	12.7	24.8	25.5	1.35	0.078
Other	249	15.2	14.3	4.2	8.8	16.9	17.4	1.06	0.070
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	133	12.1	11.7	4.5	8.6	15.8	10.7	0.97	0.081
Heat Pumps	326	17.7	14.6	6.6	12.0	22.4	24.5	1.33	0.075
Packaged Heat Pumps	366	19.4	14.1	7.2	12.6	23.8	27.5	1.46	0.075
Split-System Heat Pumps	235	15.7	14.8	5.9	10.9	21.5	17.3	1.15	0.074
Individual Room Heat Pumps	867	17.1	15.4	9.7	13.6	21.7	64.2	1.27	0.074
Individual Air Conditioners	189	11.2	12.2	3.6	6.8	13.5	15.2	0.90	0.080
District Chilled Water	1,711	19.7	7.8	10.9	15.3	23.1	111.4	1.29	0.065
Central Chillers	2,212	21.1	14.0	11.2	16.9	25.9	154.1	1.47	0.070
Packaged Air Conditioning Units	287	15.4	12.9	5.6	11.5	23.4	22.5	1.21	0.078
Swamp Coolers	181	14.1	13.3	4.0	10.1	19.9	14.8	1.16	0.082
Other	584	18.0	13.1	8.7	12.8	23.4	41.2	1.27	0.070

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
**All Buildings* ..... **	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	176	12.8	12.4	4.0	8.3	16.2	13.9	1.01	0.079
Cooling	211	13.6	11.7	4.5	9.2	18.3	16.8	1.08	0.079
Water Heating Equipment									
Centralized System	205	14.9	12.9	4.8	10.1	20.1	16.3	1.18	0.079
Distributed System	180	12.3	12.0	4.0	8.0	15.8	14.3	0.98	0.080
Combination of Centralized and Distributed System	1,092	18.6	10.9	8.4	13.5	22.5	76.8	1.31	0.070
Lighting Equipment Types (more than one may apply)									
Incandescent	269	15.3	12.0	3.6	8.4	16.9	20.3	1.15	0.076
Standard Fluorescent	219	14.5	12.2	4.2	8.9	18.4	17.0	1.12	0.077
Compact Fluorescent	519	17.7	13.3	5.1	11.4	23.7	38.9	1.33	0.075
High Intensity Discharge	725	16.0	12.7	5.0	10.1	18.6	52.0	1.15	0.072
Halogen	554	17.7	13.7	4.9	11.2	23.3	40.7	1.30	0.073
Other	Q	Q	Q	25.1	35.6	49.8	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration.....	256	15.3	12.4	4.7	10.0	20.8	19.6	1.18	0.077
Commercial Refrigeration	520	19.6	16.2	9.2	21.9	48.0	38.3	1.44	0.074
Walk-In Units	655	21.5	17.3	13.4	32.2	58.5	47.7	1.57	0.073
Cases or Cabinets	512	20.7	16.6	9.6	23.5	49.9	38.0	1.53	0.074
Residential-Type Units	219	13.3	10.8	4.1	8.4	15.5	16.9	1.03	0.077
Vending Machines	584	16.5	12.7	5.6	11.5	22.2	42.2	1.19	0.072
No Refrigeration	63	7.5	10.9	2.0	4.4	10.1	5.4	0.65	0.086
Office Equipment (more than one may apply)									
Computers	270	15.0	12.0	5.0	9.9	18.7	20.8	1.15	0.077
With Flat Screen Monitors	531	17.6	11.0	6.6	12.0	20.3	39.9	1.32	0.075
Dedicated Servers	508	16.4	11.4	6.9	12.3	20.7	38.3	1.24	0.075
Laser Printers	231	13.8	11.3	4.7	9.0	17.6	18.3	1.09	0.079
Inkjet Printers	376	16.6	12.2	6.2	11.3	20.2	28.1	1.24	0.075
FAX Machines	292	15.1	11.8	5.3	10.3	19.3	22.4	1.16	0.077
Photocopiers	357	15.0	11.3	4.9	9.8	17.4	27.0	1.13	0.076
Number of Computers									
None	44	7.6	15.9	1.8	4.1	11.6	3.8	0.65	0.086
1 to 4	92	12.4	17.6	4.1	8.1	17.6	7.7	1.04	0.084
5 to 9	143	11.2	13.3	5.8	9.5	18.3	11.8	0.92	0.082
10 to 19	226	12.6	12.2	7.3	11.9	19.3	18.2	1.02	0.081
20 to 49	470	16.1	12.7	8.8	13.5	21.7	36.6	1.26	0.078
50 to 99	690	14.1	10.9	7.7	13.4	19.2	51.5	1.05	0.075
100 to 249	1,359	16.1	12.2	7.9	14.7	23.5	96.7	1.15	0.071
250 or More	5,611	21.2	9.5	11.4	19.0	29.4	400.1	1.51	0.071

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Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Number of Dedicated Servers									
None	91	10.9	14.5	2.9	6.6	15.1	7.5	0.89	0.082
1 to 4	323	14.2	12.8	6.6	11.7	19.7	24.6	1.08	0.076
5 to 9	1,272	19.0	12.1	11.2	17.0	25.9	97.3	1.45	0.076
10 to 19	2,096	20.9	7.4	10.0	18.9	29.4	147.3	1.47	0.070
20 to 49	3,109	20.7	11.2	9.9	18.7	25.3	213.9	1.43	0.069
50 or More	6,472	23.4	10.1	17.9	18.2	31.2	515.2	1.86	0.080
Number of Photocopiers									
None	80	11.6	17.4	2.8	6.9	16.9	6.7	0.97	0.084
One	139	11.2	13.9	4.3	8.4	15.0	11.3	0.91	0.081
2 to 4	377	13.7	12.0	6.1	11.0	18.2	28.3	1.03	0.075
5 to 9	1,110	17.2	8.9	10.1	15.6	29.3	83.7	1.29	0.075
10 or More	3,977	21.2	10.4	11.3	17.6	23.9	287.0	1.53	0.072
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	505	18.2	14.8	6.6	16.5	40.3	37.2	1.34	0.074
Activities with Large Amounts of Hot Water	603	17.6	15.7	7.2	13.2	26.0	43.6	1.27	0.072
Separate Computer Area	821	16.9	12.0	6.6	11.5	19.2	60.2	1.24	0.073
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	798	19.0	12.1	7.5	14.2	26.5	57.4	1.36	0.072
Economizer Cycle	812	19.5	12.8	8.2	14.9	27.3	58.3	1.41	0.072
HVAC Maintenance	308	15.5	12.5	4.8	10.4	20.0	23.5	1.18	0.076
Energy Management and Control System (EMCS)	1,109	17.9	12.9	8.0	13.6	23.7	81.1	1.31	0.073
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	273	15.3	13.5	4.5	9.3	18.4	20.1	1.13	0.074
Tinted Window Glass	375	16.6	12.2	4.8	11.0	21.3	28.3	1.25	0.075
Reflective Window Glass	501	17.9	12.4	4.7	9.5	18.9	37.0	1.33	0.074
External Overhangs or Awnings	231	16.4	12.6	5.8	11.4	23.2	17.9	1.27	0.077
Skylights or Atriums	584	15.1	13.4	4.1	8.7	15.9	43.2	1.12	0.074
Daylighting Sensors	816	21.1	16.0	5.6	10.1	25.6	65.4	1.69	0.080
Specular Reflectors	470	16.7	13.2	5.4	10.4	18.6	34.6	1.23	0.074
Electronic Ballasts	284	15.6	12.4	4.5	9.5	19.3	21.7	1.19	0.076
Energy Management and Control System (EMCS) For Lighting	1,528	19.1	12.8	10.8	17.8	34.5	116.0	1.45	0.076
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	197	13.2	11.5	3.7	7.6	15.4	15.7	1.06	0.080
Cooling	216	13.8	11.0	4.5	8.9	16.7	17.2	1.10	0.080
Lighting	160	12.5	10.4	3.9	8.4	16.5	12.7	1.00	0.080
Office Equipment	141	10.9	10.5	4.3	8.1	14.1	11.6	0.90	0.083

Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings*	202	14.1	12.2	3.6	8.2	17.1	15.7	1.09	0.078
Annual Consumption (kilowatthours)									
10,000 or Less	5	1.3	2.8	1.0	1.9	3.2	0.6	0.17	0.124
10,001 to 50,000	26	4.9	6.1	3.8	6.9	11.7	2.7	0.51	0.104
50,001 to 100,000	73	8.0	8.6	6.4	11.4	24.0	7.2	0.78	0.098
100,001 to 500,000	220	13.0	12.2	10.1	18.9	40.0	18.9	1.12	0.086
500,001 to 1,000,000	684	14.4	13.6	12.0	16.9	30.0	54.5	1.15	0.080
1,000,001 to 5,000,000	2,087	20.3	13.5	16.0	23.4	37.7	143.9	1.40	0.069
Over 5,000,000	11,458	24.7	15.6	20.0	27.5	36.8	775.0	1.67	0.068
Provider of Purchased Electricity (more than one may apply)									
Local Utility	187	13.7	12.0	3.5	8.1	16.7	14.5	1.06	0.078
Some Other Provider	594	18.3	12.9	6.5	12.4	22.9	46.4	1.43	0.078

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Building Floorspace (Square Feet)												
1,001 to 5,000	13	30	50	19	997	1,729	2,324	1,295	13.4	17.5	21.7	14.6
5,001 to 10,000	10	15	33	19	1,083	1,447	2,454	1,214	9.0	10.7	13.4	15.3
10,001 to 25,000	19	29	49	22	1,944	3,098	4,266	2,063	9.6	9.3	11.6	10.9
25,001 to 50,000	12	31	41	19	1,292	2,483	3,012	1,599	9.0	12.6	13.7	11.7
50,001 to 100,000	22	29	50	17	2,040	2,260	3,435	1,296	11.0	12.9	14.6	13.1
100,001 to 200,000	25	33	66	18	2,117	2,285	3,439	1,177	11.6	14.6	19.1	15.0
200,001 to 500,000	24	28	38	16	1,781	2,196	1,909	1,166	13.3	12.7	20.1	13.7
Over 500,000	23	20	46	23	1,556	1,203	1,928	1,221	15.0	16.4	24.0	18.8
Principal Building Activity												
Education	13	20	58	17	1,683	2,539	3,983	1,667	7.8	8.1	14.6	10.2
Food Sales	Q	16	24	Q	Q	305	484	Q	Q	52.5	50.5	Q
Food Service	Q	14	37	8	Q	453	764	265	Q	29.9	48.3	31.9
Health Care	10	18	31	12	535	798	1,277	553	19.4	23.2	24.5	22.5
Inpatient	8	12	26	7	358	438	838	270	23.2	26.4	30.5	25.3
Outpatient	Q	7	6	6	Q	359	438	283	Q	19.2	13.0	19.8
Lodging	9	15	29	16	1,171	1,144	1,694	1,087	Q	13.0	17.2	14.7
Retail (Other Than Mall)	6	12	29	14	630	880	1,844	963	8.8	14.2	16.0	14.8
Office	50	53	71	36	3,012	2,989	3,782	2,425	16.5	17.9	18.8	15.0
Public Assembly	6	11	21	11	1,048	1,012	1,174	701	Q	10.7	17.8	16.0
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	2	5	10	2	627	1,115	1,498	515	2.8	4.1	6.7	3.6
Service	5	14	18	7	731	1,259	1,335	657	6.9	10.8	13.2	11.4
Warehouse and Storage	9	27	25	11	1,467	2,849	3,623	1,486	5.9	9.6	6.9	7.3
Other	15	5	Q	Q	649	306	Q	Q	23.3	16.7	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	11	8	Q	Q	1,388	1,535	512	Q	7.7	5.4	10.6	Q
1920 to 1945	17	23	12	8	2,472	1,954	1,249	920	7.0	11.8	9.5	9.2
1946 to 1959	17	17	22	12	2,083	2,005	1,744	1,005	8.0	8.3	12.8	11.9
1960 to 1969	22	23	34	18	1,737	2,224	2,504	1,592	12.6	10.1	13.6	11.0
1970 to 1979	26	47	64	31	1,723	3,237	3,514	2,080	15.0	14.5	18.1	15.1
1980 to 1989	25	35	88	36	1,374	1,915	4,636	2,229	17.9	18.2	19.1	16.1
1990 to 1999	19	45	104	34	1,355	2,638	6,106	1,979	14.2	16.9	17.0	17.3
2000 to 2003	11	19	45	11	675	1,193	2,501	930	16.7	15.7	18.0	11.5
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	23	62	N	34	2,365	5,488	N	2,541	9.8	11.4	N	13.3
5,500-7,000 HDD	59	134	N	31	5,366	9,655	N	2,055	11.0	13.9	N	15.0
4,000-5,499 HDD	65	19	72	Q	5,077	1,558	4,047	693	12.8	12.4	17.8	14.0
Fewer than 4,000 HDD	N	N	156	63	N	N	9,985	5,187	N	N	15.7	12.1
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	146	15	N	N	8,734	555	N	N	16.7	27.1
Number of Floors												
One	39	80	155	60	3,086	5,873	11,127	4,849	12.5	13.6	14.0	12.4
Two	27	56	78	40	3,015	5,130	4,874	2,959	8.9	11.0	16.1	13.6
Three	15	29	28	11	2,065	2,504	1,916	896	7.3	11.6	14.8	12.8
Four to Nine	40	39	74	21	3,003	2,640	3,094	1,328	13.5	14.8	23.8	15.9
Ten or More	26	11	39	19	1,640	555	1,754	999	16.1	20.5	22.2	19.2

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Elevators and Escalators (more than one may apply)												
Any Elevators	86	99	168	63	6,119	6,594	7,941	3,841	14.1	15.0	21.2	16.5
Number of Elevators												
One	18	37	36	13	1,567	3,009	2,467	1,064	11.3	12.3	14.8	11.8
Two to Five	38	41	70	23	2,971	2,695	3,094	1,360	12.8	15.2	22.6	16.6
Six or More	31	21	62	28	1,581	889	2,380	1,418	19.3	23.2	25.9	19.8
Any Escalators	Q	Q	29	Q	Q	Q	1,002	Q	Q	Q	28.9	Q
Number of Workers (main shift)												
Fewer than 5	12	37	42	19	2,279	4,579	4,966	2,236	5.1	8.0	8.5	8.3
5 to 9	9	19	33	12	1,085	1,463	2,576	1,023	8.2	13.1	12.6	11.9
10 to 19	14	23	39	14	1,872	2,081	2,741	1,109	7.2	10.8	14.3	12.2
20 to 49	21	37	68	27	2,314	2,856	3,883	1,909	9.1	13.1	17.6	13.9
50 to 99	22	33	46	19	1,598	2,311	2,654	1,370	13.5	14.1	17.2	13.6
100 to 249	23	29	59	24	1,331	1,609	2,534	1,397	17.0	18.1	23.3	17.1
250 or More	48	38	88	39	2,329	1,800	3,413	1,986	20.7	21.3	25.7	19.6
Weekly Operating Hours												
Fewer than 40	3	7	12	5	863	2,046	2,099	892	3.0	3.5	5.7	5.1
40 to 48	13	31	51	21	2,103	2,742	4,565	2,161	6.3	11.3	11.2	9.7
49 to 60	27	52	67	29	3,098	4,595	5,553	2,455	8.8	11.4	12.0	11.8
61 to 84	21	32	67	24	2,048	2,575	3,746	1,944	10.4	12.6	18.0	12.6
85 to 167	24	42	66	21	1,317	2,008	2,370	1,246	18.3	20.9	27.8	17.2
Open Continuously	59	51	111	52	3,379	2,735	4,434	2,332	17.4	18.7	25.1	22.3
Ownership and Occupancy												
Nongovernment Owned	124	158	273	119	10,292	12,107	17,152	8,460	12.0	13.1	15.9	14.1
Owner Occupied	66	80	122	50	5,904	6,131	7,803	3,617	11.2	13.1	15.7	13.8
Nonowner Occupied	57	77	150	69	4,140	5,366	9,021	4,732	13.8	14.3	16.7	14.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	24	58	101	33	2,517	4,594	5,614	2,570	9.5	12.5	18.1	12.8
Federal	Q	Q	Q	3	Q	Q	516	Q	Q	20.7	27.3	8.9
State	6	11	33	10	599	764	1,697	727	10.8	14.2	19.3	13.4
Local	15	28	55	20	1,706	2,909	3,401	1,541	8.7	9.5	16.1	13.2
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	40	41	61	27	3,095	3,105	3,919	2,079	12.8	13.1	15.5	13.2
Not At All Vacant	107	173	313	124	9,228	12,766	18,499	8,769	11.5	13.6	16.9	14.1
Number of Establishments												
One	92	162	265	108	7,996	12,134	16,569	7,679	11.4	13.4	16.0	14.1
2 to 5	28	36	59	24	2,517	2,803	3,716	1,886	11.2	12.9	15.9	12.8
6 to 10	8	7	13	5	571	510	550	327	13.9	14.1	24.3	16.1
11 to 20	Q	Q	12	Q	Q	Q	589	Q	Q	Q	19.7	Q
More than 20	13	Q	25	9	696	Q	1,011	688	18.0	Q	24.8	13.4
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Predominant Exterior Wall Material												
Brick, Stone or Stucco	75	120	187	59	7,198	9,111	11,364	4,621	10.5	13.2	16.5	12.8
Concrete (Block or Poured)	26	36	67	26	2,173	2,877	3,922	1,765	12.0	12.5	17.0	15.0
Concrete Panels	12	21	58	26	599	1,230	2,656	1,899	19.7	17.3	21.9	13.6
Siding or Shingles	8	10	14	12	1,179	1,063	1,035	698	6.5	9.6	13.3	17.6
Metal Panels	17	17	35	18	1,032	1,768	3,088	1,489	16.5	9.5	11.3	12.4
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material												
Built-Up	46	71	128	60	4,025	5,149	7,227	4,380	11.5	13.9	17.7	13.7
Shingles (Not Wood)	23	32	46	20	1,995	3,119	3,272	1,486	11.7	10.1	14.1	13.6
Metal Surfacing	9	26	59	21	1,001	2,484	5,888	1,860	9.4	10.3	10.0	11.3
Synthetic or Rubber	61	65	103	32	4,116	4,440	4,282	1,873	14.7	14.7	24.1	17.0
Slate or Tile	4	3	16	8	480	302	1,036	620	8.0	9.8	15.0	12.9
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	244	Q	Q	Q	10.9
Concrete	Q	Q	8	Q	Q	Q	426	Q	Q	Q	19.8	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	58	63	68	39	5,090	5,361	4,346	2,841	11.5	11.8	15.7	13.6
Addition or Annex	18	29	30	16	1,797	1,970	1,804	979	9.8	14.6	16.9	16.0
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	48	50	48	31	3,938	3,879	3,002	2,183	12.2	12.8	15.9	14.0
Wall or Roof Replacement	28	27	30	17	2,676	2,236	1,850	1,294	10.3	12.0	16.3	13.2
Interior Wall Re-Configuration	27	36	31	24	2,475	2,586	1,934	1,507	10.9	13.9	16.1	15.8
HVAC Equipment Upgrade	40	42	44	28	3,027	3,332	2,582	1,825	13.2	12.7	17.2	15.3
Lighting Upgrade	42	38	33	28	3,350	3,059	2,089	1,775	12.4	12.4	15.8	15.6
Window Replacement	27	21	14	12	2,750	1,772	913	842	9.7	11.8	15.3	14.3
Plumbing System Upgrade	26	23	22	21	2,511	1,898	1,364	1,369	10.4	12.2	16.1	15.1
Insulation Upgrade	15	14	14	7	1,370	1,212	855	576	11.3	11.8	16.1	13.0
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	34	54	69	33	4,314	5,594	5,179	3,051	7.9	9.7	13.3	10.7
Building Newer than 1980	55	98	237	81	3,405	5,747	13,242	5,138	16.2	17.1	17.9	15.7
Energy Sources (more than one may apply)												
Electricity	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Natural Gas	114	171	240	107	9,181	13,162	13,306	7,813	12.5	13.0	18.0	13.7
Fuel Oil	70	50	86	43	6,080	2,817	4,122	2,123	11.6	17.9	20.9	20.4
District Heat	22	28	38	10	1,363	1,648	1,766	667	16.4	17.2	21.3	14.8
District Chilled Water	11	13	23	10	620	596	1,150	487	17.1	21.7	20.2	19.6
Propane	12	30	33	24	1,354	2,179	2,360	1,173	9.0	13.9	14.0	20.1
Other	Q	7	Q	Q	Q	487	303	367	Q	13.6	26.1	16.3

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Space-Heating Energy Sources												
Electricity	66	89	228	73	4,405	6,223	13,058	4,914	15.0	14.3	17.5	14.9
Electricity Main	21	46	153	45	1,253	2,545	9,084	3,114	17.0	18.1	16.9	14.5
Electricity Secondary	45	43	75	28	3,152	3,677	3,975	1,800	14.2	11.6	18.8	15.5
Other Excluding Electricity	80	125	133	68	8,191	10,080	7,932	5,188	9.8	12.4	16.8	13.1
Buildings without Heating	Q	Q	13	11	Q	398	1,776	928	Q	4.3	7.6	12.1
Primary Space-Heating Energy Source												
Electricity	21	46	153	45	1,253	2,545	9,084	3,114	17.0	18.1	16.9	14.5
Natural Gas	85	133	162	79	6,439	11,320	9,294	5,911	13.2	11.7	17.4	13.4
Fuel Oil	17	Q	Q	Q	3,250	Q	Q	Q	5.2	Q	Q	Q
District Heat	20	28	35	8	1,205	1,531	1,614	557	16.8	18.0	21.7	14.4
Propane	Q	Q	6	Q	Q	560	674	332	Q	9.4	9.1	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Electricity	130	190	354	140	10,402	13,781	20,623	9,515	12.5	13.8	17.2	14.7
Other Excluding Electricity	11	Q	17	Q	552	Q	930	Q	19.6	Q	18.8	Q
Buildings without Cooling	7	Q	3	6	1,855	2,232	1,214	1,080	3.6	6.4	2.6	5.8
Water-Heating Energy Sources												
Electricity	57	86	200	59	5,125	6,477	11,882	4,007	11.2	13.3	16.8	14.7
Other Excluding Electricity	86	114	159	87	6,664	8,436	8,031	5,841	12.9	13.5	19.7	14.9
Bldgs without Water Heating	4	Q	16	6	1,020	1,788	2,853	1,182	4.0	9.0	5.6	5.3
Cooking Energy Sources												
Electricity	39	60	112	38	2,495	3,784	4,900	1,982	15.5	15.9	22.9	19.1
Other Excluding Electricity	31	32	67	26	2,521	2,066	2,982	1,507	Q	15.5	22.3	17.1
Buildings without Cooking	78	124	196	89	7,793	10,851	14,885	7,541	10.0	11.4	13.2	11.8
Energy End Uses (more than one may apply)												
Buildings with Space Heating	147	214	361	141	12,596	16,303	20,990	10,102	11.6	13.1	17.2	14.0
Buildings with Cooling	141	202	371	146	10,954	14,469	21,553	9,950	12.9	13.9	17.2	14.7
Buildings with Water Heating	143	200	359	146	11,789	14,913	19,913	9,848	12.2	13.4	18.0	14.8
Buildings with Cooking	69	92	179	64	5,016	5,850	7,881	3,489	13.8	15.7	22.7	18.2
Buildings with Manufacturing	13	10	8	10	1,013	798	642	685	13.1	13.2	11.8	14.6
Buildings with Electricity Generation	60	66	91	44	3,245	3,317	4,017	2,241	18.5	20.0	22.5	19.6
Percent of Floorspace Heated												
Not Heated	Q	Q	13	11	Q	398	1,776	928	Q	4.3	7.6	12.1
1 to 50	6	9	26	13	1,387	1,115	2,836	1,491	4.2	8.3	9.3	8.9
51 to 99	15	21	51	29	1,539	1,727	2,891	1,950	9.8	12.4	17.5	14.8
100	126	183	284	99	9,671	13,461	15,263	6,661	13.0	13.6	18.6	14.8
Percent of Floorspace Cooled												
Not Cooled	7	Q	3	6	1,855	2,232	1,214	1,080	3.6	6.4	2.6	5.8
1 to 50	28	37	39	25	4,270	4,742	4,915	2,656	6.6	7.9	8.0	9.6
51 to 99	49	58	73	38	3,101	3,761	3,903	2,446	15.8	15.4	18.8	15.7
100	64	106	259	82	3,582	5,966	12,735	4,849	17.8	17.8	20.3	16.9

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	11	17	26	12	2,750	2,753	3,189	1,512	4.1	6.3	8.0	7.7
51 to 99	49	65	102	45	3,599	5,299	6,134	3,256	13.7	12.3	16.7	13.9
100	86	132	245	94	6,051	7,781	12,874	6,083	14.2	16.9	19.0	15.5
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed												
Zero	20	50	61	29	2,807	5,174	6,292	3,112	7.1	9.6	9.6	9.4
1 to 50	62	103	179	68	6,279	8,293	11,027	5,349	9.9	12.5	16.2	12.7
51 to 100	Q	12	24	Q	Q	499	1,013	Q	Q	23.9	23.6	Q
Building Never Closed/ Electricity Not Used	59	51	111	52	3,379	2,735	4,434	2,332	17.4	18.7	25.1	22.3
Heating Equipment (more than one may apply)												
Heat Pumps	25	16	85	27	1,213	1,058	4,942	1,600	20.8	15.2	17.2	16.8
Packaged Heat Pumps	17	12	57	19	744	738	2,928	1,031	22.8	16.0	19.6	18.5
Split-System Heat Pumps	Q	Q	28	6	Q	Q	1,862	368	Q	Q	15.3	17.2
Individual Room Heat Pumps	Q	Q	19	7	Q	Q	1,250	538	Q	Q	15.5	12.1
Furnaces	33	82	71	37	3,596	7,219	5,715	3,075	9.2	11.3	12.5	11.9
Individual Space Heaters	35	50	56	24	2,786	4,169	3,603	1,981	12.7	11.9	15.6	11.9
District Heat	20	28	36	9	1,245	1,623	1,683	615	16.5	17.0	21.4	14.3
Boilers	71	74	94	56	6,228	6,141	4,393	3,662	11.4	12.1	21.5	15.3
Packaged Heating Units	50	62	151	48	2,912	3,666	8,130	3,312	17.3	16.8	18.5	14.4
Other	Q	14	21	8	Q	803	1,379	481	Q	17.1	15.0	15.6
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	22	45	52	15	2,391	3,609	3,854	1,181	9.1	12.5	13.4	12.7
Heat Pumps	26	16	89	31	1,270	1,063	4,923	1,785	20.1	14.8	18.0	17.1
Packaged Heat Pumps	17	12	57	19	788	760	2,849	1,030	21.7	15.7	20.1	18.5
Split-System Heat Pumps	Q	Q	29	7	Q	Q	1,868	404	Q	Q	15.7	17.1
Individual Room Heat Pumps	Q	Q	22	11	Q	Q	1,290	734	Q	Q	17.1	14.5
Individual Air Conditioners	31	35	51	23	3,687	3,488	3,635	1,749	8.3	10.1	14.1	13.2
District Chilled Water	11	13	23	10	620	596	1,150	487	17.1	21.7	20.2	19.6
Central Chillers	37	52	115	40	1,852	2,842	4,854	2,088	20.2	18.4	23.7	19.3
Packaged Air Conditioning Units	83	121	176	82	6,000	8,086	10,401	5,482	13.8	15.0	16.9	15.0
Swamp Coolers	Q	Q	Q	19	Q	Q	Q	1,342	Q	11.1	Q	13.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	42	61	68	38	3,974	5,025	4,807	2,588	10.6	12.2	14.2	14.8
Cooling	66	74	98	48	5,453	5,752	6,415	3,374	12.1	12.9	15.3	14.1
Water Heating Equipment												
Centralized System	94	133	209	80	7,770	9,709	11,537	5,640	12.1	13.7	18.1	14.2
Distributed System	23	29	66	24	2,325	2,670	4,564	1,981	9.7	10.8	14.5	12.0
Combination of Centralized and Distributed System	27	38	83	42	1,695	2,534	3,812	2,227	15.9	15.2	21.8	18.9

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Lighting Equipment Types (more than one may apply)												
Incandescent	96	146	248	98	8,102	10,973	13,045	6,408	11.9	13.3	19.0	15.3
Standard Fluorescent	144	211	363	148	12,159	15,708	21,222	10,599	11.8	13.4	17.1	14.0
Compact Fluorescent	89	109	199	90	6,091	6,828	8,881	5,772	14.7	15.9	22.4	15.7
High Intensity Discharge	64	91	124	50	4,379	6,620	6,229	3,416	14.7	13.8	19.9	14.7
Halogen	56	74	130	52	3,581	4,661	6,193	3,268	15.7	15.9	21.1	16.1
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]												
Any Refrigeration	137	192	348	135	10,842	14,082	19,103	8,947	12.6	13.6	18.2	15.1
Commercial Refrigeration	89	118	237	79	5,936	7,122	9,638	4,072	15.1	16.6	24.6	19.5
Walk-In Units	73	93	204	66	4,452	5,201	7,469	3,132	16.5	17.9	27.4	21.0
Cases or Cabinets	75	89	191	67	4,504	4,978	7,664	3,277	16.8	17.8	24.9	20.6
Residential-Type Units	88	133	210	87	8,288	10,792	13,162	6,642	10.6	12.4	16.0	13.1
Vending Machines	96	134	256	94	6,559	9,400	13,534	5,841	14.7	14.3	19.0	16.1
No Refrigeration	11	24	26	17	1,967	2,619	3,663	2,083	5.5	9.1	7.1	8.3
Office Equipment (more than one may apply)												
Computers	141	199	347	145	11,518	14,415	19,715	9,980	12.2	13.8	17.6	14.5
With Flat Screen Monitors	93	102	191	80	5,995	6,346	9,135	4,940	15.5	16.1	20.9	16.3
Dedicated Servers	113	142	241	100	8,143	9,252	12,649	6,294	13.9	15.3	19.1	16.0
Laser Printers	76	104	188	86	7,095	8,463	11,566	5,888	10.7	12.3	16.3	14.6
Inkjet Printers	95	124	225	89	6,415	8,305	11,480	6,009	14.9	14.9	19.6	14.9
FAX Machines	138	183	335	136	11,173	13,295	18,782	9,123	12.3	13.8	17.8	14.9
Photocopiers	126	160	285	121	9,893	11,859	16,312	8,193	12.7	13.5	17.5	14.8
Number of Computers												
None	7	17	28	8	1,291	2,286	3,052	1,051	5.2	7.2	9.0	7.2
1 to 4	17	44	70	22	2,081	3,743	4,419	2,151	7.9	11.7	15.9	10.4
5 to 9	10	23	30	17	1,604	1,938	2,538	1,099	6.3	12.0	11.7	15.5
10 to 19	14	23	31	16	1,321	1,690	2,403	1,196	10.2	13.5	13.0	13.3
20 to 49	20	24	50	25	1,504	1,932	2,425	1,554	13.5	12.6	20.4	16.4
50 to 99	10	16	36	14	1,157	1,049	2,102	1,068	Q	15.2	17.2	12.9
100 to 249	19	26	44	19	1,260	1,851	2,262	1,317	14.8	14.0	19.3	14.8
250 or More	52	43	86	31	2,590	2,213	3,565	1,595	19.9	19.5	24.2	19.1
Number of Dedicated Servers												
None	35	74	133	52	4,666	7,449	10,117	4,736	7.4	9.9	13.2	10.9
1 to 4	57	89	136	59	5,247	6,567	8,208	4,093	10.9	13.6	16.6	14.4
5 to 9	15	16	31	12	914	966	1,313	671	16.1	16.5	23.6	17.6
10 to 19	11	15	29	9	578	773	1,126	552	19.0	19.2	25.8	15.5
20 to 49	Q	9	29	7	Q	334	1,265	491	Q	27.4	23.2	15.2
50 or More	22	13	16	Q	912	Q	737	Q	24.5	21.0	21.0	Q
Number of Photocopiers												
None	22	56	90	31	2,915	4,843	6,454	2,838	7.4	11.5	13.9	11.0
One	28	45	68	32	3,027	4,235	5,460	2,753	9.2	10.6	12.5	11.8
2 to 4	29	52	92	35	2,944	4,026	5,518	2,594	9.8	12.8	16.6	13.5
5 to 9	22	21	38	14	1,518	1,401	1,782	814	14.7	14.7	21.1	17.5
10 or More	47	43	87	39	2,404	2,196	3,553	2,032	19.4	19.6	24.6	19.3

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	69	92	179	63	5,016	5,850	7,880	3,478	13.8	15.7	22.7	18.2
Activities with Large Amounts of Hot Water	55	80	146	61	3,922	5,225	6,903	3,432	13.9	15.3	21.2	17.8
Separate Computer Area	93	99	183	79	5,925	6,482	9,397	5,070	15.6	15.3	19.5	15.6
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	67	86	158	60	3,780	5,001	7,348	3,468	17.8	17.3	21.5	17.2
Economizer Cycle	82	106	153	73	4,141	5,884	6,632	4,452	19.7	18.0	23.0	16.3
HVAC Maintenance	137	188	330	137	11,047	13,116	17,641	9,347	12.4	14.3	18.7	14.7
Energy Management and Control System (EMCS)	53	57	120	50	3,002	3,799	5,802	3,027	17.7	15.1	20.6	16.4
Window and Interior Lighting Features (more than one may apply)												
Multipaned Windows	112	169	227	85	9,276	11,649	12,273	5,529	12.1	14.5	18.5	15.4
Tinted Window Glass	78	112	218	85	4,944	7,233	11,832	5,616	15.7	15.5	18.4	15.1
Reflective Window Glass	27	37	66	23	1,661	2,165	3,008	1,694	16.5	16.9	22.1	13.3
External Overhangs or Awnings	36	65	126	55	2,672	4,205	6,749	3,545	13.4	15.6	18.6	15.4
Skylights or Atriums	34	46	71	38	2,892	3,250	3,914	2,453	11.9	14.2	18.0	15.4
Daylighting Sensors	6	15	14	25	428	815	674	951	15.1	17.8	21.4	26.3
Specular Reflectors	84	116	163	72	5,834	7,709	7,871	4,703	14.4	15.0	20.8	15.4
Electronic Ballasts	122	180	301	129	9,288	12,610	16,459	8,525	13.1	14.3	18.3	15.2
Energy Management and Control System (EMCS) For Lighting	18	22	30	21	849	1,292	1,471	1,169	21.3	17.1	20.6	17.7
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	104	126	231	106	9,519	10,893	14,655	7,639	10.9	11.5	15.7	13.9
Cooling	103	128	253	111	8,812	10,454	16,094	7,829	11.7	12.2	15.7	14.2
Lighting	81	160	249	98	8,706	12,884	17,115	8,282	9.3	12.4	14.6	11.8
Office Equipment	34	58	82	36	4,269	5,412	6,426	3,291	8.1	10.7	12.8	11.0
Annual Consumption (kilowatthours)												
10,000 or Less	1	1	1	1	752	929	729	451	1.1	1.1	1.7	1.8
10,001 to 50,000	6	12	17	9	1,800	2,277	3,386	1,765	3.6	5.5	5.0	5.1
50,001 to 100,000	9	11	21	10	1,547	1,466	2,448	1,000	6.0	7.7	8.7	9.7
100,001 to 500,000	26	59	83	41	2,910	4,795	5,402	3,004	8.8	12.4	15.4	13.7
500,001 to 1,000,000	13	21	48	14	1,285	1,794	2,772	886	10.5	11.7	17.5	15.9
1,000,001 to 5,000,000	46	69	111	44	2,570	3,512	4,691	2,435	17.7	19.5	23.7	18.0
Over 5,000,000	46	42	92	34	1,944	1,929	3,338	1,489	23.8	21.9	27.6	22.7

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	147	216	375	152	12,809	16,701	22,766	11,030	11.5	12.9	16.5	13.8
Provider of Purchased Electricity (more than one may apply)												
Local Utility	120	198	331	142	11,159	15,631	20,579	10,484	10.8	12.7	16.1	13.6
Some Other Provider	31	16	36	Q	1,741	1,047	1,790	Q	17.9	15.6	20.3	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Building Floorspace (Square Feet)												
1,001 to 5,000	1,617	2,401	4,142	2,188	0.12	0.08	0.08	0.12	1.62	1.39	1.78	1.69
5,001 to 10,000	1,202	1,212	2,721	2,160	0.12	0.08	0.08	0.12	1.11	0.84	1.11	1.78
10,001 to 25,000	1,795	2,145	3,763	2,299	0.10	0.07	0.08	0.10	0.92	0.69	0.88	1.11
25,001 to 50,000	1,168	2,042	2,864	1,797	0.10	0.07	0.07	0.10	0.90	0.82	0.95	1.12
50,001 to 100,000	2,130	1,777	3,190	1,620	0.09	0.06	0.06	0.10	1.04	0.79	0.93	1.25
100,001 to 200,000	2,286	1,963	3,810	1,440	0.09	0.06	0.06	0.08	1.08	0.86	1.11	1.22
200,001 to 500,000	1,985	1,497	2,312	1,530	0.08	0.05	0.06	0.10	1.11	0.68	1.21	1.31
Over 500,000	2,079	1,135	2,738	2,025	0.09	0.06	0.06	0.09	1.34	0.94	1.42	1.66
Principal Building Activity												
Education	1,273	1,388	3,940	1,510	0.10	0.07	0.07	0.09	0.76	0.55	0.99	0.91
Food Sales	Q	1,069	1,741	Q	Q	0.07	0.07	Q	Q	3.51	3.60	Q
Food Service	Q	1,017	2,637	976	Q	0.08	0.07	0.12	Q	2.24	3.45	3.69
Health Care	871	1,057	1,822	1,131	0.08	0.06	0.06	0.09	1.63	1.32	1.43	2.04
Inpatient	631	606	1,387	574	0.08	0.05	0.05	0.08	1.76	1.38	1.65	2.12
Outpatient	Q	451	436	558	Q	0.07	0.08	0.10	Q	1.25	0.99	1.97
Lodging	882	953	1,910	1,543	0.10	0.06	0.07	0.10	Q	0.83	1.13	1.42
Retail (Other Than Mall)	650	877	2,198	1,408	0.12	0.07	0.07	0.10	1.03	1.00	1.19	1.46
Office	4,890	3,556	4,788	3,816	0.10	0.07	0.07	0.10	1.62	1.19	1.27	1.57
Public Assembly	628	731	1,370	Q	0.10	0.07	0.07	0.11	Q	0.72	1.17	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	183	369	869	207	0.11	0.08	0.09	0.11	0.29	0.33	0.58	0.40
Service	580	961	1,266	679	0.11	0.07	Q	0.09	0.79	0.76	0.95	1.03
Warehouse and Storage	763	1,522	1,736	1,013	0.09	0.06	0.07	0.09	0.52	0.53	0.48	0.68
Other	1,333	330	Q	Q	0.09	0.06	Q	Q	2.05	1.08	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	990	669	Q	Q	0.09	0.08	0.08	Q	0.71	0.44	0.81	Q
1920 to 1945	1,827	1,403	904	989	0.11	0.06	0.08	0.12	0.74	0.72	0.72	1.07
1946 to 1959	1,747	1,195	1,601	1,186	0.10	0.07	0.07	0.10	0.84	0.60	0.92	1.18
1960 to 1969	2,063	1,485	2,421	1,745	0.09	0.07	0.07	0.10	1.19	0.67	0.97	1.10
1970 to 1979	2,479	2,982	4,270	2,906	0.10	0.06	0.07	0.09	1.44	0.92	1.22	1.40
1980 to 1989	2,331	2,365	5,787	3,419	0.09	0.07	0.07	0.10	1.70	1.23	1.25	1.53
1990 to 1999	1,819	2,890	6,962	3,565	0.09	0.06	0.07	0.10	1.34	1.10	1.14	1.80
2000 to 2003	1,006	1,183	3,177	1,006	0.09	0.06	0.07	0.09	1.49	0.99	1.27	1.08
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	2,516	4,189	N	2,429	0.11	0.07	N	0.07	1.06	0.76	N	0.96
5,500-7,000 HDD	5,413	8,791	N	2,095	0.09	0.07	N	0.07	1.01	0.91	N	1.02
4,000-5,499 HDD	6,333	1,191	4,868	Q	0.10	0.06	0.07	0.10	1.25	0.76	1.20	1.39
Fewer than 4,000 HDD	N	N	9,940	8,271	N	N	0.06	0.13	N	N	1.00	1.59
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	10,732	1,301	N	N	0.07	0.09	N	N	1.23	2.34
Number of Floors												
One	3,780	5,312	11,585	6,131	0.10	0.07	0.07	0.10	1.22	0.90	1.04	1.26
Two	2,788	3,821	5,470	3,987	0.10	0.07	0.07	0.10	0.92	0.74	1.12	1.35
Three	1,473	1,988	1,854	1,073	0.10	0.07	0.07	0.09	0.71	0.79	0.97	1.20
Four to Nine	3,813	2,364	4,214	2,126	0.09	0.06	0.06	0.10	1.27	0.90	1.36	1.60
Ten or More	2,408	687	2,416	1,740	0.09	0.06	0.06	0.09	1.47	1.24	1.38	1.74

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Elevators and Escalators (more than one may apply)												
Any Elevators	7,917	6,121	10,195	5,994	0.09	0.06	0.06	0.09	1.29	0.93	1.28	1.56
Number of Elevators												
One	1,752	2,372	2,487	1,101	0.10	0.06	0.07	0.09	1.12	0.79	1.01	1.03
Two to Five	3,435	2,579	4,094	2,232	0.09	0.06	0.06	0.10	1.16	0.96	1.32	1.64
Six or More	2,730	1,170	3,614	2,662	0.09	0.06	0.06	0.09	1.73	1.32	1.52	1.88
Any Escalators	Q	Q	1,732	Q	Q	Q	0.06	Q	Q	Q	1.73	Q
Number of Workers (main shift)												
Fewer than 5	1,405	2,523	3,610	1,966	0.12	0.07	0.09	0.11	0.62	0.55	0.73	0.88
5 to 9	1,088	1,441	2,633	1,228	0.12	0.08	0.08	0.10	1.00	0.98	1.02	1.20
10 to 19	1,436	1,664	3,022	1,525	0.11	0.07	0.08	0.11	0.77	0.80	1.10	1.38
20 to 49	2,216	2,576	4,556	2,619	0.10	0.07	0.07	0.10	0.96	0.90	1.17	1.37
50 to 99	1,868	1,991	2,930	1,742	0.09	0.06	0.06	0.09	1.17	0.86	1.10	1.27
100 to 249	2,013	1,729	3,595	2,431	0.09	0.06	0.06	0.10	1.51	1.07	1.42	1.74
250 or More	4,236	2,248	5,194	3,546	0.09	0.06	0.06	0.09	1.82	1.25	1.52	1.79
Weekly Operating Hours												
Fewer than 40	290	616	1,009	574	0.11	0.09	0.08	0.13	0.34	0.30	0.48	0.64
40 to 48	1,369	2,162	3,885	2,161	0.10	0.07	0.08	0.10	0.65	0.79	0.85	1.00
49 to 60	2,814	3,345	4,891	3,181	0.10	0.06	0.07	0.11	0.91	0.73	0.88	1.30
61 to 84	2,270	2,313	4,660	2,315	0.11	0.07	0.07	0.09	1.11	0.90	1.24	1.19
85 to 167	2,214	2,739	4,300	1,934	0.09	0.07	0.07	0.09	1.68	1.36	1.81	1.55
Open Continuously	5,304	2,997	6,794	4,892	0.09	0.06	0.06	0.09	1.57	1.10	1.53	2.10
Ownership and Occupancy												
Nongovernment Owned	12,035	10,805	19,030	12,251	0.10	0.07	0.07	0.10	1.17	0.89	1.11	1.45
Owner Occupied	6,390	5,387	8,364	5,299	0.10	0.07	0.07	0.11	1.08	0.88	1.07	1.47
Nonowner Occupied	5,578	5,337	10,619	6,912	0.10	0.07	0.07	0.10	1.35	0.99	1.18	1.46
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	2,227	3,366	6,510	2,806	0.09	0.06	0.06	0.09	0.88	0.73	1.16	1.09
Federal	Q	876	843	228	Q	0.05	Q	0.09	Q	0.95	1.63	0.76
State	604	637	1,876	856	0.09	0.06	0.06	0.09	1.01	0.83	1.11	1.18
Local	1,411	1,853	3,791	1,722	0.10	0.07	0.07	0.08	0.83	0.64	1.11	1.12
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	3,828	2,668	4,126	2,588	0.10	0.07	0.07	0.09	1.24	0.86	1.05	1.24
Not At All Vacant	10,293	11,371	21,359	12,389	0.10	0.07	0.07	0.10	1.12	0.89	1.15	1.41
Number of Establishments												
One	8,786	10,689	18,435	10,467	0.10	0.07	0.07	0.10	1.10	0.88	1.11	1.36
2 to 5	2,681	2,359	3,847	2,552	0.10	0.07	0.07	0.11	1.07	0.84	1.04	1.35
6 to 10	738	451	905	537	0.09	0.06	0.07	0.10	1.29	0.88	1.65	1.64
11 to 20	Q	Q	726	Q	Q	Q	0.06	Q	Q	Q	1.23	Q
More than 20	1,315	Q	1,578	Q	0.11	Q	0.06	Q	1.89	Q	1.56	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Predominant Exterior Wall Material												
Brick, Stone or Stucco	7,324	7,970	12,771	6,068	0.10	0.07	0.07	0.10	1.02	0.87	1.12	1.31
Concrete (Block or Poured)	2,606	2,399	4,721	2,692	0.10	0.07	0.07	0.10	1.20	0.83	1.20	1.53
Concrete Panels	946	1,256	3,739	2,476	0.08	0.06	0.06	0.10	1.58	1.02	1.41	1.30
Siding or Shingles	828	772	1,035	1,372	0.11	0.08	0.08	0.11	0.70	0.73	1.00	1.97
Metal Panels	1,594	1,115	2,352	1,665	0.09	0.07	0.07	0.09	1.55	0.63	0.76	1.12
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material												
Built-Up	4,819	4,676	8,720	5,955	0.10	0.07	0.07	0.10	1.20	0.91	1.21	1.36
Shingles (Not Wood)	2,118	2,334	3,417	2,395	0.09	0.07	0.07	0.12	1.06	0.75	1.04	1.61
Metal Surfacing	935	1,665	4,411	1,826	0.10	0.06	0.07	0.09	0.93	0.67	0.75	0.98
Synthetic or Rubber	5,439	4,259	6,280	2,656	0.09	0.07	0.06	0.08	1.32	0.96	1.47	1.42
Slate or Tile	432	234	1,108	1,042	0.11	0.08	0.07	0.13	0.90	0.78	1.07	1.68
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	0.10	Q	Q	Q	1.05
Concrete	Q	Q	Q	Q	Q	Q	0.07	Q	Q	Q	1.43	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	5,738	4,126	4,606	3,359	0.10	0.07	0.07	0.09	1.13	0.77	1.06	1.18
Addition or Annex	1,715	1,728	2,008	1,051	0.10	0.06	0.07	0.07	0.95	0.88	1.11	1.07
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	4,825	3,153	3,155	2,712	0.10	0.06	0.07	0.09	1.23	0.81	1.05	1.24
Wall or Roof Replacement	2,888	1,684	2,041	1,516	0.10	0.06	0.07	0.09	1.08	0.75	1.10	1.17
Interior Wall Re-Configuration	2,713	2,284	1,999	2,038	0.10	0.06	0.06	0.09	1.10	0.88	1.03	1.35
HVAC Equipment Upgrade	4,033	2,721	2,815	2,253	0.10	0.06	0.06	0.08	1.33	0.82	1.09	1.23
Lighting Upgrade	3,879	2,420	2,105	2,338	0.09	0.06	0.06	0.08	1.16	0.79	1.01	1.32
Window Replacement	2,893	1,348	927	999	0.11	0.06	0.07	0.08	1.05	0.76	1.01	1.19
Plumbing System Upgrade	2,738	1,493	1,368	1,761	0.10	0.06	0.06	0.09	1.09	0.79	1.00	1.29
Insulation Upgrade	1,569	912	918	666	0.10	0.06	0.07	0.09	1.15	0.75	1.07	1.16
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	3,367	3,607	5,008	3,708	0.10	0.07	0.07	0.11	0.78	0.64	0.97	1.22
Building Newer than 1980	5,157	6,438	15,926	7,990	0.09	0.07	0.07	0.10	1.51	1.12	1.20	1.56
Energy Sources (more than one may apply)												
Electricity	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Natural Gas	10,870	11,456	15,835	10,424	0.09	0.07	0.07	0.10	1.18	0.87	1.19	1.33
Fuel Oil	6,541	2,918	5,337	3,835	0.09	0.06	0.06	0.09	1.08	1.04	1.29	1.81
District Heat	2,131	1,400	2,141	847	0.10	0.05	0.06	0.09	1.56	0.85	1.21	1.27
District Chilled Water	825	726	1,311	805	0.08	0.06	0.06	0.08	1.33	1.22	1.14	1.65
Propane	1,201	1,662	2,194	2,177	0.10	0.05	0.07	0.09	0.89	0.76	0.93	1.86
Other	Q	423	445	472	Q	0.06	0.06	0.08	Q	0.87	1.47	1.28

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Space-Heating Energy Sources												
Electricity	6,290	5,821	15,827	6,927	0.10	0.07	0.07	0.09	1.43	0.94	1.21	1.41
Electricity Main	2,071	3,002	11,093	4,361	0.10	0.07	0.07	0.10	1.65	1.18	1.22	1.40
Electricity Secondary	4,220	2,819	4,734	2,566	0.09	0.07	0.06	0.09	1.34	0.77	1.19	1.43
Other Excluding Electricity	7,864	8,207	8,622	6,694	0.10	0.07	0.06	0.10	0.96	0.81	1.09	1.29
Buildings without Heating	Q	144	1,092	1,436	Q	0.08	0.08	0.13	Q	0.36	0.61	1.55
Primary Space-Heating Energy Source												
Electricity	2,071	3,002	11,093	4,361	0.10	0.07	0.07	0.10	1.65	1.18	1.22	1.40
Natural Gas	8,025	9,099	10,595	7,635	0.09	0.07	0.07	0.10	1.25	0.80	1.14	1.29
Fuel Oil	1,837	Q	Q	Q	0.11	Q	Q	Q	0.57	Q	Q	Q
District Heat	1,929	1,344	1,971	666	0.10	0.05	0.06	0.08	1.60	0.88	1.22	1.19
Propane	Q	Q	471	Q	Q	0.07	0.08	0.13	Q	0.71	0.70	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Electricity	12,509	12,768	24,260	13,865	0.10	0.07	0.07	0.10	1.20	0.93	1.18	1.46
Other Excluding Electricity	1,012	Q	1,001	Q	0.09	Q	0.06	Q	1.83	Q	1.08	Q
Buildings without Cooling	741	Q	279	708	0.11	0.05	0.09	0.11	0.40	0.33	0.23	0.66
Water-Heating Energy Sources												
Electricity	5,313	5,702	13,738	5,545	0.09	0.07	0.07	0.09	1.04	0.88	1.16	1.38
Other Excluding Electricity	8,482	7,608	10,368	8,770	0.10	0.07	0.07	0.10	1.27	0.90	1.29	1.50
Bldgs without Water Heating	467	862	1,434	742	0.11	0.05	0.09	0.12	0.46	0.48	0.50	0.63
Cooking Energy Sources												
Electricity	3,487	3,802	7,476	3,080	0.09	0.06	0.07	0.08	1.40	1.00	1.53	1.55
Other Excluding Electricity	2,788	2,111	4,282	2,751	0.09	0.07	0.06	0.11	Q	1.02	1.44	1.83
Buildings without Cooking	7,987	8,259	13,783	9,226	0.10	0.07	0.07	0.10	1.02	0.76	0.93	1.22
Energy End Uses (more than one may apply)												
Buildings with Space Heating	14,154	14,028	24,449	13,621	0.10	0.07	0.07	0.10	1.12	0.86	1.16	1.35
Buildings with Cooling	13,521	13,424	25,261	14,349	0.10	0.07	0.07	0.10	1.23	0.93	1.17	1.44
Buildings with Water Heating	13,795	13,310	24,106	14,315	0.10	0.07	0.07	0.10	1.17	0.89	1.21	1.45
Buildings with Cooking	6,275	5,913	11,758	5,832	0.09	0.06	0.07	0.09	1.25	1.01	1.49	1.67
Buildings with Manufacturing	1,166	673	468	810	0.09	0.06	0.06	0.08	1.15	0.84	0.73	1.18
Buildings with Electricity Generation	5,398	3,882	5,483	3,916	0.09	0.06	0.06	0.09	1.66	1.17	1.36	1.75
Percent of Floorspace Heated												
Not Heated	Q	144	1,092	1,436	Q	0.08	0.08	0.13	Q	0.36	0.61	1.55
1 to 50	694	596	1,898	1,458	0.12	0.06	0.07	0.11	0.50	0.53	0.67	0.98
51 to 99	1,486	1,492	3,469	2,649	0.10	0.07	0.07	0.09	0.97	0.86	1.20	1.36
100	11,974	11,941	19,082	9,515	0.10	0.07	0.07	0.10	1.24	0.89	1.25	1.43
Percent of Floorspace Cooled												
Not Cooled	741	Q	279	708	0.11	0.05	0.09	0.11	0.40	0.33	0.23	0.66
1 to 50	2,897	2,623	2,819	2,561	0.10	0.07	0.07	0.10	0.68	0.55	0.57	0.96
51 to 99	4,663	3,749	5,029	3,476	0.10	0.06	0.07	0.09	1.50	1.00	1.29	1.42
100	5,961	7,052	17,413	8,313	0.09	0.07	0.07	0.10	1.66	1.18	1.37	1.71

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	1,262	1,342	2,026	1,312	0.11	0.08	0.08	0.11	0.46	0.49	0.64	0.87
51 to 99	4,757	4,383	7,016	4,737	0.10	0.07	0.07	0.10	1.32	0.83	1.14	1.45
100	8,146	8,308	16,362	8,947	0.09	0.06	0.07	0.09	1.35	1.07	1.27	1.47
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed												
Zero	2,124	3,236	4,759	2,986	0.11	0.07	0.08	0.10	0.76	0.63	0.76	0.96
1 to 50	6,272	7,204	12,443	6,877	0.10	0.07	0.07	0.10	1.00	0.87	1.13	1.29
51 to 100	Q	735	1,544	Q	Q	0.06	0.06	Q	Q	1.47	1.52	Q
Building Never Closed/ Electricity Not Used	5,304	2,997	6,794	4,892	0.09	0.06	0.06	0.09	1.57	1.10	1.53	2.10
Heating Equipment (more than one may apply)												
Heat Pumps	2,297	967	5,781	2,585	0.09	0.06	0.07	0.10	1.89	0.91	1.17	1.62
Packaged Heat Pumps	1,538	698	3,932	1,761	0.09	0.06	0.07	0.09	2.07	0.94	1.34	1.71
Split-System Heat Pumps	Q	Q	1,893	676	Q	Q	0.07	0.11	Q	Q	1.02	1.84
Individual Room Heat Pumps	Q	Q	1,288	586	Q	Q	0.07	0.09	Q	Q	1.03	1.09
Furnaces	3,399	5,811	5,220	3,456	0.10	0.07	0.07	0.09	0.95	0.81	0.91	1.12
Individual Space Heaters	3,394	3,244	3,804	1,944	0.10	0.07	0.07	0.08	1.22	0.78	1.06	0.98
District Heat	1,953	1,368	2,033	696	0.10	0.05	0.06	0.08	1.57	0.84	1.21	1.13
Boilers	6,441	4,822	5,657	5,124	0.09	0.06	0.06	0.09	1.03	0.79	1.29	1.40
Packaged Heating Units	4,895	3,893	10,498	5,032	0.10	0.06	0.07	0.11	1.68	1.06	1.29	1.52
Other	Q	846	1,372	530	Q	0.06	0.07	0.07	Q	1.05	1.00	1.10
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	2,372	3,158	3,733	1,484	0.11	0.07	0.07	0.10	0.99	0.87	0.97	1.26
Heat Pumps	2,357	948	5,922	2,833	0.09	0.06	0.07	0.09	1.86	0.89	1.20	1.59
Packaged Heat Pumps	1,585	707	3,904	1,713	0.09	0.06	0.07	0.09	2.01	0.93	1.37	1.66
Split-System Heat Pumps	Q	Q	1,946	709	Q	Q	0.07	0.10	Q	Q	1.04	1.76
Individual Room Heat Pumps	Q	Q	1,404	890	Q	Q	0.06	0.08	Q	Q	1.09	1.21
Individual Air Conditioners	3,052	2,295	3,551	2,370	0.10	0.07	0.07	0.10	0.83	0.66	0.98	1.36
District Chilled Water	825	726	1,311	805	0.08	0.06	0.06	0.08	1.33	1.22	1.14	1.65
Central Chillers	3,297	3,104	6,855	3,810	0.09	0.06	0.06	0.09	1.78	1.09	1.41	1.83
Packaged Air Conditioning Units	7,826	7,997	12,354	8,080	0.09	0.07	0.07	0.10	1.30	0.99	1.19	1.47
Swamp Coolers	Q	Q	Q	1,583	Q	Q	Q	0.09	Q	0.72	Q	1.18
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	4,204	4,210	4,857	3,355	0.10	0.07	0.07	0.09	1.06	0.84	1.01	1.30
Cooling	6,456	5,032	6,808	4,440	0.10	0.07	0.07	0.09	1.18	0.87	1.06	1.32
Water Heating Equipment												
Centralized System	9,178	9,057	14,452	8,184	0.10	0.07	0.07	0.10	1.18	0.93	1.25	1.45
Distributed System	2,171	1,913	4,624	2,545	0.10	0.07	0.07	0.11	0.93	0.72	1.01	1.29
Combination of Centralized and Distributed System	2,446	2,340	5,030	3,586	0.09	0.06	0.06	0.09	1.44	0.92	1.32	1.61

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Lighting Equipment Types (more than one may apply)												
Incandescent	9,289	9,679	16,344	9,110	0.10	0.07	0.07	0.09	1.15	0.88	1.25	1.42
Standard Fluorescent	13,843	13,759	24,616	14,647	0.10	0.07	0.07	0.10	1.14	0.88	1.16	1.38
Compact Fluorescent	8,449	6,975	12,475	8,685	0.09	0.06	0.06	0.10	1.39	1.02	1.40	1.50
High Intensity Discharge	5,868	5,483	7,765	4,534	0.09	0.06	0.06	0.09	1.34	0.83	1.25	1.33
Halogen	5,246	4,700	8,179	4,887	0.09	0.06	0.06	0.09	1.46	1.01	1.32	1.50
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]												
Any Refrigeration	13,006	12,700	23,481	13,170	0.10	0.07	0.07	0.10	1.20	0.90	1.23	1.47
Commercial Refrigeration	8,341	7,605	15,318	7,318	0.09	0.06	0.06	0.09	1.40	1.07	1.59	1.80
Walk-In Units	6,819	5,922	12,980	6,049	0.09	0.06	0.06	0.09	1.53	1.14	1.74	1.93
Cases or Cabinets	6,839	5,717	12,538	6,241	0.09	0.06	0.07	0.09	1.52	1.15	1.64	1.90
Residential-Type Units	8,440	8,767	14,274	8,455	0.10	0.07	0.07	0.10	1.02	0.81	1.08	1.27
Vending Machines	8,631	8,400	16,462	8,550	0.09	0.06	0.06	0.09	1.32	0.89	1.22	1.46
No Refrigeration	1,256	1,472	2,059	1,887	0.12	0.06	0.08	0.11	0.64	0.56	0.56	0.91
Office Equipment (more than one may apply)												
Computers	13,446	12,982	23,341	14,242	0.10	0.07	0.07	0.10	1.17	0.90	1.18	1.43
With Flat Screen Monitors	8,588	6,381	12,181	7,835	0.09	0.06	0.06	0.10	1.43	1.01	1.33	1.59
Dedicated Servers	10,454	9,056	15,375	10,055	0.09	0.06	0.06	0.10	1.28	0.98	1.22	1.60
Laser Printers	7,450	7,000	12,900	8,681	0.10	0.07	0.07	0.10	1.05	0.83	1.12	1.47
Inkjet Printers	8,773	8,028	14,537	8,582	0.09	0.06	0.06	0.10	1.37	0.97	1.27	1.43
FAX Machines	13,137	12,080	22,367	13,345	0.10	0.07	0.07	0.10	1.18	0.91	1.19	1.46
Photocopiers	11,694	10,371	18,560	11,784	0.09	0.06	0.07	0.10	1.18	0.87	1.14	1.44
Number of Computers												
None	816	1,190	2,200	815	0.12	0.07	0.08	0.11	0.63	0.52	0.72	0.78
1 to 4	1,926	3,029	5,576	2,386	0.12	0.07	0.08	0.11	0.93	0.81	1.26	1.11
5 to 9	1,115	1,625	2,294	1,572	0.11	0.07	0.08	0.09	0.70	0.84	0.90	1.43
10 to 19	1,300	1,562	2,186	1,693	0.10	0.07	0.07	0.11	0.98	0.92	0.91	1.42
20 to 49	1,861	1,666	3,105	2,690	0.09	0.07	0.06	0.11	1.24	0.86	1.28	1.73
50 to 99	1,024	975	2,288	1,376	0.10	0.06	0.06	0.10	Q	0.93	1.09	1.29
100 to 249	1,640	1,573	2,752	1,710	0.09	0.06	0.06	0.09	1.30	0.85	1.22	1.30
250 or More	4,580	2,551	5,140	2,814	0.09	0.06	0.06	0.09	1.77	1.15	1.44	1.76
Number of Dedicated Servers												
None	3,808	5,116	10,165	5,002	0.11	0.07	0.08	0.10	0.82	0.69	1.00	1.06
1 to 4	5,303	5,860	9,075	5,836	0.09	0.07	0.07	0.10	1.01	0.89	1.11	1.43
5 to 9	1,268	1,021	1,915	1,404	0.09	0.06	0.06	0.12	1.39	1.06	1.46	2.09
10 to 19	991	883	1,708	875	0.09	0.06	0.06	0.10	1.72	1.14	1.52	1.59
20 to 49	Q	521	1,799	679	Q	0.06	0.06	0.09	Q	1.56	1.42	1.38
50 or More	2,207	771	879	Q	0.10	0.06	0.06	Q	2.42	1.26	1.19	Q
Number of Photocopiers												
None	2,568	3,800	6,980	3,273	0.12	0.07	0.08	0.10	0.88	0.78	1.08	1.15
One	2,624	3,209	5,066	3,199	0.09	0.07	0.07	0.10	0.87	0.76	0.93	1.16
2 to 4	2,852	3,318	5,946	3,440	0.10	0.06	0.06	0.10	0.97	0.82	1.08	1.33
5 to 9	2,016	1,244	2,332	1,546	0.09	0.06	0.06	0.11	1.33	0.89	1.31	1.90
10 or More	4,201	2,601	5,217	3,599	0.09	0.06	0.06	0.09	1.75	1.18	1.47	1.77

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	6,275	5,913	11,757	5,826	0.09	0.06	0.07	0.09	1.25	1.01	1.49	1.68
Activities with Large Amounts of Hot Water	4,965	4,982	9,268	5,495	0.09	0.06	0.06	0.09	1.27	0.95	1.34	1.60
Separate Computer Area	8,286	6,100	11,405	7,516	0.09	0.06	0.06	0.09	1.40	0.94	1.21	1.48
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	6,051	5,320	9,769	5,587	0.09	0.06	0.06	0.09	1.60	1.06	1.33	1.61
Economizer Cycle	7,496	6,479	9,250	6,438	0.09	0.06	0.06	0.09	1.81	1.10	1.39	1.45
HVAC Maintenance	13,086	11,958	21,800	13,577	0.10	0.06	0.07	0.10	1.18	0.91	1.24	1.45
Energy Management and Control System (EMCS)	4,893	3,545	7,501	4,512	0.09	0.06	0.06	0.09	1.63	0.93	1.29	1.49
Window and Interior Lighting Features (more than one may apply)												
Multipaned Windows	10,709	11,096	14,728	7,250	0.10	0.07	0.06	0.09	1.15	0.95	1.20	1.31
Tinted Window Glass	7,034	6,946	14,565	8,621	0.09	0.06	0.07	0.10	1.42	0.96	1.23	1.54
Reflective Window Glass	2,767	2,275	4,234	2,026	0.10	0.06	0.06	0.09	1.67	1.05	1.41	1.20
External Overhangs or Awnings	3,544	4,181	8,637	5,436	0.10	0.06	0.07	0.10	1.33	0.99	1.28	1.53
Skylights or Atriums	3,178	2,872	4,362	3,595	0.09	0.06	0.06	0.09	1.10	0.88	1.11	1.47
Daylighting Sensors	Q	845	936	2,487	Q	0.06	0.06	0.10	Q	1.04	1.39	2.61
Specular Reflectors	7,792	7,099	10,254	6,947	0.09	0.06	0.06	0.10	1.34	0.92	1.30	1.48
Electronic Ballasts	11,540	11,566	19,990	12,741	0.09	0.06	0.07	0.10	1.24	0.92	1.21	1.49
Energy Management and Control System (EMCS) For Lighting	1,685	1,342	1,948	1,947	0.09	0.06	0.06	0.09	1.99	1.04	1.32	1.67
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	10,079	8,581	15,958	10,481	0.10	0.07	0.07	0.10	1.06	0.79	1.09	1.37
Cooling	10,034	8,738	17,611	11,169	0.10	0.07	0.07	0.10	1.14	0.84	1.09	1.43
Lighting	8,314	10,806	17,810	9,881	0.10	0.07	0.07	0.10	0.95	0.84	1.04	1.19
Office Equipment	3,575	3,837	6,296	3,759	0.10	0.07	0.08	0.10	0.84	0.71	0.98	1.14
Annual Consumption (kilowatthours)												
10,000 or Less	111	109	144	113	0.14	0.11	0.12	0.14	0.15	0.12	0.20	0.25
10,001 to 50,000	873	1,108	1,621	1,066	0.14	0.09	0.10	0.12	0.49	0.49	0.48	0.60
50,001 to 100,000	1,130	885	1,867	1,173	0.12	0.08	0.09	0.12	0.73	0.60	0.76	1.17
100,001 to 500,000	2,936	4,502	6,472	4,143	0.11	0.08	0.08	0.10	1.01	0.94	1.20	1.38
500,001 to 1,000,000	1,301	1,397	3,448	1,589	0.10	0.07	0.07	0.11	1.01	0.78	1.24	1.79
1,000,001 to 5,000,000	3,983	3,922	6,703	3,928	0.09	0.06	0.06	0.09	1.55	1.12	1.43	1.61
Over 5,000,000	3,928	2,248	5,286	3,046	0.08	0.05	0.06	0.09	2.02	1.17	1.58	2.05

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	14,262	14,172	25,540	15,057	0.10	0.07	0.07	0.10	1.11	0.85	1.12	1.37
Provider of Purchased Electricity (more than one may apply)												
Local Utility	11,785	12,978	22,643	14,070	0.10	0.07	0.07	0.10	1.06	0.83	1.10	1.34
Some Other Provider	2,841	1,086	2,412	Q	0.09	0.07	0.07	Q	1.63	1.04	1.35	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Building Floorspace (Square Feet)									
1,001 to 5,000	4	9	20	345	652	908	12.7	13.8	22.0
5,001 to 10,000	3	7	8	350	732	781	7.7	9.6	10.7
10,001 to 25,000	Q	16	20	Q	1,390	1,934	Q	11.2	10.5
25,001 to 50,000	Q	8	16	Q	944	1,534	Q	8.5	10.4
50,001 to 100,000	Q	15	21	Q	1,524	1,618	Q	10.2	12.9
100,001 to 200,000	Q	17	26	Q	1,703	1,671	Q	10.1	15.5
200,001 to 500,000	Q	22	24	Q	1,673	1,801	Q	13.1	13.1
Over 500,000	Q	22	18	Q	1,248	1,126	Q	17.3	16.4
Principal Building Activity									
Education	Q	12	16	Q	1,384	1,990	Q	8.4	7.9
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	10	Q	Q	248	Q	Q	38.5
Health Care	Q	9	13	Q	464	551	Q	20.2	24.2
Inpatient	Q	8	9	Q	310	316	Q	24.8	27.9
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	8	Q	Q	548	Q	Q	14.7
Retail (Other Than Mall)	Q	5	7	Q	419	544	Q	10.9	12.3
Office	9	40	42	578	2,434	2,190	16.3	16.6	18.9
Public Assembly	Q	5	8	Q	769	635	Q	Q	12.3
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	1	3	Q	474	720	Q	3.2	4.3
Service	Q	5	9	Q	620	775	Q	7.5	12.0
Warehouse and Storage	Q	8	21	Q	1,070	1,931	Q	7.4	10.8
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	3	8	6	444	945	994	6.0	Q	5.8
1920 to 1945	3	14	Q	611	1,861	1,494	5.6	7.4	12.5
1946 to 1959	Q	15	12	Q	1,734	1,444	Q	8.8	8.6
1960 to 1969	Q	16	14	Q	1,393	1,380	17.4	11.4	10.2
1970 to 1979	6	20	32	450	1,273	2,198	12.5	15.9	14.5
1980 to 1989	Q	20	27	Q	1,109	1,459	Q	18.1	18.8
1990 to 1999	Q	15	30	Q	1,130	1,606	Q	13.3	18.6
2000 to 2003	Q	Q	13	Q	Q	799	Q	Q	16.6
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	7	Q	32	Q	1,417	3,008	7.1	11.6	10.6
5,500-7,000 HDD	25	34	122	1,993	3,373	8,365	12.5	10.1	14.5
4,000-5,499 HDD	N	65	N	N	5,077	N	N	12.8	N
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
Number of Floors									
One	7	31	54	522	2,564	3,774	13.9	12.2	14.3
Two	4	23	35	742	2,274	3,228	5.6	10.0	10.9
Three	4	11	22	755	1,310	1,805	5.2	8.5	12.1
Four to Nine	14	27	32	793	2,210	2,061	17.4	12.1	15.4
Ten or More	Q	24	11	Q	1,510	506	Q	15.8	20.8

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Elevators and Escalators (more than one may apply)									
Any Elevators	19	67	76	1,375	4,744	4,967	13.7	14.2	15.4
Number of Elevators									
One	Q	12	26	Q	1,068	2,149	Q	11.1	12.1
Two to Five	Q	28	32	723	2,248	2,051	14.1	12.4	15.7
Six or More	Q	28	18	Q	1,428	766	Q	19.5	23.7
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	3	8	27	754	1,525	2,973	4.6	5.3	8.9
5 to 9	3	6	12	401	684	866	7.0	8.9	13.3
10 to 19	Q	10	14	Q	1,463	1,214	Q	Q	11.8
20 to 49	Q	17	25	Q	1,964	1,980	Q	8.8	12.6
50 to 99	Q	17	20	Q	1,110	1,570	Q	15.3	13.0
100 to 249	Q	15	22	Q	1,034	1,212	Q	14.7	18.1
250 or More	Q	42	34	Q	2,087	1,558	Q	20.3	21.6
Weekly Operating Hours									
Fewer than 40	Q	2	4	Q	665	1,427	Q	3.5	3.1
40 to 48	3	10	22	431	1,672	1,742	6.7	6.2	12.6
49 to 60	7	21	39	837	2,261	3,322	7.8	9.2	11.9
61 to 84	5	17	21	494	1,554	1,737	9.5	10.7	12.4
85 to 167	Q	20	32	Q	1,078	1,450	Q	18.7	22.1
Open Continuously	13	45	34	742	2,638	1,695	17.9	17.2	20.1
Ownership and Occupancy									
Nongovernment Owned	26	97	106	2,260	8,032	7,793	11.7	12.1	13.7
Owner Occupied	17	49	53	1,587	4,317	3,715	10.9	11.3	14.2
Nonowner Occupied	9	48	53	646	3,493	3,520	14.2	13.7	15.1
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	5	19	47	682	1,835	3,580	7.6	10.2	13.1
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	9	Q	Q	536	Q	Q	15.9
Local	Q	13	21	Q	1,360	2,199	Q	9.5	9.4
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	11	29	31	1,022	2,073	2,251	10.3	14.1	13.9
Not At All Vacant	21	86	121	1,781	7,447	8,436	11.8	11.5	14.4
Number of Establishments									
One	20	72	117	1,761	6,235	8,199	11.1	11.5	14.3
2 to 5	6	23	24	615	1,901	1,833	9.1	11.8	13.2
6 to 10	Q	5	Q	Q	411	Q	Q	11.4	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Predominant Exterior Wall Material									
Brick, Stone or Stucco	17	58	95	1,541	5,657	7,033	11.0	10.3	13.5
Concrete (Block or Poured)	Q	23	22	Q	1,890	1,875	Q	12.2	11.8
Concrete Panels	Q	Q	14	Q	Q	855	Q	Q	16.6
Siding or Shingles	4	3	5	764	415	425	5.6	8.0	10.6
Metal Panels	Q	13	8	Q	848	618	Q	15.4	12.4
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	5	41	52	704	3,321	3,812	6.9	12.4	13.6
Shingles (Not Wood)	5	18	21	668	1,326	2,002	7.6	13.7	10.6
Metal Surfacing	Q	8	13	Q	763	997	Q	11.0	13.3
Synthetic or Rubber	18	42	50	1,018	3,097	3,450	18.1	13.6	14.3
Slate or Tile	Q	3	2	Q	398	236	Q	6.5	10.2
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	12	46	43	1,445	3,645	3,416	8.6	12.6	12.5
Addition or Annex	Q	16	18	Q	1,395	1,243	Q	11.5	14.3
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	9	39	33	943	2,996	2,354	9.9	12.9	14.0
Wall or Roof Replacement	6	21	18	720	1,955	1,365	8.7	10.9	13.3
Interior Wall Re-Configuration	7	20	26	639	1,836	1,709	10.8	10.9	14.9
HVAC Equipment Upgrade	8	32	28	739	2,287	2,136	10.6	14.1	13.3
Lighting Upgrade	9	32	26	853	2,497	1,985	10.9	12.9	12.9
Window Replacement	6	20	15	688	2,061	1,264	9.2	9.8	11.8
Plumbing System Upgrade	7	19	16	633	1,878	1,177	10.8	10.3	13.7
Insulation Upgrade	Q	12	9	356	1,014	700	Q	11.8	12.5
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	7	27	40	752	3,561	4,094	9.0	7.6	9.9
Building Newer than 1980	Q	43	71	744	2,661	3,863	16.9	16.0	18.3
Energy Sources (more than one may apply)									
Electricity	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Natural Gas	21	93	125	1,465	7,716	9,568	14.4	12.1	13.1
Fuel Oil	15	56	36	1,577	4,502	1,856	9.3	12.4	19.4
District Heat	Q	17	25	Q	1,082	1,420	Q	15.7	17.7
District Chilled Water	Q	10	12	Q	583	569	Q	16.8	21.4
Propane	6	7	Q	850	505	Q	6.7	12.9	17.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Space-Heating Energy Sources									
Electricity	16	50	58	1,132	3,273	3,895	14.6	15.1	14.9
Electricity Main	Q	18	30	Q	1,127	1,487	Q	16.3	20.3
Electricity Secondary	Q	31	28	1,006	2,146	2,408	13.5	14.5	11.6
Other Excluding Electricity	15	66	94	1,687	6,504	7,302	8.7	10.1	12.9
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	Q	18	30	Q	1,127	1,487	Q	16.3	20.3
Natural Gas	14	71	95	1,061	5,377	8,228	13.5	13.1	11.6
Fuel Oil	8	9	Q	1,161	2,089	Q	6.7	Q	Q
District Heat	Q	15	25	Q	970	1,319	Q	16.0	18.8
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Electricity	27	103	131	1,946	8,456	9,157	13.9	12.2	14.3
Other Excluding Electricity	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings without Cooling	4	3	Q	920	935	1,598	3.8	3.3	7.7
Water-Heating Energy Sources									
Electricity	15	42	57	1,439	3,686	4,086	10.6	11.4	13.9
Other Excluding Electricity	16	70	84	1,285	5,379	6,106	12.1	13.1	13.7
Bldgs without Water Heating	Q	3	Q	Q	803	Q	Q	4.1	10.7
Cooking Energy Sources									
Electricity	7	32	46	537	1,958	2,934	12.5	16.3	15.8
Other Excluding Electricity	4	27	23	401	2,120	1,444	9.6	Q	15.7
Buildings without Cooking	21	57	84	2,003	5,789	6,995	10.5	9.9	12.1
Energy End Uses (more than one may apply)									
Buildings with Space Heating	31	115	152	2,819	9,778	11,197	11.1	11.8	13.6
Buildings with Cooling	28	113	141	2,021	8,932	9,775	13.9	12.6	14.4
Buildings with Water Heating	31	112	141	2,724	9,065	10,193	11.3	12.4	13.8
Buildings with Cooking	11	59	69	938	4,078	4,378	11.3	14.4	15.8
Buildings with Manufacturing	Q	11	8	Q	679	489	Q	16.2	16.4
Buildings with Electricity Generation	9	51	52	567	2,678	2,558	16.2	19.1	20.4
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	4	Q	Q	899	759	Q	4.7	9.0
51 to 99	3	12	15	418	1,120	1,214	8.2	10.4	12.2
100	26	99	130	1,913	7,758	9,225	13.7	12.8	14.1
Percent of Floorspace Cooled									
Not Cooled	4	3	Q	920	935	1,598	3.8	3.3	7.7
1 to 50	6	22	25	922	3,349	3,171	6.6	6.6	7.8
51 to 99	11	38	39	550	2,551	2,436	19.4	15.0	16.0
100	11	52	77	550	3,033	4,169	20.7	17.2	18.6

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	3	8	10	953	1,796	1,575	3.3	4.5	6.5
51 to 99	11	39	47	1,070	2,529	3,641	9.9	15.3	12.8
100	18	68	95	830	5,221	5,418	21.5	13.1	17.6
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	4	16	34	721	2,086	3,237	5.7	7.5	10.5
1 to 50	13	49	76	1,400	4,880	6,101	9.5	10.1	12.5
51 to 100	Q	Q	Q	Q	Q	Q	Q	Q	Q
Building Never Closed/ Electricity Not Used	13	45	34	742	2,638	1,695	17.9	17.2	20.1
Heating Equipment (more than one may apply)									
Heat Pumps	Q	21	12	Q	1,019	719	Q	20.5	16.3
Packaged Heat Pumps	Q	16	9	Q	656	541	Q	24.1	16.8
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	9	24	50	990	2,606	4,561	8.8	9.3	10.9
Individual Space Heaters	11	25	30	1,011	1,775	2,544	10.5	13.9	11.7
District Heat	Q	15	25	Q	1,000	1,420	Q	15.5	17.7
Boilers	16	55	56	1,465	4,763	4,466	11.0	11.5	12.4
Packaged Heating Units	15	36	45	615	2,297	2,531	23.8	15.5	17.6
Other	Q	Q	7	Q	Q	419	Q	Q	17.1
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	Q	17	27	Q	2,100	2,040	Q	8.1	13.2
Heat Pumps	Q	21	12	Q	1,008	746	Q	20.4	15.8
Packaged Heat Pumps	Q	15	9	Q	646	563	Q	23.9	16.3
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Air Conditioners	8	22	23	925	2,762	2,199	9.1	8.0	10.3
District Chilled Water	Q	10	12	Q	583	569	Q	16.8	21.4
Central Chillers	6	31	41	383	1,469	2,074	16.6	21.1	19.7
Packaged Air Conditioning Units	18	65	82	872	5,128	5,505	20.5	12.6	15.0
Swamp Coolers	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	9	33	41	1,013	2,961	3,271	8.4	11.3	12.4
Cooling	14	52	52	1,100	4,353	3,700	12.7	12.0	14.1
Water Heating Equipment									
Centralized System	18	76	95	1,839	5,930	6,680	9.7	12.8	14.2
Distributed System	Q	18	19	Q	1,815	1,750	Q	9.7	10.9
Combination of Centralized and Distributed System	Q	19	27	Q	1,319	1,763	Q	14.4	15.1

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Lighting Equipment Types (more than one may apply)									
Incandescent	24	72	101	1,996	6,105	7,211	12.1	11.8	13.9
Standard Fluorescent	31	113	150	2,724	9,435	10,701	11.4	11.9	14.0
Compact Fluorescent	22	68	78	1,474	4,616	4,845	14.8	14.7	16.1
High Intensity Discharge	16	49	72	1,021	3,358	5,104	15.3	14.5	14.1
Halogen	14	42	52	769	2,812	3,259	18.3	15.0	16.0
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	30	107	136	2,474	8,367	9,538	12.0	12.8	14.2
Commercial Refrigeration	20	70	89	1,107	4,830	5,286	17.8	14.5	16.9
Walk-In Units	17	56	70	889	3,563	3,860	19.2	15.8	18.0
Cases or Cabinets	18	58	67	849	3,656	3,702	20.9	15.8	18.1
Residential-Type Units	20	67	92	2,037	6,251	7,247	10.0	10.8	12.7
Vending Machines	23	73	98	1,569	4,990	6,583	14.7	14.7	14.8
No Refrigeration	2	9	Q	467	1,500	1,835	4.3	5.9	9.8
Office Equipment (more than one may apply)									
Computers	30	110	141	2,521	8,996	9,882	12.1	12.3	14.3
With Flat Screen Monitors	19	73	74	1,156	4,839	4,584	16.6	15.2	16.2
Dedicated Servers	24	89	99	1,656	6,486	6,456	14.4	13.7	15.4
Laser Printers	15	61	72	1,569	5,526	5,678	9.4	11.1	12.8
Inkjet Printers	19	77	86	1,204	5,211	5,817	15.6	14.7	14.7
FAX Machines	29	109	129	2,367	8,806	9,138	12.1	12.4	14.1
Photocopiers	25	100	114	1,869	8,024	8,273	13.6	12.5	13.8
Number of Computers									
None	1	6	12	Q	871	1,491	2.9	6.4	8.2
1 to 4	6	11	32	570	1,511	2,536	10.1	7.1	12.5
5 to 9	Q	8	13	Q	1,087	1,112	Q	7.4	11.7
10 to 19	Q	10	14	Q	992	1,069	Q	10.6	13.4
20 to 49	Q	16	14	Q	1,182	1,196	Q	13.6	12.1
50 to 99	Q	8	11	Q	1,018	744	Q	Q	14.8
100 to 249	Q	15	18	Q	1,054	1,221	Q	14.0	14.7
250 or More	Q	42	39	439	2,151	2,005	21.4	19.6	19.3
Number of Dedicated Servers									
None	8	27	54	1,285	3,381	4,917	6.1	7.9	11.0
1 to 4	12	45	55	1,028	4,219	4,202	11.9	10.7	13.0
5 to 9	Q	12	12	Q	604	754	Q	19.4	16.2
10 to 19	Q	Q	12	Q	Q	647	Q	Q	18.6
20 to 49	Q	Q	Q	Q	Q	Q	Q	Q	Q
50 or More	Q	19	12	Q	815	Q	Q	23.1	21.0
Number of Photocopiers									
None	6	15	40	1,072	1,843	3,100	5.9	8.3	12.8
One	6	22	27	683	2,344	2,620	8.8	9.4	10.3
2 to 4	8	21	35	643	2,302	2,745	12.9	8.9	12.9
5 to 9	Q	16	15	Q	1,250	1,013	Q	13.2	14.6
10 or More	Q	41	36	Q	2,128	1,894	Q	19.5	19.2

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	11	59	69	938	4,078	4,378	11.3	14.4	15.8
Activities with Large Amounts of Hot Water	15	40	56	995	2,927	3,546	15.2	13.5	15.7
Separate Computer Area	17	75	73	1,045	4,880	4,759	16.6	15.4	15.3
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	Q	54	64	592	3,188	3,660	22.5	16.9	17.4
Economizer Cycle	17	65	79	824	3,317	4,350	20.3	19.6	18.2
HVAC Maintenance	29	109	140	2,311	8,736	9,415	12.5	12.4	14.9
Energy Management and Control System (EMCS)	8	45	42	429	2,573	2,835	19.0	17.4	14.7
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	27	85	120	2,292	6,983	7,925	11.8	12.2	15.2
Tinted Window Glass	16	61	86	803	4,141	5,307	20.1	14.8	16.2
Reflective Window Glass	Q	23	26	Q	1,436	1,454	Q	15.9	17.9
External Overhangs or Awnings	8	28	42	577	2,096	2,522	13.0	13.5	16.7
Skylights or Atriums	5	30	34	476	2,416	2,322	10.3	12.2	14.6
Daylighting Sensors	Q	Q	11	Q	Q	608	Q	Q	17.7
Specular Reflectors	19	65	89	1,390	4,444	5,813	13.5	14.7	15.4
Electronic Ballasts	28	94	128	2,162	7,125	8,623	12.9	13.2	14.8
Energy Management and Control System (EMCS) For Lighting	Q	17	17	Q	758	988	Q	21.9	17.2
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	17	87	88	1,768	7,751	7,580	9.5	11.2	11.7
Cooling	17	86	91	1,456	7,356	7,132	11.5	11.7	12.8
Lighting	18	63	117	2,067	6,639	8,846	8.8	9.5	13.2
Office Equipment	6	28	42	847	3,422	3,645	7.2	8.3	11.4
Annual Consumption (kilowatthours)									
10,000 or Less	Q	0	0	Q	Q	Q	Q	1.1	0.9
10,001 to 50,000	2	4	7	638	1,162	1,273	3.2	3.8	5.2
50,001 to 100,000	Q	7	6	Q	1,319	886	Q	5.3	7.1
100,001 to 500,000	7	19	40	606	2,304	3,293	10.9	8.3	12.1
500,001 to 1,000,000	Q	10	14	Q	967	1,107	Q	10.1	12.2
1,000,001 to 5,000,000	10	35	48	672	1,899	2,564	15.4	18.5	18.9
Over 5,000,000	Q	40	38	Q	1,770	1,751	Q	22.5	21.8

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	32	116	153	2,942	9,867	11,373	10.8	11.7	13.5
Provider of Purchased Electricity (more than one may apply)									
Local Utility	24	96	139	2,399	8,760	10,536	10.1	11.0	13.2
Some Other Provider	9	22	13	589	1,151	789	14.7	19.5	15.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Building Floorspace (Square Feet)									
1,001 to 5,000	10	26	7	821	1,157	472	12.4	22.9	15.5
5,001 to 10,000	7	18	4	666	1,308	359	10.7	13.9	12.0
10,001 to 25,000	8	27	11	1,164	2,207	791	7.3	12.2	14.2
25,001 to 50,000	15	24	5	949	1,672	442	16.1	14.4	10.9
50,001 to 100,000	8	25	10	642	1,470	650	12.8	16.7	14.8
100,001 to 200,000	8	39	Q	614	2,087	Q	12.3	18.9	Q
200,001 to 500,000	Q	22	Q	Q	1,072	Q	Q	20.4	Q
Over 500,000	Q	29	Q	Q	1,123	Q	Q	25.6	Q
Principal Building Activity									
Education	5	39	Q	549	2,445	Q	8.8	16.0	Q
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	20	Q	Q	433	Q	Q	45.7	Q
Health Care	5	17	5	247	749	219	20.8	23.4	24.2
Inpatient	Q	15	Q	Q	469	Q	Q	31.3	Q
Outpatient	Q	3	Q	Q	280	Q	Q	10.1	Q
Lodging	7	17	Q	595	939	Q	11.3	18.0	Q
Retail (Other Than Mall)	6	16	4	337	897	353	17.3	17.7	11.9
Office	12	35	9	799	1,958	481	14.9	18.0	18.8
Public Assembly	Q	9	Q	Q	440	Q	Q	20.4	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	2	5	Q	395	721	Q	3.9	6.4	Q
Service	4	Q	Q	484	753	Q	9.0	16.9	Q
Warehouse and Storage	6	16	Q	918	1,733	Q	6.9	9.1	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	3	Q	Q	541	Q	Q	4.8	8.9	Q
1920 to 1945	4	5	Q	459	630	Q	9.6	8.2	Q
1946 to 1959	4	16	Q	561	1,074	Q	7.7	14.4	Q
1960 to 1969	8	19	6	844	1,379	449	10.0	14.0	14.0
1970 to 1979	15	30	12	1,039	1,423	784	14.3	21.1	15.3
1980 to 1989	8	45	9	457	2,373	423	16.5	19.1	21.8
1990 to 1999	15	66	10	1,032	3,620	693	14.3	18.2	14.8
2000 to 2003	6	26	Q	394	1,258	Q	14.0	20.9	Q
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	31	N	N	2,479	N	N	12.4	N	N
5,500-7,000 HDD	Q	N	N	Q	N	N	9.6	N	N
4,000-5,499 HDD	19	48	Q	1,558	2,613	Q	12.4	18.2	19.0
Fewer than 4,000 HDD	N	107	Q	N	6,293	Q	N	17.0	12.6
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	56	Q	N	3,190	Q	N	17.6	19.6
Number of Floors									
One	26	81	20	2,099	5,612	1,489	12.5	14.5	13.7
Two	21	47	14	1,902	2,680	864	11.1	17.6	16.1
Three	7	17	5	699	1,043	421	10.1	15.9	12.4
Four to Nine	7	48	8	579	2,003	355	12.5	24.1	22.6
Ten or More	Q	17	Q	Q	759	Q	Q	22.4	Q

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Elevators and Escalators (more than one may apply)									
Any Elevators	22	101	18	1,627	4,612	923	13.6	21.8	19.9
Number of Elevators									
One	11	23	6	860	1,475	369	12.7	15.4	17.2
Two to Five	9	43	Q	644	1,900	Q	13.5	22.8	Q
Six or More	Q	35	Q	Q	1,237	Q	Q	28.1	Q
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	10	23	7	1,606	2,375	933	6.2	9.7	7.7
5 to 9	8	14	7	598	1,264	476	12.7	11.3	15.7
10 to 19	8	21	5	867	1,392	350	9.5	15.0	14.5
20 to 49	13	31	14	876	1,773	701	14.4	17.5	19.7
50 to 99	12	27	Q	742	1,611	Q	16.3	16.9	Q
100 to 249	Q	42	Q	Q	1,737	Q	Q	24.0	Q
250 or More	5	52	6	242	1,943	211	19.3	26.8	26.9
Weekly Operating Hours									
Fewer than 40	3	7	2	619	1,134	308	4.3	6.0	5.6
40 to 48	9	24	11	1,001	2,107	770	9.1	11.2	13.8
49 to 60	13	37	Q	1,273	3,071	610	10.0	11.9	12.7
61 to 84	11	37	10	837	1,926	593	13.1	19.1	17.3
85 to 167	10	40	Q	558	1,370	Q	17.9	28.8	Q
Open Continuously	17	67	16	1,040	2,488	769	16.3	26.9	20.4
Ownership and Occupancy									
Nongovernment Owned	52	148	35	4,314	8,895	2,308	12.0	16.6	15.3
Owner Occupied	28	71	14	2,416	4,141	962	11.5	17.2	14.5
Nonowner Occupied	24	76	21	1,846	4,572	1,335	12.9	16.7	16.0
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	11	62	15	1,014	3,202	912	10.5	19.5	16.1
Federal	Q	Q	Q	Q	Q	Q	Q	29.3	Q
State	Q	14	8	Q	726	485	Q	19.6	17.5
Local	7	36	5	710	2,071	369	10.0	17.5	13.4
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	N	Q	Q	N	Q	Q	N
Partially Vacant	9	27	5	854	1,939	358	11.0	14.1	12.7
Not At All Vacant	52	182	45	4,329	9,961	2,851	12.1	18.3	15.9
Number of Establishments									
One	45	151	37	3,936	8,797	2,587	11.5	17.2	14.5
2 to 5	12	37	8	970	2,139	385	12.2	17.2	20.3
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Predominant Exterior Wall Material									
Brick, Stone or Stucco	26	99	26	2,078	6,021	1,746	12.3	16.5	15.0
Concrete (Block or Poured)	14	38	11	1,002	2,355	631	13.8	16.2	18.2
Concrete Panels	7	38	Q	375	1,416	Q	19.1	26.9	Q
Siding or Shingles	6	8	Q	638	638	Q	9.0	12.0	Q
Metal Panels	9	21	Q	1,150	1,345	530	8.0	15.5	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	N	Q	Q	N	Q	Q	N
Predominant Roof Material									
Built-Up	20	72	15	1,338	4,119	762	14.8	17.6	19.7
Shingles (Not Wood)	10	26	9	1,116	1,864	638	9.2	14.0	13.8
Metal Surfacing	12	28	11	1,488	2,456	1,012	8.3	11.4	10.7
Synthetic or Rubber	16	60	13	990	2,449	638	16.1	24.4	20.3
Slate or Tile	Q	9	Q	Q	604	Q	Q	15.1	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	N	Q	Q	N	Q	Q	N
Other	Q	Q	N	Q	Q	N	Q	Q	N
No One Major Type	Q	Q	N	Q	Q	N	Q	Q	N
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	21	39	12	1,945	2,304	884	10.7	16.7	13.8
Addition or Annex	11	14	6	727	884	392	15.0	15.9	16.2
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	17	25	10	1,525	1,497	677	10.9	16.5	14.8
Wall or Roof Replacement	9	18	6	871	961	340	9.8	18.3	17.4
Interior Wall Re-Configuration	10	18	6	877	1,036	334	11.7	17.0	18.0
HVAC Equipment Upgrade	14	27	8	1,197	1,559	464	11.6	17.5	17.0
Lighting Upgrade	12	18	7	1,074	1,186	440	11.5	15.5	16.6
Window Replacement	6	8	Q	508	505	Q	11.7	15.0	Q
Plumbing System Upgrade	7	12	Q	721	782	Q	9.8	16.0	Q
Insulation Upgrade	6	7	Q	512	468	Q	10.9	15.6	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	14	34	12	1,500	2,542	885	9.2	13.5	14.1
Building Newer than 1980	28	137	25	1,883	7,251	1,452	14.8	18.9	17.5
Energy Sources (more than one may apply)									
Electricity	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Natural Gas	46	122	36	3,593	6,326	2,281	12.8	19.3	15.7
Fuel Oil	14	52	8	961	2,639	341	14.8	19.8	22.9
District Heat	Q	29	Q	Q	1,243	Q	Q	23.1	Q
District Chilled Water	Q	15	Q	Q	667	Q	Q	22.9	Q
Propane	10	26	Q	991	1,548	Q	9.9	16.7	8.5
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Space-Heating Energy Sources									
Electricity	31	135	23	2,328	7,347	1,411	13.2	18.4	16.4
Electricity Main	16	86	15	1,058	4,968	791	15.0	17.3	19.0
Electricity Secondary	15	49	8	1,269	2,379	620	11.7	20.5	13.2
Other Excluding Electricity	31	66	26	2,778	3,662	1,645	11.3	18.0	15.7
Buildings without Heating	Q	9	Q	Q	1,087	Q	Q	8.5	Q
Primary Space-Heating Energy Source									
Electricity	16	86	15	1,058	4,968	791	15.0	17.3	19.0
Natural Gas	37	79	27	3,091	4,175	1,817	12.0	18.9	14.8
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	27	Q	Q	1,149	Q	Q	23.3	Q
Propane	Q	5	Q	496	456	Q	8.7	10.8	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Electricity	60	198	46	4,625	10,969	2,820	12.9	18.0	16.3
Other Excluding Electricity	Q	Q	Q	Q	505	Q	Q	22.0	Q
Buildings without Cooling	2	1	Q	634	623	Q	3.1	2.1	Q
Water-Heating Energy Sources									
Electricity	29	126	26	2,391	7,033	1,581	12.3	17.9	16.4
Other Excluding Electricity	30	77	22	2,329	3,681	1,277	12.8	20.9	17.3
Bldgs without Water Heating	Q	8	Q	608	1,383	363	5.6	5.5	5.3
Cooking Energy Sources									
Electricity	14	62	13	850	2,611	665	16.0	23.6	19.1
Other Excluding Electricity	9	37	7	622	1,587	390	15.2	23.1	18.2
Buildings without Cooking	39	112	30	3,856	7,899	2,165	10.2	14.2	14.0
Energy End Uses (more than one may apply)									
Buildings with Space Heating	62	201	49	5,106	11,009	3,056	12.2	18.3	16.0
Buildings with Cooling	60	209	49	4,694	11,474	2,985	12.9	18.2	16.5
Buildings with Water Heating	59	203	48	4,720	10,714	2,858	12.5	18.9	16.8
Buildings with Cooking	23	98	20	1,472	4,198	1,055	15.6	23.4	18.7
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	14	52	8	760	2,396	324	18.4	21.7	24.9
Percent of Floorspace Heated									
Not Heated	Q	9	Q	Q	1,087	Q	Q	8.5	Q
1 to 50	2	15	Q	356	1,105	353	6.8	13.7	10.8
51 to 99	7	30	6	513	1,864	309	12.8	15.9	20.7
100	53	156	39	4,236	8,041	2,394	12.5	19.4	16.2
Percent of Floorspace Cooled									
Not Cooled	2	1	Q	634	623	Q	3.1	2.1	Q
1 to 50	13	25	Q	1,571	2,418	472	8.0	10.2	9.2
51 to 99	19	46	9	1,325	2,624	459	14.4	17.4	19.0
100	29	139	36	1,797	6,431	2,054	16.0	21.5	17.7

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	7	10	4	1,178	1,313	505	6.1	7.8	8.2
51 to 99	18	58	14	1,658	3,293	913	11.2	17.7	15.5
100	36	141	32	2,362	7,210	1,730	15.4	19.5	18.3
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	15	37	5	1,936	3,431	623	8.0	10.9	8.8
1 to 50	27	93	26	2,192	5,687	1,682	12.3	16.4	15.5
51 to 100	Q	13	Q	Q	491	Q	Q	26.4	Q
Building Never Closed/ Electricity Not Used	17	67	16	1,040	2,488	769	16.3	26.9	20.4
Heating Equipment (more than one may apply)									
Heat Pumps	4	64	9	339	3,677	542	12.9	17.5	16.8
Packaged Heat Pumps	Q	45	Q	Q	2,145	Q	Q	20.8	Q
Split-System Heat Pumps	Q	23	Q	Q	1,459	Q	Q	15.7	Q
Individual Room Heat Pumps	Q	16	Q	Q	1,039	Q	Q	15.3	Q
Furnaces	32	34	9	2,657	2,772	895	12.0	12.4	10.3
Individual Space Heaters	20	38	7	1,625	2,148	563	12.3	17.9	12.6
District Heat	Q	27	Q	Q	1,173	Q	Q	23.3	Q
Boilers	19	47	18	1,675	2,135	786	11.2	21.9	22.6
Packaged Heating Units	17	78	20	1,135	3,917	1,215	15.0	20.0	16.4
Other	7	12	Q	383	902	Q	17.0	13.8	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	18	32	6	1,568	1,843	489	11.5	17.4	12.1
Heat Pumps	4	67	11	317	3,742	586	12.5	18.0	18.6
Packaged Heat Pumps	Q	43	Q	Q	2,104	Q	Q	20.6	19.2
Split-System Heat Pumps	Q	24	Q	Q	1,494	Q	Q	16.2	Q
Individual Room Heat Pumps	Q	18	Q	Q	1,079	Q	Q	17.1	Q
Individual Air Conditioners	13	35	7	1,289	2,218	610	9.7	15.7	11.5
District Chilled Water	Q	15	Q	Q	667	Q	Q	22.9	Q
Central Chillers	11	63	13	768	2,489	594	14.8	25.1	21.2
Packaged Air Conditioning Units	39	96	26	2,581	5,520	1,555	15.1	17.4	16.7
Swamp Coolers	N	Q	Q	N	Q	Q	N	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	21	34	12	1,754	2,250	886	11.8	14.9	13.6
Cooling	22	49	17	2,052	3,111	1,059	10.7	15.6	16.0
Water Heating Equipment									
Centralized System	38	106	32	3,029	5,649	1,890	12.4	18.7	16.7
Distributed System	10	38	7	920	2,432	469	10.5	15.8	14.1
Combination of Centralized and Distributed System	12	58	10	771	2,633	499	15.3	22.2	19.7

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Lighting Equipment Types (more than one may apply)									
Incandescent	45	138	32	3,762	7,028	1,984	12.1	19.6	16.2
Standard Fluorescent	61	203	49	5,006	11,245	3,022	12.2	18.0	16.1
Compact Fluorescent	31	114	26	1,983	4,856	1,262	15.7	23.4	20.8
High Intensity Discharge	19	84	13	1,515	4,053	706	12.8	20.7	18.2
Halogen	22	83	12	1,402	3,474	620	15.7	24.0	19.0
Other	N	Q	Q	N	Q	Q	N	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	57	198	47	4,544	10,256	2,829	12.5	19.3	16.7
Commercial Refrigeration	29	137	27	1,835	5,426	1,145	15.8	25.2	23.2
Walk-In Units	24	121	23	1,341	4,324	862	17.6	27.9	27.1
Cases or Cabinets	22	106	23	1,276	4,246	993	17.0	25.1	22.9
Residential-Type Units	41	118	26	3,545	7,043	1,834	11.7	16.8	14.4
Vending Machines	37	145	35	2,817	7,066	2,056	13.1	20.5	17.0
No Refrigeration	6	12	Q	784	1,841	392	7.4	6.5	Q
Office Equipment (more than one may apply)									
Computers	58	193	47	4,533	10,483	2,724	12.8	18.4	17.3
With Flat Screen Monitors	28	103	25	1,762	4,768	1,314	15.7	21.6	19.2
Dedicated Servers	43	137	31	2,796	6,839	1,606	15.2	20.0	19.3
Laser Printers	32	106	29	2,784	6,059	1,813	11.4	17.6	15.8
Inkjet Printers	38	125	27	2,489	6,138	1,502	15.3	20.4	18.2
FAX Machines	55	187	45	4,157	9,973	2,551	13.2	18.8	17.5
Photocopiers	46	164	36	3,586	8,821	2,211	13.0	18.6	16.3
Number of Computers									
None	4	17	3	795	1,613	496	5.4	10.8	5.8
1 to 4	12	35	13	1,207	2,124	807	10.0	16.6	16.0
5 to 9	10	14	6	826	1,154	520	12.5	12.3	12.3
10 to 19	8	17	Q	621	1,321	Q	13.6	13.2	Q
20 to 49	10	25	10	736	1,207	437	13.5	20.7	23.3
50 to 99	Q	23	Q	Q	1,265	Q	Q	18.1	Q
100 to 249	8	26	Q	630	1,353	Q	12.8	19.6	Q
250 or More	4	52	Q	208	2,059	Q	21.4	25.1	Q
Number of Dedicated Servers									
None	20	74	19	2,532	5,258	1,615	7.8	14.0	11.8
1 to 4	35	72	25	2,366	4,155	1,272	14.6	17.3	19.5
5 to 9	Q	23	Q	Q	966	Q	Q	24.0	Q
10 to 19	Q	22	Q	Q	837	Q	Q	26.2	Q
20 to 49	Q	11	Q	Q	524	Q	Q	21.9	Q
50 or More	Q	Q	Q	Q	Q	Q	Q	22.2	Q
Number of Photocopiers									
None	16	46	14	1,742	3,276	1,009	9.2	14.0	13.8
One	18	37	10	1,615	2,611	1,016	11.1	14.2	10.2
2 to 4	16	53	14	1,281	3,060	659	12.7	17.4	20.5
5 to 9	6	22	Q	388	1,124	Q	14.8	19.9	Q
10 or More	7	52	7	302	2,026	284	21.7	25.6	24.0

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	23	98	20	1,472	4,196	1,055	15.6	23.4	18.7
Activities with Large Amounts of Hot Water	24	94	16	1,678	4,178	949	14.3	22.4	17.2
Separate Computer Area	26	106	20	1,723	5,236	1,028	15.1	20.3	19.1
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	23	86	18	1,342	3,818	788	16.8	22.6	22.5
Economizer Cycle	26	90	17	1,533	3,815	828	17.2	23.6	21.0
HVAC Maintenance	47	187	41	3,701	9,547	2,258	12.8	19.6	18.0
Energy Management and Control System (EMCS)	16	70	11	965	3,426	542	16.2	20.4	20.4
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	49	131	30	3,724	7,178	1,678	13.1	18.3	17.8
Tinted Window Glass	26	127	21	1,925	6,495	1,167	13.5	19.6	18.3
Reflective Window Glass	11	33	7	711	1,655	255	14.8	19.9	28.8
External Overhangs or Awnings	23	71	18	1,684	3,812	1,016	13.8	18.6	17.8
Skylights or Atriums	12	35	7	929	1,828	429	13.2	18.9	16.9
Daylighting Sensors	Q	8	Q	Q	448	Q	Q	18.9	Q
Specular Reflectors	26	99	14	1,896	4,553	785	13.9	21.8	17.8
Electronic Ballasts	52	171	37	3,987	8,835	2,177	13.0	19.3	17.0
Energy Management and Control System (EMCS) For Lighting	Q	15	Q	Q	810	Q	Q	18.5	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	37	128	31	3,314	7,843	2,124	11.2	16.3	14.4
Cooling	37	140	33	3,323	8,678	2,175	11.1	16.2	15.0
Lighting	43	137	33	4,037	9,061	2,340	10.6	15.1	13.9
Office Equipment	16	50	10	1,767	3,468	703	9.3	14.3	13.9
Annual Consumption (kilowatthours)									
10,000 or Less	1	1	Q	430	302	Q	1.2	2.0	Q
10,001 to 50,000	6	8	3	1,004	1,684	546	5.9	4.8	5.8
50,001 to 100,000	5	11	4	580	1,284	376	8.5	9.0	10.8
100,001 to 500,000	19	43	13	1,502	2,743	871	12.9	15.6	15.1
500,001 to 1,000,000	7	29	Q	687	1,454	Q	10.8	20.2	Q
1,000,001 to 5,000,000	20	61	15	948	2,661	587	21.3	22.8	25.9
Over 5,000,000	Q	57	7	Q	1,968	247	Q	29.2	28.5

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	62	210	50	5,328	12,097	3,220	11.7	17.4	15.5
Provider of Purchased Electricity (more than one may apply)									
Local Utility	59	193	48	5,095	11,510	3,167	11.5	16.8	15.3
Some Other Provider	Q	Q	Q	Q	Q	Q	Q	31.3	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Building Floorspace (Square Feet)									
1,001 to 5,000	17	7	12	696	437	857	24.1	15.7	14.0
5,001 to 10,000	11	5	14	787	404	810	13.4	12.0	16.9
10,001 to 25,000	11	10	13	1,267	831	1,232	8.9	11.7	10.3
25,001 to 50,000	12	7	12	897	511	1,088	13.6	13.2	11.0
50,001 to 100,000	16	5	12	1,314	374	922	12.1	12.7	13.3
100,001 to 200,000	20	Q	13	1,096	Q	895	18.2	Q	14.5
200,001 to 500,000	12	5	11	659	Q	827	18.4	14.3	13.5
Over 500,000	Q	Q	9	Q	Q	766	Q	Q	12.4
Principal Building Activity									
Education	15	6	11	1,198	640	1,027	12.8	9.4	10.7
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	7	Q	Q	232	Q	Q	31.8
Health Care	8	6	6	309	230	323	27.5	25.8	20.1
Inpatient	7	Q	Q	235	Q	Q	29.7	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	8	Q	438	649	Q	Q	11.9
Retail (Other Than Mall)	9	Q	10	594	Q	753	15.8	Q	13.4
Office	27	10	26	1,343	629	1,796	19.9	16.3	14.6
Public Assembly	Q	Q	Q	Q	Q	464	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	4	Q	Q	467	Q	Q	8.1	Q	Q
Service	Q	Q	3	Q	Q	319	Q	Q	8.0
Warehouse and Storage	7	Q	6	1,581	Q	1,000	4.3	Q	5.9
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	Q	Q	7	Q	Q	783	Q	Q	9.1
1946 to 1959	4	3	9	455	255	750	9.3	13.4	11.3
1960 to 1969	8	7	10	675	592	1,000	12.5	12.4	10.2
1970 to 1979	22	15	16	1,307	924	1,156	16.5	16.7	13.7
1980 to 1989	34	13	22	1,840	688	1,541	18.4	19.4	14.6
1990 to 1999	28	11	24	1,792	612	1,367	15.6	17.2	17.4
2000 to 2003	13	4	7	907	292	638	14.2	12.7	11.0
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	N	27	Q	N	2,081	Q	N	13.1	14.7
5,500-7,000 HDD	N	16	Q	N	1,075	Q	N	14.8	15.1
4,000-5,499 HDD	Q	N	Q	Q	N	693	Q	N	14.0
Fewer than 4,000 HDD	27	N	63	1,891	N	5,187	14.3	N	12.1
2,000 CDD or More and --									
Fewer than 4,000 HDD	82	13	Q	5,153	476	Q	16.0	26.8	Q
Number of Floors									
One	54	23	37	4,026	1,830	3,020	13.4	12.4	12.4
Two	17	14	26	1,330	990	1,969	12.9	14.5	13.2
Three	7	Q	9	453	Q	715	14.4	Q	12.3
Four to Nine	17	7	14	736	338	990	23.5	20.5	14.4
Ten or More	19	Q	10	904	Q	Q	21.6	Q	14.1

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Elevators and Escalators (more than one may apply)									
Any Elevators	49	23	40	2,407	1,069	2,772	20.4	22.0	14.4
Number of Elevators									
One	7	5	7	623	414	649	11.8	13.1	11.0
Two to Five	19	5	17	808	275	1,085	24.0	19.6	15.9
Six or More	22	Q	15	975	Q	1,039	22.8	Q	14.9
Any Escalators	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Workers (main shift)									
Fewer than 5	12	7	12	1,658	724	1,512	7.1	9.8	7.6
5 to 9	11	4	8	835	345	678	13.0	11.2	12.2
10 to 19	13	5	8	999	428	681	13.3	12.2	12.2
20 to 49	24	10	17	1,408	645	1,264	16.7	14.7	13.5
50 to 99	14	7	12	840	558	812	17.2	11.9	14.7
100 to 249	10	6	18	451	311	1,086	22.9	19.5	16.5
250 or More	30	Q	21	1,259	Q	1,364	23.8	28.2	15.6
Weekly Operating Hours									
Fewer than 40	4	1	3	656	270	623	5.4	4.4	5.4
40 to 48	17	8	13	1,688	783	1,378	10.1	10.6	9.1
49 to 60	22	7	22	1,872	712	1,744	12.0	10.2	12.5
61 to 84	20	9	16	1,227	592	1,352	16.5	14.5	11.7
85 to 167	22	Q	15	829	Q	901	26.8	Q	16.8
Open Continuously	29	24	28	1,177	931	1,401	24.4	26.0	19.8
Ownership and Occupancy									
Nongovernment Owned	90	41	78	5,949	2,569	5,891	15.1	16.0	13.3
Owner Occupied	37	13	37	2,700	976	2,641	13.8	13.0	14.1
Nonowner Occupied	53	28	41	3,114	1,582	3,149	16.9	18.0	12.9
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	24	15	18	1,500	1,064	1,507	16.3	13.9	12.0
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	6	Q	Q	565	Q	Q	11.3
Local	14	10	11	961	681	861	14.1	14.3	12.4
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	29	12	16	1,623	750	1,329	17.7	15.3	12.0
Not At All Vacant	85	44	80	5,687	2,855	5,914	15.0	15.5	13.4
Number of Establishments									
One	76	42	66	5,186	2,767	4,912	14.7	15.0	13.5
2 to 5	14	8	17	1,193	524	1,362	12.1	14.4	12.2
6 to 10	Q	Q	3	Q	Q	211	Q	Q	13.3
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Predominant Exterior Wall Material									
Brick, Stone or Stucco	62	20	39	3,597	1,551	3,070	17.1	13.2	12.6
Concrete (Block or Poured)	17	8	18	937	450	1,315	18.4	17.7	14.0
Concrete Panels	17	Q	12	1,114	Q	1,204	15.6	19.6	10.1
Siding or Shingles	4	Q	9	281	Q	461	14.4	12.0	Q
Metal Panels	8	8	10	1,212	604	885	6.3	13.3	11.8
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	40	26	34	2,346	1,421	2,959	17.1	18.1	11.6
Shingles (Not Wood)	11	5	15	769	475	1,011	14.3	10.1	15.2
Metal Surfacing	20	10	11	2,420	903	958	8.3	10.8	11.7
Synthetic or Rubber	30	12	19	1,194	664	1,209	25.3	18.6	16.1
Slate or Tile	Q	Q	6	Q	Q	552	Q	Q	11.7
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	N	Q	Q	N	Q	Q	N	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	18	17	21	1,157	1,095	1,746	15.1	15.9	12.1
Addition or Annex	10	9	6	529	551	428	19.0	16.8	15.0
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	13	12	18	828	718	1,465	15.5	17.2	12.5
Wall or Roof Replacement	7	7	10	549	504	789	12.1	13.6	13.0
Interior Wall Re-Configuration	8	12	12	564	637	870	13.4	18.7	13.6
HVAC Equipment Upgrade	9	14	14	559	776	1,049	16.4	18.3	13.1
Lighting Upgrade	7	14	14	463	733	1,042	15.5	18.6	13.4
Window Replacement	Q	5	7	Q	332	510	Q	16.2	13.0
Plumbing System Upgrade	Q	10	11	Q	517	852	Q	19.4	12.5
Insulation Upgrade	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	22	11	22	1,752	945	2,106	12.6	11.5	10.3
Building Newer than 1980	75	28	53	4,540	1,593	3,545	16.4	17.3	15.0
Energy Sources (more than one may apply)									
Electricity	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Natural Gas	82	44	64	4,698	2,797	5,016	17.5	15.6	12.7
Fuel Oil	26	Q	27	1,141	626	1,497	22.9	26.0	18.0
District Heat	Q	Q	6	Q	Q	413	Q	Q	14.1
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	Q	Q	13	Q	555	618	Q	18.8	21.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Space-Heating Energy Sources									
Electricity	70	26	47	4,300	1,389	3,526	16.2	18.5	13.5
Electricity Main	52	14	32	3,325	789	2,325	15.7	17.2	13.7
Electricity Secondary	18	Q	16	975	599	1,201	18.1	20.2	13.1
Other Excluding Electricity	41	27	41	2,624	2,136	3,052	15.7	12.7	13.3
Buildings without Heating	Q	Q	8	Q	Q	820	Q	Q	10.0
Primary Space-Heating Energy Source									
Electricity	52	14	32	3,325	789	2,325	15.7	17.2	13.7
Natural Gas	56	34	45	3,303	2,277	3,633	17.0	14.8	12.5
Fuel Oil	N	Q	Q	N	Q	Q	N	Q	Q
District Heat	Q	Q	5	Q	Q	362	Q	Q	13.3
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	N	Q	Q	N	Q	Q	N	Q	Q
Cooling Energy Sources									
Electricity	110	52	88	6,834	3,186	6,328	16.1	16.4	13.9
Other Excluding Electricity	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings without Cooling	Q	2	4	Q	366	715	Q	5.6	5.9
Water-Heating Energy Sources									
Electricity	48	20	39	3,267	1,236	2,771	14.8	16.3	14.0
Other Excluding Electricity	60	35	52	3,074	2,187	3,655	19.4	15.9	14.3
Bldgs without Water Heating	6	Q	5	1,108	Q	972	5.7	Q	5.4
Cooking Energy Sources									
Electricity	38	18	20	1,623	791	1,192	23.4	23.1	16.4
Other Excluding Electricity	23	6	20	1,005	418	1,089	22.7	14.1	18.3
Buildings without Cooking	53	32	57	4,821	2,424	5,117	11.1	13.1	11.1
Energy End Uses (more than one may apply)									
Buildings with Space Heating	111	53	88	6,924	3,525	6,577	16.0	15.0	13.4
Buildings with Cooling	113	54	92	7,094	3,267	6,683	16.0	16.5	13.8
Buildings with Water Heating	108	55	91	6,341	3,422	6,426	17.0	16.0	14.2
Buildings with Cooking	61	24	39	2,628	1,209	2,280	23.1	20.0	17.3
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	30	18	26	1,297	738	1,504	23.4	24.9	17.1
Percent of Floorspace Heated									
Not Heated	Q	Q	8	Q	Q	820	Q	Q	10.0
1 to 50	7	Q	12	1,379	Q	1,257	5.4	Q	9.3
51 to 99	14	11	18	718	569	1,381	20.2	19.7	12.7
100	89	40	59	4,828	2,721	3,940	18.5	14.7	14.9
Percent of Floorspace Cooled									
Not Cooled	Q	2	4	Q	366	715	Q	5.6	5.9
1 to 50	10	10	15	2,025	918	1,738	5.0	11.2	8.7
51 to 99	19	16	23	820	886	1,559	23.2	17.7	14.5
100	84	28	54	4,249	1,463	3,386	19.8	19.0	16.1

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	11	3	9	1,371	382	1,130	8.1	6.7	8.0
51 to 99	30	17	29	1,928	1,095	2,161	15.5	15.2	13.3
100	73	37	58	3,933	2,136	3,947	18.5	17.1	14.7
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	18	10	19	2,239	1,118	1,994	7.9	8.9	9.6
1 to 50	60	21	47	3,658	1,526	3,823	16.3	13.5	12.4
51 to 100	8	Q	Q	374	Q	Q	22.0	Q	Q
Building Never Closed/ Electricity Not Used	29	24	28	1,177	931	1,401	24.4	26.0	19.8
Heating Equipment (more than one may apply)									
Heat Pumps	12	Q	17	722	Q	1,268	16.2	Q	13.4
Packaged Heat Pumps	Q	Q	10	Q	Q	741	Q	Q	13.6
Split-System Heat Pumps	Q	Q	5	Q	Q	305	Q	Q	16.9
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	28	14	22	2,048	1,302	1,773	13.6	11.0	12.6
Individual Space Heaters	11	9	15	893	692	1,290	12.1	13.1	11.3
District Heat	Q	Q	5	Q	Q	362	Q	Q	13.3
Boilers	30	23	33	1,472	1,359	2,302	20.3	17.1	14.2
Packaged Heating Units	52	12	35	2,998	748	2,564	17.5	16.6	13.7
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	14	4	11	1,523	341	841	8.9	11.7	13.1
Heat Pumps	10	Q	18	595	430	1,355	17.4	30.1	13.0
Packaged Heat Pumps	Q	Q	10	Q	Q	742	Q	Q	13.4
Split-System Heat Pumps	Q	Q	6	Q	Q	322	Q	Q	17.2
Individual Room Heat Pumps	Q	Q	6	Q	Q	546	Q	Q	11.3
Individual Air Conditioners	9	11	12	806	730	1,019	11.7	15.7	11.5
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	40	15	25	1,771	621	1,466	22.7	24.8	16.9
Packaged Air Conditioning Units	54	31	52	3,325	1,655	3,826	16.2	18.7	13.5
Swamp Coolers	Q	11	8	Q	874	468	Q	12.3	16.6
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	23	21	17	1,670	1,133	1,455	13.5	18.9	11.6
Cooling	33	24	23	2,245	1,356	2,018	14.6	18.0	11.5
Water Heating Equipment									
Centralized System	72	25	55	3,998	1,928	3,712	17.9	12.8	14.9
Distributed System	21	9	15	1,664	566	1,415	12.8	15.4	10.7
Combination of Centralized and Distributed System	15	21	21	679	928	1,299	22.1	23.1	15.9

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Lighting Equipment Types (more than one may apply)									
Incandescent	78	41	57	4,033	2,443	3,965	19.2	16.6	14.5
Standard Fluorescent	111	55	93	6,955	3,534	7,066	16.0	15.4	13.2
Compact Fluorescent	59	32	59	2,764	1,748	4,024	21.5	18.2	14.6
High Intensity Discharge	27	15	35	1,470	977	2,438	18.5	15.8	14.2
Halogen	35	20	33	2,099	993	2,275	16.9	20.1	14.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	103	51	84	6,018	3,028	5,919	17.1	16.7	14.3
Commercial Refrigeration	73	32	47	3,067	1,398	2,674	24.0	23.2	17.6
Walk-In Units	60	26	40	2,284	1,073	2,059	26.4	24.3	19.2
Cases or Cabinets	61	27	40	2,425	1,093	2,185	25.3	24.8	18.5
Residential-Type Units	66	32	55	4,285	2,232	4,410	15.4	14.3	12.5
Vending Machines	76	39	56	4,412	2,058	3,783	17.3	18.9	14.7
No Refrigeration	12	5	12	1,431	605	1,478	8.1	8.9	8.0
Office Equipment (more than one may apply)									
Computers	107	53	92	6,507	3,282	6,698	16.5	16.1	13.7
With Flat Screen Monitors	62	27	53	3,053	1,365	3,575	20.4	19.8	14.9
Dedicated Servers	74	36	65	4,204	1,959	4,335	17.5	18.2	14.9
Laser Printers	53	33	53	3,694	2,165	3,723	14.3	15.2	14.3
Inkjet Printers	72	33	57	3,840	1,901	4,108	18.8	17.2	13.8
FAX Machines	103	51	85	6,258	2,983	6,140	16.4	17.0	13.9
Photocopiers	84	46	75	5,281	2,753	5,439	16.0	16.9	13.7
Number of Computers									
None	7	3	4	942	351	699	7.7	9.0	6.3
1 to 4	22	8	14	1,488	707	1,444	15.1	11.5	9.9
5 to 9	9	7	10	864	450	649	10.4	16.6	14.8
10 to 19	11	5	11	910	371	825	11.6	14.0	13.0
20 to 49	14	8	17	780	548	1,006	18.3	14.6	17.4
50 to 99	9	Q	10	490	Q	784	17.6	Q	12.9
100 to 249	13	8	12	660	448	869	19.2	17.5	13.4
250 or More	30	Q	18	1,315	473	1,122	22.4	26.3	16.1
Number of Dedicated Servers									
None	41	20	32	3,245	1,674	3,062	12.5	12.0	10.3
1 to 4	40	23	36	2,782	1,428	2,665	14.2	15.8	13.6
5 to 9	Q	Q	11	Q	Q	601	Q	Q	18.3
10 to 19	Q	Q	6	Q	Q	414	Q	Q	15.4
20 to 49	Q	Q	Q	Q	Q	Q	Q	Q	Q
50 or More	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Photocopiers									
None	30	10	22	2,169	880	1,958	13.8	10.8	11.1
One	21	12	21	1,833	995	1,757	11.5	11.9	11.8
2 to 4	25	13	22	1,799	887	1,706	13.8	14.9	12.7
5 to 9	Q	Q	12	Q	Q	634	Q	Q	18.6
10 or More	29	19	20	1,243	690	1,341	23.0	27.4	15.2

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	61	24	39	2,628	1,209	2,269	23.1	20.0	17.3
Activities with Large Amounts of Hot Water	36	26	35	1,776	1,384	2,048	20.5	19.0	17.1
Separate Computer Area	58	30	49	3,132	1,607	3,462	18.4	18.6	14.3
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	54	25	35	2,743	1,236	2,232	19.7	20.0	15.7
Economizer Cycle	45	29	44	1,988	1,383	3,069	22.6	21.1	14.2
HVAC Maintenance	102	50	88	5,836	3,065	6,282	17.5	16.2	14.0
Energy Management and Control System (EMCS)	38	18	31	1,834	857	2,170	21.0	21.4	14.5
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	65	42	43	3,416	2,649	2,880	19.2	15.8	15.0
Tinted Window Glass	70	33	52	4,170	1,617	3,999	16.7	20.2	13.1
Reflective Window Glass	26	7	16	1,098	489	1,206	23.8	13.7	13.2
External Overhangs or Awnings	37	24	31	1,921	1,521	2,025	19.2	15.5	15.4
Skylights or Atriums	29	19	19	1,656	1,001	1,452	17.4	18.5	13.3
Daylighting Sensors	Q	Q	15	Q	Q	674	Q	Q	22.6
Specular Reflectors	50	28	45	2,533	1,307	3,396	19.7	21.2	13.2
Electronic Ballasts	93	48	81	5,446	2,905	5,621	17.1	16.6	14.5
Energy Management and Control System (EMCS) For Lighting	14	Q	16	629	Q	923	22.9	Q	17.2
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	72	36	70	4,688	2,456	5,183	15.4	14.8	13.4
Cooling	80	40	72	5,241	2,449	5,380	15.3	16.1	13.3
Lighting	80	31	66	5,715	2,608	5,674	14.0	11.9	11.7
Office Equipment	23	12	24	2,255	1,030	2,260	10.2	11.7	10.7
Annual Consumption (kilowatthours)									
10,000 or Less	Q	Q	1	Q	Q	292	Q	Q	1.8
10,001 to 50,000	6	3	6	1,156	564	1,201	5.0	5.4	4.9
50,001 to 100,000	6	3	7	788	299	701	7.4	9.4	9.9
100,001 to 500,000	27	16	25	1,788	1,146	1,858	15.3	14.2	13.4
500,001 to 1,000,000	12	Q	10	923	Q	657	12.9	Q	15.2
1,000,001 to 5,000,000	35	12	32	1,443	665	1,770	24.3	18.1	17.9
Over 5,000,000	28	Q	16	1,123	Q	918	24.7	30.4	17.9

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	114	56	96	7,449	3,633	7,397	15.3	15.4	13.0
Provider of Purchased Electricity (more than one may apply)									
Local Utility	89	54	88	5,901	3,544	6,940	15.1	15.3	12.7
Some Other Provider	23	Q	Q	1,335	Q	Q	16.9	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Building Floorspace (Square Feet)															
1,001 to 5,000	19	26	14	31	23	1,204	1,595	918	1,759	871	15.7	16.5	14.9	17.8	26.3
5,001 to 10,000	11	17	12	24	13	1,124	1,547	950	1,738	839	9.9	10.9	12.8	13.7	15.3
10,001 to 25,000	18	29	23	25	24	2,183	3,140	1,402	2,822	1,823	8.3	9.2	16.1	9.0	13.3
25,001 to 50,000	18	24	15	25	22	1,451	2,199	1,272	2,027	1,435	12.2	10.8	11.6	12.3	15.1
50,001 to 100,000	15	32	24	28	19	1,295	2,549	1,823	2,037	1,327	11.8	12.6	13.2	13.8	14.3
100,001 to 200,000	15	40	24	41	22	1,206	2,641	1,752	2,259	1,160	12.4	15.3	13.5	17.9	18.8
200,001 to 500,000	14	27	21	25	19	1,115	1,943	1,619	1,432	942	12.3	13.7	13.1	17.8	20.0
Over 500,000	Q	29	34	20	20	Q	1,463	1,639	1,098	893	12.0	19.8	20.9	17.9	22.1
Principal Building Activity															
Education	13	23	16	31	27	1,537	2,800	1,401	2,435	1,698	8.2	8.0	11.1	12.7	16.0
Food Sales	12	Q	Q	Q	Q	271	Q	Q	Q	Q	43.0	Q	Q	Q	Q
Food Service	7	12	Q	20	17	227	400	Q	440	366	29.3	30.6	Q	45.7	46.3
Health Care	10	18	11	20	14	475	784	564	844	496	20.6	23.3	19.2	23.7	27.6
Inpatient	6	12	8	17	9	262	450	323	592	278	23.7	27.7	23.3	28.2	34.0
Outpatient	4	6	3	3	Q	213	334	240	252	Q	16.7	17.4	13.7	13.4	Q
Lodging	8	21	12	18	10	768	1,314	1,132	1,275	608	10.1	15.9	Q	14.0	16.7
Retail (Other Than Mall)	10	10	10	16	15	710	865	695	1,454	592	14.2	11.0	14.8	11.3	25.9
Office	22	58	53	39	38	1,593	3,165	3,125	2,341	1,985	13.9	18.2	17.1	16.8	19.2
Public Assembly	8	8	6	18	9	876	818	806	906	529	9.1	9.5	Q	19.7	17.0
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	1	5	2	5	5	408	1,320	499	1,039	488	3.0	3.5	4.9	4.8	10.1
Service	10	11	Q	7	Q	911	1,179	639	946	Q	10.6	9.6	Q	7.6	Q
Warehouse and Storage	11	24	11	16	9	1,564	2,539	1,426	2,186	1,710	7.0	9.6	7.9	7.5	5.0
Other	Q	11	Q	Q	Q	Q	467	Q	Q	Q	Q	24.6	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed															
Before 1920	6	8	Q	2	Q	1,212	1,387	731	277	Q	5.2	5.6	Q	8.4	Q
1920 to 1945	8	23	16	9	Q	1,070	2,076	1,924	1,169	Q	7.8	11.0	8.4	7.5	Q
1946 to 1959	9	22	14	17	6	1,053	2,435	1,369	1,462	519	8.5	9.0	10.0	11.8	11.2
1960 to 1969	16	25	20	19	16	1,405	2,302	1,504	1,845	1,001	11.1	10.8	13.1	10.5	16.4
1970 to 1979	33	44	34	34	24	2,215	2,967	1,726	2,413	1,233	14.8	14.7	19.4	14.2	19.1
1980 to 1989	13	47	31	54	38	1,003	2,339	1,664	3,051	2,097	12.8	20.0	18.8	17.9	18.3
1990 to 1999	26	39	27	63	47	1,750	2,457	1,560	3,650	2,661	15.1	15.8	17.2	17.3	17.6
2000 to 2003	8	17	17	20	23	684	1,114	898	1,305	1,298	12.2	15.4	19.1	15.1	18.1
Census Region and Division															
Northeast	23	59	65	N	N	2,365	5,366	5,077	N	N	9.8	11.0	12.8	N	N
New England	7	25	N	N	N	Q	1,993	N	N	N	7.1	12.5	N	N	N
Middle Atlantic	Q	34	65	N	N	1,417	3,373	5,077	N	N	11.6	10.1	12.8	N	N
Midwest	62	134	19	N	N	5,488	9,655	1,558	N	N	11.4	13.9	12.4	N	N
East North Central	32	122	N	N	N	3,008	8,365	N	N	N	10.6	14.5	N	N	N
West North Central	31	Q	19	N	N	2,479	Q	1,558	N	N	12.4	9.6	12.4	N	N
South	N	N	72	156	146	N	N	4,047	9,985	8,734	N	N	17.8	15.7	16.7
South Atlantic	N	N	48	107	56	N	N	2,613	6,293	3,190	N	N	18.2	17.0	17.6
East South Central	N	N	Q	Q	Q	N	N	Q	Q	Q	N	N	19.0	12.6	19.6
West South Central	N	N	Q	27	82	N	N	Q	1,891	5,153	N	N	Q	14.3	16.0
West	34	31	Q	63	15	2,541	2,055	693	5,187	555	13.3	15.0	14.0	12.1	27.1
Mountain	27	16	N	N	13	2,081	1,075	N	N	476	13.1	14.8	N	N	26.8
Pacific	Q	Q	Q	63	Q	Q	Q	693	5,187	Q	14.7	15.1	14.0	12.1	Q

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Number of Floors															
One	46	80	46	92	71	3,565	6,112	3,064	7,623	4,571	12.8	13.1	14.9	12.1	15.5
Two	33	50	36	50	34	3,122	4,845	2,592	3,244	2,177	10.5	10.3	13.8	15.3	15.5
Three	15	27	14	21	7	1,645	2,568	1,223	1,473	471	9.0	10.4	11.6	14.4	14.7
Four to Nine	20	44	40	43	27	1,731	2,505	2,744	1,982	1,103	11.8	17.5	14.6	21.5	24.8
Ten or More	6	23	31	14	22	330	1,047	1,752	850	968	18.1	22.4	17.6	16.1	22.6
Elevators and Escalators (more than one may apply)															
Any Elevators	48	107	96	94	71	4,029	6,378	5,728	4,954	3,406	11.8	16.8	16.8	19.0	20.9
Number of Elevators															
One	18	32	20	19	15	1,696	2,573	1,539	1,259	1,041	10.4	12.6	13.2	14.9	14.1
Two to Five	21	44	33	46	27	1,906	2,470	2,282	2,263	1,199	11.2	17.7	14.6	20.3	22.7
Six or More	9	31	42	29	29	427	1,336	1,908	1,431	1,166	20.5	23.5	22.2	20.5	25.0
Any Escalators	Q	Q	Q	Q	Q	Q	Q	788	Q	Q	Q	Q	23.3	Q	Q
Number of Workers (main shift)															
Fewer than 5	15	37	13	26	18	2,470	4,599	1,626	3,554	1,811	6.2	7.9	8.1	7.3	10.0
5 to 9	11	19	11	18	14	1,035	1,529	1,013	1,627	944	10.2	12.7	11.2	10.8	14.6
10 to 19	15	21	13	21	19	1,374	2,155	1,359	1,599	1,317	11.1	9.8	9.5	13.0	14.3
20 to 49	27	31	30	37	27	2,014	2,709	2,132	2,472	1,635	13.6	11.6	14.1	15.1	16.7
50 to 99	19	31	21	31	16	1,673	2,166	1,316	1,812	966	11.5	14.2	16.1	17.2	16.6
100 to 249	15	32	22	45	21	996	1,561	1,434	2,109	771	14.9	20.6	15.2	21.6	26.7
250 or More	17	53	56	41	46	832	2,357	2,495	1,999	1,845	20.2	22.3	22.5	20.6	25.2
Weekly Operating Hours															
Fewer than 40	3	7	3	7	6	877	2,116	592	1,539	776	3.2	3.1	5.5	4.7	8.4
40 to 48	12	34	17	30	24	1,505	3,142	1,983	3,014	1,926	8.0	10.7	8.4	9.9	12.6
49 to 60	26	48	28	39	34	3,094	4,105	2,377	3,589	2,537	8.4	11.8	11.8	10.8	13.4
61 to 84	20	32	29	39	26	1,578	2,887	1,897	2,544	1,405	12.9	11.0	15.2	15.2	18.7
85 to 167	27	36	29	36	26	1,517	1,665	1,386	1,334	1,040	17.7	21.6	21.0	26.7	24.7
Open Continuously	32	67	60	69	44	1,822	3,162	3,140	3,151	1,605	17.4	21.3	19.2	22.0	27.6
Ownership and Occupancy															
Nongovernment Owned	93	163	129	169	120	7,846	12,091	9,079	11,859	7,136	11.8	13.5	14.2	14.3	16.8
Owner Occupied	41	82	64	78	54	3,884	6,481	4,791	5,434	2,865	10.5	12.7	13.4	14.3	18.8
Nonowner Occupied	52	80	64	91	66	3,797	4,937	4,179	6,208	4,137	13.7	16.2	15.4	14.7	15.8
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	27	61	37	50	41	2,547	4,985	2,296	3,313	2,154	10.5	12.2	16.2	15.1	19.2
Federal	2	Q	Q	Q	Q	167	Q	Q	Q	Q	12.3	17.8	28.5	Q	Q
State	9	10	10	20	Q	696	709	692	1,247	Q	12.8	14.1	14.4	16.1	Q
Local	16	30	15	28	29	1,683	3,141	1,178	1,921	1,634	9.3	9.7	12.9	14.3	17.7
Vacancy Status															
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	11.5
Partially Vacant	24	45	37	27	35	2,275	3,247	2,576	2,104	1,997	10.6	14.0	14.4	12.8	17.4
Not At All Vacant	94	177	128	192	126	7,621	13,116	8,575	12,806	7,144	12.4	13.5	14.9	15.0	17.6
Number of Establishments															
One	83	169	111	161	103	6,955	12,392	7,648	11,322	6,061	12.0	13.6	14.5	14.2	16.9
2 to 5	26	32	28	38	22	2,257	2,774	1,887	2,422	1,582	11.7	11.6	14.9	15.9	14.1
6 to 10	5	9	5	Q	Q	401	540	341	Q	Q	12.7	16.5	14.7	Q	Q
11 to 20	Q	Q	Q	7	Q	Q	Q	Q	387	Q	Q	Q	Q	17.3	Q
More than 20	Q	Q	15	Q	19	Q	Q	812	Q	760	Q	Q	18.2	Q	24.4
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Predominant Exterior Wall Material															
Brick, Stone or Stucco	49	127	75	116	75	4,456	9,758	6,013	8,064	4,003	11.0	13.0	12.5	14.4	18.6
Concrete (Block or Poured)	27	29	33	33	33	2,001	2,589	1,831	2,402	1,914	13.7	11.4	17.9	13.7	17.0
Concrete Panels	15	23	24	23	32	895	1,252	1,219	1,357	1,660	16.8	18.5	20.1	16.9	19.0
Siding or Shingles	10	11	4	14	Q	1,221	1,266	432	841	Q	8.5	8.8	9.2	16.9	Q
Metal Panels	15	20	17	28	7	1,552	1,444	1,233	2,169	978	9.9	13.5	13.7	13.0	7.2
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material															
Built-Up	42	72	55	73	64	3,271	5,072	3,848	5,178	3,412	12.9	14.1	14.3	14.0	18.7
Shingles (Not Wood)	16	31	26	35	14	1,735	3,254	1,478	2,461	943	9.5	9.5	17.4	14.1	14.3
Metal Surfacing	20	22	18	34	21	2,263	1,989	1,539	3,158	2,284	8.8	11.0	11.9	10.7	9.1
Synthetic or Rubber	34	79	56	49	42	2,528	5,225	2,838	2,556	1,564	13.5	15.2	19.9	19.0	27.1
Slate or Tile	2	4	5	13	7	145	478	447	952	416	13.8	8.5	10.3	13.1	17.3
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)															
Any Type of Renovation Since 1980	42	67	54	41	25	3,792	5,370	4,011	3,157	1,308	11.1	12.5	13.4	13.0	19.0
Addition or Annex	24	27	18	14	10	1,800	1,798	1,489	930	533	13.5	14.8	11.9	14.9	18.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	34	50	41	31	19	2,780	3,719	3,110	2,449	944	12.3	13.6	13.3	12.8	19.6
Wall or Roof Replacement	20	27	27	17	11	1,722	2,178	2,280	1,316	560	11.5	12.4	11.7	13.2	19.0
Interior Wall Re-Configuration	26	34	27	20	11	1,983	2,300	2,282	1,388	548	13.1	14.8	11.9	14.1	19.9
HVAC Equipment Upgrade	31	43	39	28	14	2,415	3,076	2,660	1,879	736	12.7	14.0	14.8	14.7	19.0
Lighting Upgrade	32	41	33	23	12	2,492	3,124	2,353	1,707	598	13.0	13.0	13.8	13.3	19.7
Window Replacement	15	26	20	8	Q	1,384	2,067	1,938	650	Q	10.8	12.4	10.5	12.2	Q
Plumbing System Upgrade	20	27	21	16	Q	1,616	1,939	1,948	1,204	Q	12.7	13.7	10.9	13.0	Q
Insulation Upgrade	10	14	14	8	Q	907	1,181	1,079	583	Q	10.9	12.1	13.0	13.8	Q
Other Renovation	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
No Renovations Since 1980	30	54	38	41	28	3,163	5,796	3,242	4,010	1,925	9.4	9.3	11.6	10.2	14.3
Building Newer than 1980	48	103	75	137	109	3,438	5,910	4,122	8,005	6,057	13.9	17.4	18.2	17.2	17.9
Energy Sources (more than one may apply)															
Electricity	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Natural Gas	94	175	118	155	91	7,644	12,850	8,113	10,509	4,345	12.3	13.6	14.6	14.7	20.9
Fuel Oil	30	65	70	45	40	2,499	4,037	4,628	2,337	1,642	12.1	16.0	15.2	19.3	24.2
District Heat	11	32	23	23	Q	825	1,784	1,349	1,025	Q	13.3	17.7	17.0	22.0	Q
District Chilled Water	6	14	9	13	Q	350	698	514	659	633	17.3	20.2	17.8	19.2	22.7
Propane	18	28	13	26	14	1,598	2,036	1,102	1,403	928	11.2	13.8	11.8	18.5	15.4
Other	7	Q	Q	Q	Q	483	363	Q	Q	Q	13.6	12.5	Q	Q	23.3

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Space-Heating Energy Sources															
Electricity	52	97	92	106	109	3,945	6,180	5,080	7,343	6,052	13.1	15.7	18.0	14.5	18.0
Electricity Main	23	47	40	66	91	1,375	2,603	2,210	4,580	5,228	16.4	18.0	17.9	14.3	17.5
Electricity Secondary	29	50	52	41	18	2,570	3,577	2,870	2,763	824	11.3	14.1	18.1	14.7	21.7
Other Excluding Electricity	67	124	74	104	38	6,153	10,525	6,154	6,622	1,938	10.9	11.8	12.0	15.7	19.5
Buildings without Heating	Q	Q	Q	9	14	Q	372	Q	1,207	1,300	Q	6.6	Q	7.5	10.9
Primary Space-Heating Energy Source															
Electricity	23	47	40	66	91	1,375	2,603	2,210	4,580	5,228	16.4	18.0	17.9	14.3	17.5
Natural Gas	76	132	90	116	45	6,513	10,640	5,617	7,965	2,228	11.6	12.4	16.0	14.6	20.3
Fuel Oil	6	7	8	Q	Q	962	1,211	Q	Q	Q	6.0	5.9	Q	Q	11.8
District Heat	10	31	21	20	Q	752	1,638	1,231	883	Q	13.0	18.7	17.3	22.9	Q
Propane	3	4	Q	Q	Q	Q	492	Q	423	Q	8.6	8.4	10.1	Q	Q
Other	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
Cooling Energy Sources															
Electricity	107	197	154	206	150	8,205	13,843	10,319	13,508	8,446	13.0	14.2	14.9	15.2	17.8
Other Excluding Electricity	Q	11	11	8	Q	Q	667	626	468	Q	Q	15.9	17.7	18.0	Q
Buildings without Cooling	7	Q	1	5	Q	1,843	2,567	430	1,195	Q	4.0	6.3	3.0	4.1	Q
Water-Heating Energy Sources															
Electricity	43	88	77	104	91	3,941	6,525	5,147	6,685	5,192	10.8	13.5	15.0	15.6	17.5
Other Excluding Electricity	74	118	87	104	61	5,533	8,621	5,637	6,507	2,675	13.4	13.7	15.5	16.0	22.8
Bldgs without Water Heating	3	Q	2	11	9	919	1,931	591	1,980	1,423	3.2	9.1	3.1	5.4	6.5
Cooking Energy Sources															
Electricity	32	70	45	52	50	2,123	4,210	2,235	2,472	2,120	14.9	16.7	19.9	21.0	23.8
Other Excluding Electricity	17	32	39	40	27	1,179	2,160	2,501	2,149	1,088	14.7	14.9	Q	18.4	24.4
Buildings without Cooking	71	121	82	128	84	7,091	10,707	6,639	10,550	6,082	10.0	11.3	12.4	12.1	13.8
Energy End Uses (more than one may apply)															
Buildings with Space Heating	119	221	165	210	147	10,098	16,705	11,234	13,965	7,990	11.8	13.2	14.7	15.1	18.4
Buildings with Cooling	112	208	165	214	160	8,550	14,509	10,946	13,977	8,943	13.1	14.3	15.1	15.3	17.9
Buildings with Water Heating	117	206	164	209	152	9,474	15,145	10,785	13,192	7,867	12.3	13.6	15.3	15.8	19.3
Buildings with Cooking	49	102	84	91	77	3,302	6,369	4,736	4,621	3,208	14.9	16.1	17.7	19.8	24.0
Buildings with Manufacturing	9	12	11	8	Q	855	729	772	608	Q	10.2	17.0	14.1	13.3	Q
Buildings with Electricity Generation	29	78	62	52	40	1,764	3,862	2,973	2,583	1,639	16.4	20.2	20.9	20.0	24.6
Percent of Floorspace Heated															
Not Heated	Q	Q	Q	9	14	Q	372	Q	1,207	1,300	Q	6.6	Q	7.5	10.9
1 to 50	5	10	12	18	10	1,111	1,094	1,325	1,845	1,455	4.4	8.9	9.4	9.6	6.9
51 to 99	17	21	24	33	22	1,377	1,735	1,713	2,349	932	12.1	12.0	13.8	14.1	23.1
100	97	191	129	159	115	7,609	13,876	8,196	9,772	5,602	12.8	13.7	15.8	16.3	20.6
Percent of Floorspace Cooled															
Not Cooled	7	Q	1	5	Q	1,843	2,567	430	1,195	Q	4.0	6.3	3.0	4.1	Q
1 to 50	29	35	24	32	11	3,133	4,642	3,422	3,480	1,906	9.2	7.5	7.0	9.2	5.7
51 to 99	33	58	55	42	29	2,327	3,568	3,297	2,803	1,215	14.1	16.4	16.8	15.2	24.2
100	51	114	86	140	120	3,089	6,300	4,227	7,693	5,822	16.4	18.2	20.3	18.2	20.6

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Percent Lit When Open															
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	12	14	13	13	13	1,956	2,667	2,132	2,066	1,382	5.9	5.4	6.3	6.4	9.6
51 to 99	40	62	54	54	52	3,666	4,929	3,133	3,804	2,756	10.8	12.7	17.2	14.1	19.0
100	68	145	98	151	95	4,362	8,654	5,924	8,979	4,870	15.5	16.8	16.6	16.9	19.4
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed															
Zero	25	45	22	38	29	3,536	4,589	2,252	4,370	2,637	7.2	9.8	9.7	8.6	11.2
1 to 50	56	103	74	105	75	4,772	8,916	5,541	7,172	4,546	11.8	11.5	13.4	14.6	16.4
51 to 100	Q	Q	Q	7	13	Q	Q	Q	478	501	Q	Q	Q	15.5	25.4
Building Never Closed/ Electricity Not Used	32	67	60	69	44	1,822	3,162	3,140	3,151	1,605	17.4	21.3	19.2	22.0	27.6
Heating Equipment (more than one may apply)															
Heat Pumps	10	29	40	46	29	727	1,471	1,971	3,283	1,361	14.2	19.6	20.1	14.0	21.0
Packaged Heat Pumps	7	20	30	26	23	433	995	1,267	1,749	997	15.0	19.8	24.0	14.7	23.0
Split-System Heat Pumps	Q	Q	Q	14	6	Q	Q	686	1,140	419	Q	Q	20.6	12.3	15.5
Individual Room Heat Pumps	Q	10	10	14	Q	Q	497	537	1,021	Q	Q	20.0	18.1	13.3	Q
Furnaces	50	70	32	48	25	4,576	6,411	2,648	4,313	1,658	10.8	10.9	11.9	11.1	14.9
Individual Space Heaters	31	48	45	30	12	3,014	3,582	2,524	2,569	851	10.2	13.3	17.8	11.5	14.3
District Heat	10	31	21	20	Q	801	1,749	1,266	918	Q	12.9	17.9	16.9	22.3	Q
Boilers	47	86	69	63	31	4,060	6,835	4,693	3,334	1,500	11.6	12.5	14.8	18.7	20.6
Packaged Heating Units	32	68	57	86	67	2,126	3,708	3,204	5,619	3,365	15.3	18.2	17.7	15.3	20.0
Other	13	11	Q	5	13	816	659	Q	525	750	15.6	16.1	Q	10.5	17.3
Cooling Equipment (more than one may apply)															
Residential-Type Central Air Conditioners	22	37	27	28	19	1,971	3,078	2,207	2,056	1,723	11.2	12.2	12.2	13.7	10.8
Heat Pumps	10	29	42	49	30	739	1,542	1,998	3,398	1,365	14.0	18.7	20.9	14.5	22.2
Packaged Heat Pumps	7	19	33	24	22	453	1,033	1,337	1,679	924	14.6	18.9	24.6	14.6	23.8
Split-System Heat Pumps	Q	Q	Q	15	7	Q	Q	703	1,127	458	Q	Q	20.6	13.0	15.5
Individual Room Heat Pumps	Q	10	10	17	Q	Q	510	523	1,190	Q	Q	19.7	19.0	14.5	Q
Individual Air Conditioners	24	36	26	35	20	2,321	3,633	2,786	2,565	1,253	10.2	10.0	9.2	13.8	15.6
District Chilled Water	6	14	9	13	Q	350	698	514	659	633	17.3	20.2	17.8	19.2	22.7
Central Chillers	24	57	55	58	51	1,604	2,658	2,473	2,695	2,205	15.1	21.3	22.2	21.6	23.1
Packaged Air Conditioning Units	69	122	87	111	72	4,565	7,740	6,076	7,703	3,884	15.1	15.8	14.4	14.5	18.6
Swamp Coolers	7	5	Q	6	Q	515	468	Q	346	Q	14.2	11.1	Q	16.8	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)															
Heating	34	67	43	39	28	3,262	4,981	3,202	3,195	1,754	10.3	13.4	13.3	12.3	15.7
Cooling	41	85	69	49	43	3,555	5,895	4,827	4,112	2,606	11.5	14.4	14.3	11.8	16.4
Water Heating Equipment															
Centralized System	79	124	100	124	90	6,315	9,538	6,774	7,444	4,585	12.5	12.9	14.7	16.6	19.6
Distributed System	14	33	26	35	34	1,468	2,954	2,015	3,009	2,094	9.8	11.0	12.8	11.6	16.1
Combination of Centralized and Distributed System	23	50	39	50	28	1,691	2,654	1,996	2,739	1,187	13.8	18.9	19.5	18.3	23.8

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Lighting Equipment Types (more than one may apply)															
Incandescent	80	150	123	135	101	7,016	10,308	8,192	7,939	5,073	11.4	14.5	15.0	17.0	19.9
Standard Fluorescent	117	218	163	212	155	9,783	16,090	10,871	14,316	8,627	11.9	13.5	15.0	14.8	18.0
Compact Fluorescent	66	114	109	122	77	4,667	6,835	6,292	6,439	3,339	14.2	16.7	17.3	19.0	23.1
High Intensity Discharge	45	95	75	66	49	3,955	6,149	4,385	3,863	2,292	11.5	15.4	17.0	17.1	21.4
Halogen	44	74	68	77	50	2,762	4,485	3,903	4,117	2,435	15.9	16.5	17.4	18.7	20.5
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	22.4	25.6	Q
Refrigeration Equipment (more than one may apply)[b]															
Any Refrigeration	109	202	156	198	148	8,673	14,438	9,893	12,329	7,640	12.6	14.0	15.7	16.1	19.3
Commercial Refrigeration	65	131	104	128	96	4,106	7,355	5,702	5,784	3,821	15.9	17.8	18.3	22.1	25.0
Walk-In Units	54	106	86	112	79	3,188	5,353	4,341	4,490	2,882	16.8	19.8	19.7	25.0	27.5
Cases or Cabinets	51	105	86	100	81	2,950	5,523	4,191	4,586	3,174	17.3	19.0	20.4	21.7	25.5
Residential-Type Units	75	135	99	115	94	6,713	10,957	7,367	8,479	5,369	11.1	12.3	13.5	13.6	17.6
Vending Machines	76	146	113	140	107	5,824	9,186	6,729	8,220	5,375	13.1	15.9	16.8	17.0	19.9
No Refrigeration	10	22	11	21	13	1,720	2,638	1,482	2,843	1,649	6.1	8.4	7.2	7.4	8.2
Office Equipment (more than one may apply)															
Computers	111	208	160	202	152	8,976	14,756	10,556	13,086	8,253	12.4	14.1	15.2	15.4	18.4
With Flat Screen Monitors	52	112	109	107	85	3,629	6,548	6,204	6,118	3,919	14.4	17.1	17.6	17.4	21.7
Dedicated Servers	76	148	129	143	100	5,673	9,426	7,813	8,157	5,269	13.4	15.7	16.5	17.5	19.1
Laser Printers	67	113	84	109	82	5,811	8,950	5,910	7,675	4,666	11.6	12.6	14.2	14.2	17.5
Inkjet Printers	74	120	108	131	99	5,523	7,781	6,220	7,556	5,130	13.5	15.5	17.4	17.4	19.4
FAX Machines	105	191	156	195	145	8,446	13,443	10,336	12,438	7,710	12.4	14.2	15.1	15.7	18.8
Photocopiers	91	169	136	170	125	7,181	12,244	9,222	10,780	6,828	12.7	13.8	14.8	15.7	18.3
Number of Computers															
None	9	16	6	18	9	1,417	2,320	819	2,086	1,037	6.1	7.0	7.8	8.5	9.0
1 to 4	24	41	20	38	31	2,242	3,537	1,801	3,206	1,608	10.6	11.5	10.9	12.0	19.0
5 to 9	14	21	12	16	17	1,392	1,946	1,206	1,572	1,063	9.9	10.8	10.3	10.0	16.3
10 to 19	12	21	14	21	15	1,057	1,724	1,032	1,568	1,228	11.7	12.1	14.0	13.3	12.1
20 to 49	18	25	24	36	17	1,239	2,045	1,441	1,729	960	14.2	12.1	16.8	20.7	18.0
50 to 99	9	15	12	24	15	740	1,124	1,078	1,547	887	12.4	13.7	Q	15.6	17.1
100 to 249	17	24	21	28	18	1,266	1,554	1,389	1,626	855	13.3	15.7	14.8	17.4	20.8
250 or More	17	60	57	38	39	1,040	2,825	2,610	1,837	1,652	16.7	21.3	21.7	20.9	23.5
Number of Dedicated Servers															
None	43	75	38	77	61	4,720	7,651	3,563	7,015	4,021	9.2	9.8	10.6	10.9	15.1
1 to 4	55	82	62	88	55	4,305	6,249	4,591	5,624	3,346	12.9	13.1	13.4	15.7	16.4
5 to 9	5	17	Q	19	Q	516	980	1,078	884	Q	9.0	16.9	21.7	21.5	Q
10 to 19	7	18	9	17	Q	412	965	455	724	472	17.3	18.5	19.0	23.2	27.5
20 to 49	Q	Q	11	11	Q	Q	Q	586	604	Q	Q	Q	18.4	18.9	Q
50 or More	Q	21	24	Q	Q	Q	804	1,102	Q	Q	Q	26.6	22.0	Q	Q
Number of Photocopiers															
None	28	54	30	50	36	3,212	4,832	2,153	4,392	2,462	8.8	11.3	13.9	11.3	14.6
One	30	44	24	46	29	2,653	4,546	2,337	3,806	2,133	11.4	9.6	10.3	12.2	13.8
2 to 4	30	48	35	54	40	2,655	3,694	2,833	3,554	2,345	11.3	13.1	12.4	15.1	17.0
5 to 9	11	23	17	27	17	863	1,386	1,219	1,326	721	13.0	16.7	Q	20.1	23.4
10 or More	20	54	60	43	39	1,010	2,619	2,833	2,093	1,629	19.5	20.6	21.3	20.7	24.0

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Energy-Related Space Functions (more than one may apply)															
Commercial Food Preparation	49	102	84	91	77	3,302	6,358	4,736	4,620	3,208	14.9	16.1	17.7	19.8	24.0
Activities with Large Amounts of Hot Water	48	88	68	90	48	3,451	5,260	4,091	4,479	2,200	13.9	16.7	16.7	20.0	21.9
Separate Computer Area	56	113	102	110	74	3,713	7,143	5,988	6,266	3,763	15.1	15.8	17.0	17.6	19.6
HVAC Conservation Features (more than one may apply)															
Variable Air-Volume System	44	91	81	84	71	2,985	4,852	4,086	4,201	3,473	14.9	18.7	19.8	20.0	20.5
Economizer Cycle	59	112	96	89	57	3,804	5,533	4,736	4,630	2,406	15.5	20.2	20.3	19.2	23.5
HVAC Maintenance	101	204	149	190	148	8,035	14,309	9,595	11,542	7,670	12.6	14.2	15.6	16.5	19.3
Energy Management and Control System (EMCS)	34	64	67	59	55	2,438	3,834	3,284	3,546	2,528	14.0	16.7	20.4	16.8	21.8
Window and Interior Lighting Features (more than one may apply)															
Multipaned Windows	100	173	115	128	77	8,065	11,659	7,843	7,244	3,916	12.4	14.8	14.7	17.7	19.6
Tinted Window Glass	52	124	98	121	99	3,628	7,501	5,333	7,836	5,328	14.2	16.5	18.3	15.4	18.6
Reflective Window Glass	17	38	36	32	30	1,259	2,139	1,733	2,051	1,347	13.7	17.5	20.5	15.8	22.6
External Overhangs or Awnings	37	73	47	73	52	2,639	4,497	2,985	4,416	2,637	13.9	16.2	15.8	16.5	19.8
Skylights or Atriums	29	52	36	41	30	2,163	3,557	2,573	2,575	1,640	13.6	14.7	14.2	15.9	18.3
Daylighting Sensors	9	18	10	13	11	574	837	413	618	426	15.5	21.8	24.2	20.6	24.9
Specular Reflectors	57	125	88	101	65	4,446	7,579	5,238	5,892	2,961	12.8	16.4	16.9	17.1	22.1
Electronic Ballasts	104	177	143	176	133	8,390	11,771	8,922	10,876	6,923	12.3	15.0	16.0	16.2	19.3
Energy Management and Control System (EMCS) For Lighting	12	22	21	15	21	756	1,249	881	899	997	16.0	17.4	23.5	17.0	21.5
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[b]															
Heating	75	137	124	137	93	6,995	11,636	8,469	10,227	5,380	10.7	11.7	14.6	13.4	17.4
Cooling	74	136	125	145	116	6,309	10,730	8,843	10,627	6,681	11.8	12.7	14.1	13.6	17.3
Lighting	83	153	99	143	110	7,959	12,889	7,802	11,312	7,025	10.4	11.9	12.7	12.7	15.6
Office Equipment	32	56	33	46	43	3,401	5,473	3,238	4,319	2,966	9.5	10.3	10.3	10.8	14.4
Annual Consumption (kilowatthours)															
10,000 or Less	1	1	1	1	Q	636	1,052	306	622	Q	1.3	1.1	1.7	1.7	Q
10,001 to 50,000	7	12	7	12	7	1,589	2,594	1,270	2,624	1,150	4.6	4.5	5.6	4.6	5.8
50,001 to 100,000	10	11	7	16	8	1,081	1,506	1,340	1,672	862	9.1	7.3	5.6	9.4	8.8
100,001 to 500,000	38	54	26	52	39	3,073	4,313	2,698	3,648	2,380	12.5	12.5	9.7	14.3	16.3
500,001 to 1,000,000	10	21	20	23	23	1,022	1,715	1,261	1,456	1,282	10.2	12.0	15.8	15.9	17.8
1,000,001 to 5,000,000	36	69	50	67	46	2,225	3,545	2,269	3,319	1,851	16.3	19.5	22.2	20.3	24.7
Over 5,000,000	17	56	55	48	39	768	2,351	2,231	1,831	1,518	21.7	23.9	24.5	26.1	25.8

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)					Total Floorspace of Buildings Using Electricity (million square feet)					Electricity Energy Intensity (kWh/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	120	224	166	219	161	10,393	17,076	11,375	15,172	9,290	11.5	13.1	14.6	14.5	17.3
Provider of Purchased Electricity (more than one may apply)															
Local Utility	109	198	140	210	134	9,635	15,515	10,370	14,626	7,707	11.3	12.8	13.5	14.4	17.4
Some Other Provider	Q	25	27	Q	23	784	1,500	987	Q	1,341	14.2	16.5	26.9	Q	17.1

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] Climate zone (30-year average) definitions: Zone 1 = Under 2,000 CDD and more than 7,000 HDD; Zone 2 = Under 2,000 CDD and 5,500-7,000 HDD; Zone 3 = Under 2,000 CDD and 4,000-5,499 HDD; Zone 4 = Under 2,000 CDD and fewer than 4,000 HDD; Zone 5 = 2,000 CDD or more and fewer than 4,000 HDD. (See "Glossary" for definitions of CDD and HDD.)

[b] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Principal Building Activity									
Education	9	55	45	806	5,378	3,687	11.1	10.2	12.2
Food Sales	36	24	Q	747	467	Q	48.8	51.1	Q
Food Service	47	16	Q	986	664	Q	47.8	24.5	Q
Health Care	6	17	50	445	835	1,883	13.1	20.5	26.3
Inpatient	N	Q	47	N	Q	1,723	N	Q	27.0
Outpatient	6	11	Q	445	652	Q	13.1	17.4	Q
Lodging	4	31	34	260	2,274	2,563	14.0	13.5	13.5
Retail (Other Than Mall)	17	28	18	1,363	2,133	821	12.2	12.9	21.5
Office	30	75	105	2,320	4,602	5,286	12.9	16.4	19.9
Public Assembly	10	21	19	850	1,851	1,233	11.6	11.2	Q
Public Order and Safety	2	6	Q	231	390	Q	10.4	14.9	Q
Religious Worship	5	11	Q	1,160	2,391	Q	4.5	4.7	Q
Service	14	19	Q	1,687	1,862	Q	8.2	10.2	Q
Warehouse and Storage	7	25	40	1,256	4,482	3,687	5.8	5.5	10.8
Other	2	11	25	206	601	922	9.6	19.1	27.6
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	6	14	6	953	1,972	805	6.7	7.3	7.0
1920 to 1945	16	17	28	1,491	2,336	2,768	10.7	7.4	10.0
1946 to 1959	16	26	25	1,465	3,237	2,136	10.8	8.1	11.9
1960 to 1969	19	43	33	1,545	4,143	2,369	12.5	10.4	14.1
1970 to 1979	34	64	70	2,208	4,607	3,740	15.2	13.9	18.7
1980 to 1989	34	61	88	1,769	4,169	4,215	19.4	14.7	20.9
1990 to 1999	50	75	77	2,252	5,798	4,029	22.1	13.0	19.1
2000 to 2003	14	39	33	860	2,524	1,915	16.8	15.4	17.0
Census Region and Division									
Northeast	23	53	72	2,080	5,275	5,454	11.1	10.0	13.1
New England	7	14	Q	696	1,416	829	10.2	9.7	13.1
Middle Atlantic	16	39	61	1,384	3,859	4,624	11.6	10.1	13.1
Midwest	46	89	81	3,176	7,841	5,684	14.4	11.4	14.3
East North Central	28	57	68	1,689	5,086	4,598	16.8	11.2	14.8
West North Central	17	32	13	1,487	2,755	1,086	11.7	11.6	12.0
South	83	141	150	4,778	10,712	7,276	17.5	13.1	20.7
South Atlantic	45	76	90	2,464	5,350	4,282	18.1	14.1	21.0
East South Central	12	26	13	832	1,884	505	14.0	13.6	25.1
West South Central	27	39	48	1,482	3,478	2,489	18.4	11.3	19.2
West	37	58	57	2,509	4,958	3,564	14.9	11.7	15.9
Mountain	12	21	23	841	1,716	1,076	13.9	12.4	21.4
Pacific	26	37	34	1,668	3,242	2,488	15.4	11.4	13.5
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	30	51	38	2,327	4,929	3,137	12.9	10.4	12.3
5,500-7,000 HDD	43	85	96	3,142	7,887	6,047	13.7	10.7	15.9
4,000-5,499 HDD	26	61	79	1,868	4,498	5,009	13.8	13.7	15.8
Fewer than 4,000 HDD	55	78	86	3,496	6,886	4,790	15.8	11.4	17.9
2,000 CDD or More and --									
Fewer than 4,000 HDD	36	65	60	1,709	4,586	2,994	20.9	14.2	20.2

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Number of Floors									
One	142	139	53	8,615	12,365	3,955	16.5	11.3	13.4
Two	38	115	50	2,932	9,121	3,925	12.9	12.6	12.6
Three	9	44	31	841	4,112	2,428	10.2	10.7	12.8
Four to Nine	Q	41	132	Q	3,069	6,841	Q	13.5	19.2
Ten or More	N	Q	94	N	Q	4,828	N	Q	19.5
Elevators and Escalators (more than one may apply)									
Any Elevators	4	116	296	286	7,913	16,296	14.6	14.7	18.2
Number of Elevators									
One	4	67	32	286	5,077	2,745	14.6	13.3	11.7
Two to Five	N	48	123	N	2,791	7,329	N	17.3	16.8
Six or More	N	Q	140	N	Q	6,222	N	Q	22.6
Any Escalators	Q	Q	56	Q	Q	2,257	Q	Q	24.6
Number of Workers (main shift)									
Fewer than 5	75	22	Q	7,169	5,485	Q	10.5	4.0	Q
5 to 9	45	25	Q	2,618	3,202	Q	17.3	8.0	Q
10 to 19	41	44	Q	1,798	4,940	Q	22.9	8.8	Q
20 to 49	22	110	22	844	7,872	2,247	25.6	14.0	9.6
50 to 99	Q	74	42	Q	4,492	3,368	Q	16.4	12.6
100 to 249	Q	55	76	Q	2,377	4,455	Q	23.1	17.0
250 or More	N	11	202	N	419	9,109	N	25.7	22.2
Weekly Operating Hours									
Fewer than 40	13	10	Q	2,586	2,415	Q	5.2	4.1	Q
40 to 48	32	59	25	3,364	6,136	2,071	9.5	9.7	12.2
49 to 60	34	75	66	2,888	8,031	4,783	11.9	9.4	13.7
61 to 84	33	65	47	1,555	5,209	3,547	21.5	12.5	13.3
85 to 167	48	57	48	1,121	2,889	2,932	42.7	19.8	16.4
Open Continuously	29	74	171	1,029	4,107	7,745	28.1	17.9	22.0
Ownership and Occupancy									
Nongovernment Owned	172	253	248	11,073	21,731	15,208	15.6	11.7	16.3
Owner Occupied	73	114	132	5,456	10,662	7,336	13.3	10.7	18.0
Nonowner Occupied	99	139	115	5,424	10,495	7,339	18.3	13.2	15.7
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	17	87	111	1,470	7,055	6,770	11.8	12.4	16.4
Federal	Q	6	32	Q	402	1,466	Q	14.1	21.7
State	3	23	34	302	1,733	1,751	10.4	13.1	19.3
Local	13	59	46	1,085	4,920	3,553	12.2	12.0	12.8
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	13	49	106	1,275	4,504	6,420	10.6	10.8	16.6
Not At All Vacant	176	290	252	11,042	23,426	14,794	15.9	12.4	17.0

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Number of Establishments									
One	166	252	208	10,331	20,970	13,077	16.0	12.0	15.9
2 to 5	23	58	67	1,908	5,307	3,705	11.8	10.9	18.1
6 to 10	Q	16	17	Q	1,011	872	Q	15.9	19.4
11 to 20	Q	10	19	Q	624	1,325	Q	15.4	14.4
More than 20	Q	Q	47	Q	Q	2,305	Q	Q	20.4
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	101	180	161	5,658	15,715	10,922	17.8	11.5	14.7
Concrete (Block or Poured)	33	70	52	2,003	5,347	3,388	16.7	13.1	15.3
Concrete Panels	Q	30	82	Q	1,843	4,270	Q	16.2	19.2
Siding or Shingles	28	12	Q	2,129	1,555	Q	13.1	7.4	Q
Metal Panels	19	41	27	2,242	3,737	1,398	8.3	11.0	19.5
Window Glass	Q	Q	15	Q	Q	762	Q	Q	20.0
Other	Q	Q	13	Q	Q	770	Q	Q	17.3
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	54	117	134	2,678	9,269	8,834	20.3	12.6	15.2
Shingles (Not Wood)	50	53	18	3,736	4,849	1,286	13.3	11.0	14.2
Metal Surfacing	31	60	24	3,446	6,247	1,541	9.0	9.6	15.6
Synthetic or Rubber	33	84	144	1,342	5,667	7,701	24.6	14.7	18.7
Slate or Tile	13	13	5	751	1,296	391	17.0	10.0	12.0
Wooden Materials	4	Q	Q	330	Q	Q	13.3	Q	Q
Concrete	Q	6	Q	Q	455	Q	Q	14.2	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	36	95	98	2,893	7,830	6,916	12.3	12.1	14.2
Addition or Annex	9	37	46	668	2,805	3,079	14.2	13.2	14.9
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	27	73	76	2,091	5,806	5,105	12.7	12.6	15.0
Wall or Roof Replacement	13	33	55	1,162	2,989	3,904	11.4	11.2	14.1
Interior Wall Re-Configuration	15	42	61	1,164	3,222	4,115	12.7	12.9	14.9
HVAC Equipment Upgrade	15	60	80	1,173	4,662	4,931	12.7	12.8	16.2
Lighting Upgrade	13	59	67	1,202	4,417	4,654	11.0	13.4	14.5
Window Replacement	9	32	32	871	2,772	2,633	10.4	11.7	12.1
Plumbing System Upgrade	10	30	51	888	2,735	3,519	11.5	11.1	14.6
Insulation Upgrade	6	21	25	638	1,655	1,719	8.8	12.4	14.5
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	56	71	63	4,769	8,465	4,903	11.7	8.3	12.9
Building Newer than 1980	99	175	198	4,881	12,491	10,159	20.2	14.0	19.5

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Energy Sources (more than one may apply)									
Electricity	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Natural Gas	112	243	279	6,775	19,761	16,926	16.5	12.3	16.5
Fuel Oil	12	52	186	1,302	3,532	10,308	9.4	14.8	18.0
District Heat	Q	20	77	Q	1,232	4,111	Q	16.4	18.8
District Chilled Water	Q	13	43	Q	694	2,111	Q	19.0	20.2
Propane	21	30	48	1,522	2,577	2,968	14.1	11.7	16.0
Other	3	10	9	409	583	388	8.0	17.7	23.4
Space-Heating Energy Sources									
Electricity	89	181	185	4,927	13,154	10,519	18.1	13.8	17.6
Electricity Main	69	118	79	3,465	7,876	4,656	19.8	15.0	17.0
Electricity Secondary	20	63	106	1,462	5,279	5,863	14.0	12.0	18.1
Other Excluding Electricity	88	152	166	6,496	14,011	10,885	13.6	10.9	15.3
Buildings without Heating	12	7	Q	1,120	1,621	Q	10.9	4.3	Q
Primary Space-Heating Energy Source									
Electricity	69	118	79	3,465	7,876	4,656	19.8	15.0	17.0
Natural Gas	86	182	191	5,739	15,927	11,297	14.9	11.4	16.9
Fuel Oil	8	6	9	913	1,268	Q	8.3	4.9	Q
District Heat	Q	18	72	Q	1,112	3,695	Q	16.4	19.4
Propane	13	6	Q	999	858	Q	13.2	7.5	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Electricity	178	324	312	10,360	25,385	18,575	17.2	12.7	16.8
Other Excluding Electricity	Q	9	36	Q	644	1,920	Q	14.5	18.7
Buildings without Cooling	11	8	Q	2,142	2,757	Q	5.2	2.8	7.7
Water-Heating Energy Sources									
Electricity	88	163	152	5,669	12,392	9,430	15.5	13.1	16.1
Other Excluding Electricity	83	167	196	4,423	13,317	11,233	18.7	12.5	17.4
Bldgs without Water Heating	19	11	Q	2,451	3,078	Q	7.8	3.6	Q
Cooking Energy Sources									
Electricity	40	74	135	1,114	4,754	7,292	35.8	15.5	18.5
Other Excluding Electricity	33	46	76	1,019	3,286	4,771	32.4	13.9	16.0
Buildings without Cooking	117	221	148	10,410	20,746	9,914	11.2	10.7	14.9
Energy End Uses (more than one may apply)									
Buildings with Space Heating	178	334	351	11,423	27,165	21,403	15.5	12.3	16.4
Buildings with Cooling	179	333	348	10,401	26,030	20,495	17.2	12.8	17.0
Buildings with Water Heating	171	330	347	10,092	25,708	20,663	16.9	12.8	16.8
Buildings with Cooking	73	119	211	2,133	8,041	12,063	34.2	14.8	17.5
Buildings with Manufacturing	3	18	21	330	1,326	1,482	9.4	13.2	14.0
Buildings with Electricity Generation	Q	65	192	Q	3,074	9,547	Q	21.3	20.1

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Percent of Floorspace Heated									
Not Heated	12	7	Q	1,120	1,621	Q	10.9	4.3	Q
1 to 50	15	27	13	1,612	3,499	1,718	9.2	7.8	7.5
51 to 99	23	39	53	1,455	3,286	3,365	16.1	11.9	15.8
100	139	267	285	8,355	20,380	16,320	16.7	13.1	17.5
Percent of Floorspace Cooled									
Not Cooled	11	8	Q	2,142	2,757	Q	5.2	2.8	7.7
1 to 50	28	64	38	2,894	8,811	4,877	9.6	7.2	7.9
51 to 99	37	79	102	1,775	5,265	6,170	21.0	15.0	16.5
100	113	190	208	5,731	11,953	9,447	19.8	15.9	22.0
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	20	31	15	2,495	5,662	2,046	8.1	5.4	7.4
51 to 99	44	105	113	3,154	8,556	6,579	14.1	12.3	17.1
100	123	203	231	6,390	13,779	12,620	19.3	14.8	18.3
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	57	66	36	5,839	8,570	2,976	9.8	7.7	12.0
1 to 50	95	181	137	5,314	15,218	10,415	17.8	11.9	13.1
51 to 100	9	20	16	361	891	841	23.9	22.8	19.6
Building Never Closed/ Electricity Not Used	29	74	171	1,029	4,107	7,745	28.1	17.9	22.0
Heating Equipment (more than one may apply)									
Heat Pumps	21	65	68	1,147	4,074	3,593	18.2	15.9	18.8
Packaged Heat Pumps	15	41	50	686	2,402	2,354	21.2	17.0	21.2
Split-System Heat Pumps	6	18	Q	420	1,293	868	13.4	13.7	19.0
Individual Room Heat Pumps	Q	18	24	Q	1,113	1,509	Q	16.5	15.9
Furnaces	75	95	54	5,783	9,501	4,320	12.9	10.0	12.4
Individual Space Heaters	25	68	72	2,329	5,696	4,515	10.7	11.9	16.0
District Heat	Q	19	73	Q	1,162	3,903	Q	16.1	18.8
Boilers	16	100	180	1,234	8,490	10,699	12.7	11.8	16.8
Packaged Heating Units	66	130	114	2,758	8,541	6,722	24.1	15.2	17.0
Other	7	20	22	529	1,325	1,388	12.7	15.3	16.0
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	41	56	36	3,091	5,245	2,699	13.4	10.7	13.3
Heat Pumps	22	65	73	1,239	4,036	3,766	18.0	16.2	19.3
Packaged Heat Pumps	15	42	49	761	2,370	2,295	19.8	17.6	21.2
Split-System Heat Pumps	7	18	Q	436	1,289	880	15.0	13.7	18.9
Individual Room Heat Pumps	Q	18	31	Q	1,096	1,774	Q	16.5	17.5
Individual Air Conditioners	20	59	61	1,984	5,999	4,576	10.2	9.9	13.3
District Chilled Water	Q	13	43	Q	694	2,111	Q	19.0	20.2
Central Chillers	Q	54	189	Q	2,907	8,666	Q	18.7	21.8
Packaged Air Conditioning Units	102	196	164	4,698	14,256	11,016	21.8	13.7	14.9
Swamp Coolers	6	10	Q	385	776	Q	16.4	12.7	Q
Other	Q	Q	13	Q	Q	700	Q	Q	18.1

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	49	97	63	3,374	8,613	4,406	14.6	11.3	14.4
Cooling	61	117	108	3,903	10,012	7,080	15.7	11.7	15.2
Water Heating Equipment									
Centralized System	136	208	171	7,591	16,799	10,266	17.9	12.4	16.7
Distributed System	31	63	48	2,263	5,582	3,695	13.6	11.3	12.9
Combination of Centralized and Distributed System	Q	58	128	Q	3,327	6,702	Q	17.6	19.1
Lighting Equipment Types (more than one may apply)									
Incandescent	93	218	277	5,979	16,896	15,653	15.6	12.9	17.7
Standard Fluorescent	181	330	354	11,305	27,126	21,256	16.0	12.2	16.6
Compact Fluorescent	47	169	272	2,232	10,936	14,403	21.2	15.4	18.9
High Intensity Discharge	17	105	208	998	7,559	12,086	16.8	13.9	17.2
Halogen	30	102	181	1,385	6,585	9,734	21.9	15.4	18.6
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	164	308	340	9,071	23,752	20,150	18.1	13.0	16.9
Commercial Refrigeration	100	160	263	2,716	9,350	14,702	36.9	17.1	17.9
Walk-In Units	86	118	233	1,824	5,937	12,493	47.1	19.8	18.6
Cases or Cabinets	85	127	210	2,216	7,057	11,151	38.5	18.0	18.8
Residential-Type Units	80	207	231	6,783	17,774	14,328	11.8	11.7	16.1
Vending Machines	41	230	311	2,237	15,323	17,775	18.3	15.0	17.5
No Refrigeration	26	33	Q	3,472	5,034	1,827	7.4	6.5	10.6
Office Equipment (more than one may apply)									
Computers	150	330	351	8,727	26,064	20,837	17.2	12.7	16.8
With Flat Screen Monitors	39	160	266	2,173	10,178	14,065	18.1	15.7	18.9
Dedicated Servers	56	229	312	2,790	15,713	17,835	20.0	14.5	17.5
Laser Printers	91	188	175	5,598	16,584	10,830	16.3	11.3	16.2
Inkjet Printers	70	207	257	3,821	14,731	13,658	18.2	14.1	18.8
FAX Machines	130	314	347	7,520	24,274	20,580	17.3	13.0	16.9
Photocopiers	71	286	335	5,167	21,434	19,657	13.8	13.4	17.0
Number of Computers									
None	39	10	Q	3,816	2,723	Q	10.3	3.8	Q
1 to 4	89	52	Q	5,366	5,844	1,185	16.7	8.9	Q
5 to 9	30	42	Q	1,725	4,428	Q	17.2	9.5	Q
10 to 19	17	52	14	1,031	4,055	1,524	16.2	12.9	9.4
20 to 49	13	72	34	569	4,639	2,207	23.1	15.6	15.6
50 to 99	Q	47	28	Q	3,297	2,045	Q	14.3	13.6
100 to 249	Q	51	56	Q	3,165	3,522	Q	16.0	16.0
250 or More	N	14	198	N	636	9,327	N	21.7	21.2

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Number of Dedicated Servers									
None	134	112	48	9,753	13,073	4,142	13.7	8.6	11.5
1 to 4	51	172	119	2,667	13,017	8,432	19.1	13.2	14.1
5 to 9	Q	30	40	Q	1,491	2,305	Q	20.1	17.1
10 to 19	Q	14	48	Q	603	2,370	Q	23.8	20.2
20 to 49	N	9	44	N	482	2,101	N	19.5	21.0
50 or More	N	Q	62	N	Q	2,627	N	Q	23.5
Number of Photocopiers									
None	118	54	25	7,376	7,353	2,321	16.1	7.4	10.8
One	48	99	27	3,817	8,993	2,665	12.5	11.0	10.1
2 to 4	19	122	66	1,257	8,908	4,917	15.0	13.7	13.5
5 to 9	Q	38	53	Q	2,032	3,390	Q	18.5	15.5
10 or More	N	28	189	N	1,500	8,685	N	18.3	21.7
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	73	119	211	2,131	8,029	12,063	34.2	14.8	17.5
Activities with Large Amounts of Hot Water	38	113	191	1,477	7,554	10,451	25.7	14.9	18.3
Separate Computer Area	16	157	282	969	10,433	15,471	16.3	15.0	18.2
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	26	111	235	1,048	6,736	11,813	24.5	16.5	19.9
Economizer Cycle	29	133	251	1,102	7,217	12,789	26.5	18.4	19.6
HVAC Maintenance	133	304	356	7,121	23,011	21,019	18.6	13.2	16.9
Energy Management and Control System (EMCS)	9	80	191	364	4,973	10,294	24.8	16.0	18.6
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	104	228	260	6,162	17,228	15,337	16.9	13.3	17.0
Tinted Window Glass	68	163	262	3,766	11,952	13,908	18.1	13.6	18.9
Reflective Window Glass	12	48	94	694	2,919	4,915	16.8	16.3	19.1
External Overhangs or Awnings	70	112	100	3,596	7,868	5,709	19.4	14.2	17.5
Skylights or Atriums	10	56	123	733	4,605	7,170	13.8	12.1	17.2
Daylighting Sensors	Q	12	42	Q	789	1,864	Q	15.7	22.5
Specular Reflectors	38	145	253	2,184	10,058	13,875	17.3	14.4	18.2
Electronic Ballasts	124	276	332	7,346	20,431	19,105	16.8	13.5	17.4
Energy Management and Control System (EMCS) For Lighting	Q	21	67	Q	1,172	3,537	Q	18.1	19.0
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	112	221	233	8,146	19,476	15,084	13.7	11.3	15.5
Cooling	117	232	247	7,782	19,738	15,670	15.0	11.7	15.8
Lighting	154	253	180	10,689	23,175	13,123	14.4	10.9	13.7
Office Equipment	57	97	57	4,483	10,317	4,597	12.8	9.4	12.4

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	190	341	360	12,543	28,786	21,977	15.1	11.8	16.4
Annual Consumption (kilowatthours)									
10,000 or Less	4	Q	Q	1,954	Q	Q	1.8	Q	Q
10,001 to 50,000	39	6	Q	5,565	3,534	Q	7.0	1.8	Q
50,001 to 100,000	38	14	Q	2,527	3,373	Q	14.9	4.1	Q
100,001 to 500,000	94	112	3	2,345	11,928	1,838	40.2	9.4	1.6
500,001 to 1,000,000	Q	77	8	Q	4,927	1,684	Q	15.6	4.6
1,000,001 to 5,000,000	Q	129	137	Q	4,144	9,037	Q	31.1	15.1
Over 5,000,000	N	Q	212	N	Q	8,677	N	Q	24.4
Provider of Purchased Electricity (more than one may apply)									
Local Utility	182	314	296	12,150	27,035	18,668	15.0	11.6	15.8
Some Other Provider	7	23	60	351	1,399	3,196	20.1	16.4	18.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Building Floorspace (Square Feet)									
1,001 to 5,000	23	52	37	2,049	2,668	1,628	11.3	19.6	23.0
5,001 to 10,000	15	35	27	1,859	2,854	1,484	8.1	12.2	18.1
10,001 to 25,000	27	55	37	3,141	4,907	3,322	8.5	11.3	11.2
25,001 to 50,000	16	56	31	2,344	3,994	2,047	6.7	13.9	15.3
50,001 to 100,000	15	58	46	2,060	4,018	2,953	7.5	14.3	15.5
100,001 to 200,000	19	69	53	2,113	3,911	2,993	9.2	17.7	17.7
200,001 to 500,000	21	57	27	2,030	3,427	1,593	10.5	16.6	17.2
Over 500,000	18	65	29	1,566	2,986	1,357	11.4	21.9	21.4
Principal Building Activity									
Education	22	53	34	3,191	4,359	2,321	6.8	12.3	14.4
Food Sales	Q	29	Q	Q	585	Q	Q	50.0	Q
Food Service	10	22	31	613	524	517	16.7	42.9	59.4
Health Care	14	43	16	730	1,671	762	19.2	25.5	21.0
Inpatient	11	35	7	456	1,218	231	23.7	28.4	30.2
Outpatient	3	8	9	273	453	531	11.7	17.9	17.0
Lodging	10	39	20	1,236	2,564	1,296	Q	15.3	15.1
Retail (Other Than Mall)	8	24	29	1,026	1,804	1,487	8.2	13.3	19.7
Office	34	131	46	2,852	6,792	2,563	11.9	19.2	17.9
Public Assembly	7	20	22	1,455	1,445	1,035	4.6	13.9	21.6
Public Order and Safety	Q	7	Q	Q	385	Q	Q	18.5	Q
Religious Worship	4	6	7	1,522	1,328	904	2.9	4.8	8.1
Service	7	26	11	1,045	1,925	1,012	6.3	13.4	11.4
Warehouse and Storage	Q	25	30	1,941	3,851	3,633	8.3	6.5	8.4
Other	Q	19	14	Q	684	673	Q	28.0	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division									
Northeast	45	72	31	5,944	4,834	2,031	7.5	15.0	15.0
New England	8	16	Q	1,404	1,058	479	5.4	15.2	16.7
Middle Atlantic	37	56	22	4,540	3,776	1,552	8.2	14.9	14.5
Midwest	48	104	63	5,494	7,376	3,832	8.8	14.1	16.6
East North Central	37	73	43	3,932	5,036	2,405	9.4	14.6	17.9
West North Central	11	31	20	1,562	2,339	1,427	7.2	13.2	14.2
South	40	186	149	3,506	10,654	8,606	11.3	17.5	17.3
South Atlantic	24	94	92	2,043	5,175	4,878	11.6	18.3	18.9
East South Central	6	28	16	535	1,656	1,029	11.8	16.6	15.7
West South Central	10	64	41	927	3,822	2,700	10.4	16.7	15.1
West	22	85	45	2,220	5,902	2,909	10.1	14.4	15.5
Mountain	6	36	14	524	2,204	904	10.6	16.4	15.7
Pacific	17	49	31	1,695	3,697	2,005	9.9	13.1	15.4
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	24	61	35	3,335	4,624	2,435	7.1	13.2	14.3
5,500-7,000 HDD	53	115	56	5,898	7,607	3,571	8.9	15.2	15.7
4,000-5,499 HDD	38	84	44	4,024	4,894	2,458	9.4	17.3	17.9
Fewer than 4,000 HDD	28	108	83	2,908	7,309	4,954	9.8	14.8	16.7
2,000 CDD or More and --									
Fewer than 4,000 HDD	12	78	70	999	4,332	3,959	12.4	18.1	17.7

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Number of Floors									
One	49	148	137	4,653	11,401	8,881	10.5	13.0	15.5
Two	34	99	69	4,361	7,474	4,143	7.8	13.3	16.6
Three	25	37	23	3,351	2,465	1,565	7.3	14.9	14.4
Four to Nine	26	101	47	3,384	4,507	2,175	7.8	22.5	21.4
Ten or More	21	62	13	1,415	2,919	613	14.7	21.3	21.1
Elevators and Escalators (more than one may apply)									
Any Elevators	63	234	120	6,479	11,645	6,371	9.8	20.1	18.8
Number of Elevators									
One	17	49	37	2,292	3,249	2,567	7.5	15.2	14.5
Two to Five	22	99	50	2,812	4,792	2,516	7.8	20.7	20.0
Six or More	24	85	32	1,375	3,605	1,288	17.7	23.5	24.8
Any Escalators	Q	41	Q	Q	1,598	Q	Q	25.7	Q
Number of Workers (main shift)									
Fewer than 5	36	44	29	4,848	5,608	3,605	7.4	7.8	8.1
5 to 9	15	37	21	1,766	2,693	1,687	8.2	13.9	12.3
10 to 19	14	37	38	2,429	3,045	2,329	5.8	12.2	16.2
20 to 49	24	70	60	3,158	4,568	3,236	7.7	15.2	18.4
50 to 99	18	58	42	1,781	3,725	2,428	10.3	15.6	17.1
100 to 249	18	72	45	1,284	3,779	1,808	13.6	19.2	24.8
250 or More	30	129	54	1,896	5,347	2,285	15.8	24.1	23.8
Weekly Operating Hours									
Fewer than 40	6	12	8	2,019	2,548	1,333	3.2	4.6	6.1
40 to 48	26	61	30	3,627	5,076	2,868	7.2	11.9	10.4
49 to 60	38	92	46	4,564	7,361	3,777	8.2	12.5	12.1
61 to 84	26	71	48	2,728	4,607	2,976	9.6	15.4	16.2
85 to 167	20	64	69	1,353	2,818	2,770	14.6	22.9	25.0
Open Continuously	39	148	87	2,872	6,355	3,653	13.5	23.2	23.8
Ownership and Occupancy									
Nongovernment Owned	108	343	222	12,516	21,961	13,534	8.7	15.6	16.4
Owner Occupied	57	160	101	7,103	10,371	5,981	8.0	15.4	16.9
Nonowner Occupied	51	182	120	5,116	10,912	7,230	10.0	16.7	16.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	46	104	66	4,647	6,804	3,844	10.0	15.3	17.1
Federal	Q	17	Q	Q	737	Q	17.0	23.2	Q
State	9	34	17	816	2,122	848	11.1	15.8	20.2
Local	23	53	41	2,992	3,945	2,620	7.7	13.5	15.8
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	33	93	43	3,680	5,665	2,853	8.9	16.4	15.0
Not At All Vacant	120	352	244	12,832	22,251	14,179	9.4	15.8	17.2
Number of Establishments									
One	112	300	215	12,146	19,255	12,978	9.2	15.6	16.5
2 to 5	27	77	43	2,930	5,146	2,845	9.1	15.0	15.2
6 to 10	4	17	13	467	989	501	8.1	16.9	26.4
11 to 20	Q	17	Q	Q	974	Q	Q	17.8	Q
More than 20	9	34	Q	607	1,720	Q	14.8	19.9	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Predominant Exterior Wall Material									
Brick, Stone or Stucco	107	212	122	12,533	12,959	6,802	8.6	16.4	17.9
Concrete (Block or Poured)	30	78	46	2,664	5,391	2,683	11.4	14.5	17.3
Concrete Panels	Q	72	44	Q	3,493	2,728	Q	20.5	16.0
Siding or Shingles	8	16	20	1,128	1,512	1,335	6.9	10.7	15.0
Metal Panels	Q	41	40	485	3,854	3,038	10.7	10.7	13.3
Window Glass	Q	12	Q	Q	624	Q	Q	19.6	Q
Other	Q	11	Q	Q	726	Q	Q	15.7	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	61	173	71	6,451	10,404	3,926	9.5	16.6	18.2
Shingles (Not Wood)	26	55	40	3,179	4,128	2,564	8.2	13.3	15.7
Metal Surfacing	7	46	62	943	4,753	5,538	7.3	9.6	11.3
Synthetic or Rubber	35	132	93	3,525	6,945	4,240	10.0	19.0	22.0
Slate or Tile	9	10	12	1,164	701	572	7.6	13.9	20.7
Wooden Materials	Q	7	Q	Q	461	Q	Q	15.3	Q
Concrete	Q	12	Q	Q	666	Q	Q	17.5	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	91	138	N	9,053	8,584	N	10.0	16.1	N
Addition or Annex	31	61	N	3,069	3,482	N	10.1	17.7	N
Reduction In Floorspace	7	Q	N	501	Q	N	13.2	Q	N
Cosmetic Improvements	67	108	N	6,735	6,267	N	10.0	17.3	N
Wall or Roof Replacement	41	61	N	4,166	3,890	N	9.8	15.6	N
Interior Wall Re-Configuration	42	76	N	4,175	4,327	N	9.9	17.6	N
HVAC Equipment Upgrade	59	96	N	5,433	5,332	N	10.8	18.0	N
Lighting Upgrade	54	86	N	5,481	4,792	N	9.9	17.9	N
Window Replacement	36	38	N	4,013	2,264	N	8.9	16.7	N
Plumbing System Upgrade	39	53	N	4,011	3,130	N	9.8	16.9	N
Insulation Upgrade	23	28	N	2,209	1,803	N	10.3	15.6	N
Other Renovation	3	Q	N	451	Q	N	7.4	Q	N
No Renovations Since 1980	64	125	N	8,110	10,027	N	7.9	12.5	N
Building Newer than 1980	N	184	288	N	10,154	17,378	N	18.1	16.6
Energy Sources (more than one may apply)									
Electricity	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Natural Gas	106	318	210	12,091	19,763	11,608	8.7	16.1	18.1
Fuel Oil	44	139	67	4,995	6,951	3,196	8.8	20.1	20.9
District Heat	31	47	20	2,206	2,330	908	14.0	20.3	22.0
District Chilled Water	8	28	20	510	1,433	910	16.3	19.8	21.6
Propane	24	39	36	2,025	2,881	2,161	11.8	13.6	16.7
Other	2	14	Q	331	804	Q	6.9	17.1	Q

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Space-Heating Energy Sources									
Electricity	61	238	158	5,769	13,818	9,013	10.5	17.2	17.5
Electricity Main	23	144	98	1,886	8,416	5,694	12.4	17.1	17.3
Electricity Secondary	37	93	59	3,883	5,402	3,319	9.6	17.3	17.9
Other Excluding Electricity	89	198	120	10,661	13,711	7,019	8.4	14.4	17.0
Buildings without Heating	5	12	11	733	1,237	1,346	6.8	9.4	7.9
Primary Space-Heating Energy Source									
Electricity	23	144	98	1,886	8,416	5,694	12.4	17.1	17.3
Natural Gas	83	232	144	9,425	15,149	8,390	8.8	15.3	17.2
Fuel Oil	10	9	Q	2,583	958	Q	4.0	9.3	Q
District Heat	29	43	19	2,001	2,044	862	14.6	20.9	22.0
Propane	4	6	10	450	768	729	8.3	8.1	14.4
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Electricity	126	421	267	13,263	25,843	15,214	9.5	16.3	17.5
Other Excluding Electricity	Q	18	18	Q	1,090	922	Q	16.4	19.1
Buildings without Cooling	Q	8	4	3,308	1,832	1,241	5.7	4.4	2.9
Water-Heating Energy Sources									
Electricity	51	216	135	6,039	13,305	8,147	8.5	16.2	16.6
Other Excluding Electricity	85	216	144	8,530	13,104	7,338	9.9	16.5	19.7
Bldgs without Water Heating	Q	15	9	2,594	2,356	1,893	7.2	6.4	4.5
Cooking Energy Sources									
Electricity	38	132	79	3,320	6,449	3,392	11.3	20.4	23.4
Other Excluding Electricity	33	70	52	3,440	3,327	2,309	9.7	21.0	22.5
Buildings without Cooking	84	246	157	10,404	18,990	11,676	8.1	12.9	13.4
Energy End Uses (more than one may apply)									
Buildings with Space Heating	150	436	277	16,430	27,529	16,032	9.1	15.8	17.3
Buildings with Cooling	136	439	284	13,855	26,933	16,137	9.8	16.3	17.6
Buildings with Water Heating	136	432	279	14,569	26,409	15,484	9.3	16.4	18.0
Buildings with Cooking	71	202	131	6,760	9,776	5,701	10.5	20.6	23.0
Buildings with Manufacturing	7	20	15	928	1,480	730	7.2	13.4	20.3
Buildings with Electricity Generation	35	154	71	2,294	6,955	3,572	15.3	22.2	20.0
Percent of Floorspace Heated									
Not Heated	5	12	11	733	1,237	1,346	6.8	9.4	7.9
1 to 50	9	19	26	1,955	2,608	2,266	4.8	7.4	11.5
51 to 99	23	57	36	2,611	3,476	2,020	8.9	16.3	17.8
100	117	360	215	11,864	21,446	11,746	9.9	16.8	18.3
Percent of Floorspace Cooled									
Not Cooled	Q	8	4	3,308	1,832	1,241	5.7	4.4	2.9
1 to 50	31	59	40	5,393	7,014	4,176	5.8	8.3	9.6
51 to 99	39	111	68	3,663	6,171	3,377	10.6	18.1	20.2
100	66	269	176	4,799	13,748	8,584	13.8	19.6	20.5

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	18	26	22	3,977	3,766	2,461	4.5	6.9	8.9
51 to 99	46	144	71	4,889	9,002	4,398	9.4	16.0	16.3
100	89	274	194	7,611	15,221	9,957	11.7	18.0	19.4
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	37	67	56	5,199	7,017	5,169	7.1	9.5	10.8
1 to 50	76	213	123	8,854	14,432	7,662	8.6	14.8	16.1
51 to 100	3	20	22	238	961	894	12.7	20.8	25.1
Building Never Closed/ Electricity Not Used	39	148	87	2,872	6,355	3,653	13.5	23.2	23.8
Heating Equipment (more than one may apply)									
Heat Pumps	20	79	54	1,617	4,223	2,973	12.5	18.6	18.3
Packaged Heat Pumps	11	62	33	796	3,059	1,587	14.1	20.1	20.5
Split-System Heat Pumps	5	20	15	364	1,214	1,003	12.6	16.7	14.9
Individual Room Heat Pumps	9	20	15	753	1,050	888	11.6	19.1	16.5
Furnaces	51	100	73	5,908	8,367	5,329	8.5	11.9	13.7
Individual Space Heaters	29	89	48	3,645	5,661	3,233	7.8	15.6	14.9
District Heat	30	44	19	2,147	2,139	880	13.9	20.5	22.0
Boilers	65	164	66	7,751	9,099	3,573	8.4	18.1	18.5
Packaged Heating Units	32	156	123	2,791	9,252	5,978	11.3	16.9	20.5
Other	4	29	16	386	1,659	1,197	11.0	17.2	13.8
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	32	62	40	3,470	4,779	2,786	9.1	12.9	14.4
Heat Pumps	22	78	60	1,699	4,241	3,102	13.0	18.4	19.5
Packaged Heat Pumps	12	60	33	860	2,997	1,569	14.4	20.1	20.9
Split-System Heat Pumps	5	20	15	419	1,205	981	13.0	16.6	15.7
Individual Room Heat Pumps	9	22	20	716	1,183	1,041	12.0	18.4	19.2
Individual Air Conditioners	39	69	33	5,406	5,295	1,858	7.2	13.0	17.7
District Chilled Water	8	28	20	510	1,433	910	16.3	19.8	21.6
Central Chillers	37	153	55	2,346	6,900	2,390	15.8	22.2	23.0
Packaged Air Conditioning Units	71	229	162	7,068	13,851	9,050	10.1	16.5	18.0
Swamp Coolers	Q	16	Q	Q	1,072	Q	Q	15.3	Q
Other	Q	9	Q	Q	528	Q	Q	17.6	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	50	160	N	6,045	10,348	N	8.3	15.4	N
Cooling	72	215	N	7,686	13,309	N	9.3	16.1	N
Water Heating Equipment									
Centralized System	88	260	167	8,889	16,543	9,225	9.9	15.7	18.1
Distributed System	21	71	50	3,221	4,871	3,448	6.4	14.5	14.6
Combination of Centralized and Distributed System	28	101	62	2,459	4,996	2,812	11.2	20.2	22.1

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Lighting Equipment Types (more than one may apply)									
Incandescent	98	318	172	11,094	18,083	9,351	8.8	17.6	18.4
Standard Fluorescent	148	438	279	15,996	27,530	16,161	9.3	15.9	17.3
Compact Fluorescent	72	264	152	6,587	13,504	7,480	10.9	19.5	20.4
High Intensity Discharge	55	151	124	4,992	9,231	6,420	11.0	16.4	19.3
Halogen	44	163	107	4,079	8,102	5,522	10.7	20.1	19.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)[a]									
Any Refrigeration	131	410	271	13,973	24,165	14,836	9.4	17.0	18.3
Commercial Refrigeration	84	266	173	7,421	12,240	7,107	11.4	21.7	24.4
Walk-In Units	64	226	146	5,242	9,625	5,387	12.3	23.4	27.2
Cases or Cabinets	70	219	134	5,492	9,628	5,304	12.7	22.8	25.2
Residential-Type Units	90	269	160	11,110	17,563	10,211	8.1	15.3	15.7
Vending Machines	80	311	191	7,833	17,126	10,375	10.2	18.2	18.4
No Refrigeration	24	37	17	3,190	4,601	2,542	7.4	8.1	6.6
Office Equipment (more than one may apply)									
Computers	131	426	274	14,244	25,894	15,490	9.2	16.5	17.7
With Flat Screen Monitors	68	254	143	6,001	13,348	7,068	11.4	19.1	20.3
Dedicated Servers	84	322	190	8,136	17,936	10,265	10.4	17.9	18.5
Laser Printers	77	233	145	9,240	15,256	8,516	8.3	15.2	17.0
Inkjet Printers	77	275	182	6,987	15,573	9,650	11.1	17.6	18.8
FAX Machines	123	408	261	13,208	24,496	14,669	9.3	16.6	17.8
Photocopiers	106	362	224	11,473	21,832	12,952	9.2	16.6	17.3
Number of Computers									
None	24	21	14	2,920	2,872	1,888	8.1	7.4	7.2
1 to 4	30	64	59	4,022	5,011	3,362	7.5	12.7	17.6
5 to 9	14	35	31	2,124	2,820	2,236	6.5	12.5	14.0
10 to 19	11	39	33	1,268	3,254	2,088	8.8	12.1	15.8
20 to 49	19	55	46	1,808	3,178	2,428	10.4	17.3	18.9
50 to 99	13	44	19	1,607	2,523	1,246	8.3	17.3	15.1
100 to 249	16	56	36	1,507	3,277	1,907	10.3	17.1	19.0
250 or More	28	133	50	1,909	5,832	2,222	14.8	22.8	22.5
Number of Dedicated Servers									
None	70	125	98	9,027	10,829	7,112	7.8	11.6	13.8
1 to 4	49	177	115	5,444	11,560	7,112	9.1	15.3	16.2
5 to 9	10	37	26	1,078	1,607	1,180	9.4	23.0	22.3
10 to 19	10	33	20	795	1,468	764	13.1	22.3	26.4
20 to 49	Q	41	8	Q	1,921	423	Q	21.4	19.5
50 or More	10	34	20	581	1,380	787	17.5	24.7	25.4
Number of Photocopiers									
None	49	85	64	5,690	6,934	4,426	8.6	12.2	14.6
One	32	72	70	4,324	6,116	5,035	7.4	11.7	14.0
2 to 4	30	107	70	3,669	7,155	4,258	8.1	15.0	16.5
5 to 9	10	49	36	1,256	2,754	1,505	Q	17.8	23.6
10 or More	34	135	48	2,224	5,806	2,154	15.4	23.2	22.1

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	71	202	131	6,748	9,774	5,701	10.5	20.6	23.0
Activities with Large Amounts of Hot Water	52	178	111	4,912	9,140	5,430	10.6	19.5	20.5
Separate Computer Area	68	255	131	6,222	13,495	7,156	11.0	18.9	18.2
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	45	209	118	3,465	9,798	6,335	13.0	21.3	18.6
Economizer Cycle	53	233	127	3,618	11,196	6,294	14.6	20.8	20.1
HVAC Maintenance	127	399	266	13,084	23,498	14,569	9.7	17.0	18.3
Energy Management and Control System (EMCS)	35	158	87	2,975	8,078	4,577	11.6	19.5	19.1
Window and Interior Lighting Features (more than one may apply)									
Multipaned Windows	84	293	216	9,534	16,692	12,502	8.8	17.6	17.3
Tinted Window Glass	63	273	157	5,462	14,980	9,183	11.5	18.2	17.1
Reflective Window Glass	19	81	53	1,576	4,009	2,943	12.3	20.2	17.8
External Overhangs or Awnings	38	149	95	4,112	8,141	4,919	9.3	18.3	19.3
Skylights or Atriums	23	102	64	2,661	6,126	3,722	8.5	16.7	17.3
Daylighting Sensors	5	31	25	448	1,407	1,014	10.3	21.7	24.9
Specular Reflectors	64	226	146	6,340	12,258	7,519	10.1	18.4	19.4
Electronic Ballasts	122	371	240	11,938	21,721	13,223	10.2	17.1	18.1
Energy Management and Control System (EMCS) For Lighting	6	51	34	565	2,606	1,610	11.1	19.4	21.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	95	294	176	11,574	20,077	11,055	8.2	14.6	16.0
Cooling	99	304	192	11,103	20,157	11,930	9.0	15.1	16.1
Lighting	113	285	190	13,346	20,951	12,690	8.4	13.6	15.0
Office Equipment	46	96	69	6,195	8,140	5,062	7.4	11.8	13.7
Annual Consumption (kilowatthours)									
10,000 or Less	1	2	1	1,102	1,083	676	1.4	1.5	1.1
10,001 to 50,000	15	19	10	3,538	3,820	1,870	4.3	5.1	5.5
50,001 to 100,000	16	23	13	2,344	2,382	1,735	6.7	9.5	7.7
100,001 to 500,000	42	100	67	4,712	7,155	4,244	9.0	13.9	15.9
500,001 to 1,000,000	13	48	35	1,308	3,269	2,160	10.2	14.8	16.3
1,000,001 to 5,000,000	35	136	98	2,329	6,488	4,391	14.9	20.9	22.4
Over 5,000,000	32	120	63	1,830	4,568	2,301	17.4	26.3	27.2

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
**All Buildings* ..... **	155	447	288	17,163	28,766	17,378	9.0	15.5	16.6
Provider of Purchased Electricity (more than one may apply)									
Local Utility	142	395	254	15,846	26,253	15,754	8.9	15.0	16.2
Some Other Provider	15	51	25	1,329	2,366	1,250	11.1	21.5	19.8

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use electricity.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Building Floorspace (Square Feet)						
1,001 to 5,000	1,110	3,084	2.8	250	243	2,155
5,001 to 10,000	496	3,692	7.4	209	202	1,689
10,001 to 25,000	450	7,053	15.7	309	300	2,524
25,001 to 50,000	168	6,025	35.8	258	250	1,865
50,001 to 100,000	95	6,683	70.6	244	236	1,868
100,001 to 200,000	48	6,645	138.4	249	241	1,737
200,001 to 500,000	19	5,679	292.6	205	199	1,343
Over 500,000	5	4,606	919.5	204	198	1,344
Principal Building Activity						
Education	213	7,045	33.1	268	260	1,889
Food Sales	98	747	7.6	39	37	332
Food Service	226	1,396	6.2	203	197	1,615
Health Care	72	2,544	35.5	243	235	1,538
Inpatient	7	1,805	257.0	204	198	1,241
Outpatient	65	739	11.4	38	37	297
Lodging	86	4,256	49.7	215	208	1,581
Retail (Other Than Mall)	245	2,866	11.7	91	89	719
Office	488	8,208	16.8	269	261	2,201
Public Assembly	146	2,723	18.6	102	99	775
Public Order and Safety	36	637	17.7	29	28	234
Religious Worship	220	2,629	11.9	82	80	664
Service	281	2,496	8.9	139	135	1,096
Warehouse and Storage	187	5,494	29.4	132	128	976
Other	45	1,252	27.9	87	85	684
Vacant	49	1,176	24.2	28	27	220
Year Constructed						
Before 1920	200	2,759	13.8	143	139	1,134
1920 to 1945	338	4,679	13.9	229	223	1,708
1946 to 1959	313	4,659	14.9	216	210	1,610
1960 to 1969	309	5,635	18.2	255	248	1,872
1970 to 1979	391	7,659	19.6	351	341	2,466
1980 to 1989	303	6,469	21.3	291	282	2,270
1990 to 1999	419	8,177	19.5	314	305	2,452
2000 to 2003	118	3,431	29.1	127	123	1,012
Census Region and Division						
Northeast	397	9,181	23.1	428	415	3,553
New England	74	1,465	19.8	75	73	673
Middle Atlantic	323	7,716	23.9	353	343	2,880
Midwest	802	13,163	16.4	705	683	4,844
East North Central	546	9,570	17.5	528	512	3,649
West North Central	255	3,593	14.1	177	171	1,195
South	714	13,311	18.6	474	460	3,866
South Atlantic	308	6,326	20.5	217	210	1,934
East South Central	155	2,281	14.7	102	99	817
West South Central	251	4,704	18.7	156	151	1,115
West	479	7,813	16.3	320	311	2,261
Mountain	190	2,797	14.7	167	162	1,089
Pacific	289	5,016	17.4	153	149	1,172

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	493	7,645	15.5	431	418	3,076
5,500-7,000 HDD	718	12,850	17.9	679	659	4,901
4,000-5,499 HDD	347	8,113	23.4	337	327	2,702
Fewer than 4,000 HDD	646	10,509	16.3	358	347	2,920
2,000 CDD or More and --						
Fewer than 4,000 HDD	187	4,350	23.2	122	119	925
Number of Floors						
One	1,431	14,940	10.4	664	644	5,406
Two	617	11,441	18.5	491	476	3,627
Three	242	5,668	23.5	241	234	1,816
Four to Nine	93	7,670	82.1	378	367	2,560
Ten or More	9	3,749	437.6	154	149	1,116
Number of Workers (main shift)						
Fewer than 5	1,082	7,023	6.5	272	264	2,308
5 to 9	474	4,084	8.6	198	192	1,666
10 to 19	359	5,317	14.8	242	235	1,841
20 to 49	289	8,212	28.5	395	383	2,951
50 to 99	113	6,156	54.7	241	234	1,780
100 to 249	52	5,127	98.1	235	228	1,652
250 or More	23	7,549	333.2	344	334	2,327
Weekly Operating Hours						
Fewer than 40	382	3,259	8.5	107	104	892
40 to 48	569	6,913	12.1	249	242	2,018
49 to 60	607	10,191	16.8	374	363	2,928
61 to 84	374	7,468	20.0	314	305	2,373
85 to 167	233	5,225	22.4	257	249	1,906
Open Continuously	225	10,411	46.2	626	607	4,407
Ownership and Occupancy						
Nongovernment Owned	2,078	33,317	16.0	1,503	1,458	11,558
Owner Occupied	1,044	16,548	15.8	708	686	5,361
Nonowner Occupied	997	15,886	15.9	779	756	6,070
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	313	10,150	32.4	425	412	2,967
Federal	23	1,083	46.3	35	34	226
State	72	2,438	33.8	98	95	748
Local	218	6,630	30.4	291	283	1,993
Vacancy Status						
Completely Vacant	37	933	25.6	18	18	142
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	264	8,446	32.0	318	308	2,477
Not At All Vacant	2,079	33,845	16.3	1,582	1,534	11,828

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Number of Establishments						
One	1,912	30,518	16.0	1,462	1,418	10,950
2 to 5	382	7,593	19.9	307	298	2,377
6 to 10	39	1,355	34.5	48	47	366
11 to 20	12	1,271	102.6	34	33	248
More than 20	9	1,797	Q	58	56	441
Currently Unoccupied	37	933	25.6	18	18	142
Predominant Exterior Wall Material						
Brick, Stone or Stucco	1,292	23,551	18.2	1,127	1,093	8,403
Concrete (Block or Poured)	423	7,323	17.3	351	340	2,622
Concrete Panels	83	4,680	56.4	180	174	1,326
Siding or Shingles	261	1,997	7.7	85	83	735
Metal Panels	276	4,023	14.6	130	126	1,059
Window Glass	11	696	65.0	14	14	83
Other	33	898	26.9	35	34	248
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	649	15,208	23.4	743	720	5,529
Shingles (Not Wood)	677	6,519	9.6	310	301	2,482
Metal Surfacing	436	5,781	13.2	194	188	1,516
Synthetic or Rubber	363	11,838	32.7	542	526	3,905
Slate or Tile	152	1,574	10.4	67	65	562
Wooden Materials	59	526	8.9	21	20	160
Concrete	34	Q	Q	24	23	168
Other	Q	Q	Q	Q	Q	Q
No One Major Type	13	378	29.1	16	16	124
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation Since 1980	641	13,270	20.7	684	663	4,851
Addition or Annex	158	5,036	31.8	304	295	1,982
Reduction In Floorspace	18	964	53.6	52	50	390
Cosmetic Improvements	477	10,073	21.1	497	482	3,587
Wall or Roof Replacement	234	6,328	27.0	278	270	1,966
Interior Wall Re-Configuration	278	7,019	25.2	342	331	2,430
HVAC Equipment Upgrade	306	8,482	27.7	467	453	3,281
Lighting Upgrade	304	8,104	26.7	397	386	2,868
Window Replacement	195	5,000	25.6	242	235	1,734
Plumbing System Upgrade	213	5,714	26.8	287	278	2,051
Insulation Upgrade	142	2,960	20.8	132	128	978
Other Renovation	12	443	37.4	26	25	Q
No Renovations Since 1980	910	12,120	13.3	512	497	3,939
Building Newer than 1980	840	18,077	21.5	732	710	5,734

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Energy Sources (more than one may apply)						
Electricity	2,390	43,461	18.2	1,927	1,869	14,523
Natural Gas	2,391	43,468	18.2	1,928	1,870	14,525
Fuel Oil	129	10,383	80.4	507	492	3,539
District Heat	25	2,444	99.5	47	46	323
District Chilled Water	17	1,765	101.7	35	34	244
Propane	47	2,470	52.7	106	103	751
Other	39	903	23.4	47	46	330
Space-Heating Energy Sources						
Natural Gas	2,165	36,959	17.1	1,803	1,749	13,515
Natural Gas Main	1,999	32,970	16.5	1,687	1,636	12,586
Natural Gas Secondary	166	3,989	24.0	116	113	929
Other Excluding Natural Gas	179	6,015	33.6	106	103	862
Buildings without Heating	47	494	10.6	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	281	6,162	21.9	177	171	1,434
Natural Gas	1,999	32,970	16.5	1,687	1,636	12,586
Fuel Oil	38	Q	42.3	20	20	162
District Heat	24	2,117	90.0	23	22	172
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Natural Gas	17	1,018	58.9	92	89	672
Other Excluding Natural Gas	2,136	40,006	18.7	1,729	1,677	13,046
Buildings without Cooling	238	2,444	10.3	107	104	807
Water-Heating Energy Sources						
Natural Gas	1,445	28,820	19.9	1,509	1,463	11,092
Other Excluding Natural Gas	681	12,313	18.1	361	350	2,933
Bldgs without Water Heating	265	2,334	8.8	57	56	500
Cooking Energy Sources						
Natural Gas	457	15,438	33.8	856	830	6,157
Other Excluding Natural Gas	107	3,218	30.0	141	137	1,007
Buildings without Cooking	1,827	24,812	13.6	931	903	7,361
Energy End Uses (more than one may apply)						
Buildings with Space Heating	2,344	42,974	18.3	1,909	1,852	14,377
Buildings with Cooling	2,153	41,023	19.1	1,821	1,766	13,718
Buildings with Water Heating	2,126	41,134	19.3	1,870	1,814	14,025
Buildings with Cooking	564	18,656	33.1	997	967	7,163
Buildings with Manufacturing	70	2,301	33.1	100	97	718
Buildings with Electricity Generation	104	10,402	99.7	534	518	3,718

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Percent of Floorspace Heated						
Not Heated	47	494	10.6	Q	Q	Q
1 to 50	231	4,006	17.4	97	94	831
51 to 99	317	5,965	18.8	268	260	2,078
100	1,796	33,002	18.4	1,544	1,498	11,468
Percent of Floorspace Cooled						
Not Cooled	238	2,444	10.3	107	104	807
1 to 50	601	12,132	20	452	438	3,465
51 to 99	402	9,732	24	451	438	3,341
100	1,150	19,159	17	918	890	6,912
Heating Equipment (more than one may apply)						
Heat Pumps	152	5,552	37	224	217	1,804
Packaged Heat Pumps	86	3,323	39	140	135	1,115
Split-System Heat Pumps	50	1,453	29	42	41	361
Individual Room Heat Pumps	32	2,195	69	84	81	648
Furnaces	1,314	15,304	12	673	653	5,095
Individual Space Heaters	429	8,969	21	379	368	2,720
District Heat	24	2,291	95	39	38	269
Boilers	432	18,174	42	1,040	1,009	7,418
Packaged Heating Units	586	13,618	23	582	564	4,477
Other	85	1,801	21	47	46	368
Cooling Equipment (more than one may apply)						
Residential-Type Central Air Conditioners	652	7,982	12	391	379	2,867
Heat Pumps	176	5,832	33	234	227	1,887
Packaged Heat Pumps	100	3,352	33	145	141	1,163
Split-System Heat Pumps	59	1,489	25	45	43	382
Individual Room Heat Pumps	31	2,380	76	85	83	660
Individual Air Conditioners	392	9,114	23	410	398	3,040
District Chilled Water	17	1,765	102	35	34	244
Central Chillers	78	9,100	117	501	486	3,461
Packaged Air Conditioning Units	1,116	23,806	21	1,090	1,057	8,210
Swamp Coolers	78	1,265	16	81	78	520
Other	16	808	50	52	51	377
Main Equipment Replaced Since 1990 (more than one may apply)						
Heating	734	12,275	17	605	587	4,519
Cooling	873	16,047	18	779	756	5,761
Water Heating Equipment						
Centralized System	1,560	25,353	16	1,226	1,189	9,346
Distributed System	438	7,559	17	254	247	1,989
Combination of Centralized and Distributed System	128	8,222	64	390	378	2,691

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

	All Buildings* Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	563	18,644	33	996	966	7,156
Activities with Large Amounts of Hot Water	404	16,023	40	931	903	6,466
Separate Computer Area	373	20,615	55	875	849	6,230
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	290	14,594	50	710	688	5,070
Economizer Cycle	348	16,655	48	805	781	5,703
HVAC Maintenance	1,576	36,984	24	1,659	1,609	12,356
Energy Management and Control System (EMCS)	155	11,626	75	477	463	3,318
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]						
Heating	1,727	31,179	18	1,292	1,253	9,840
Cooling	1,676	31,437	19	1,288	1,249	9,785
Lighting	2,043	31,070	15	1,250	1,213	9,710
Office Equipment	863	12,670	15	476	462	3,666
Annual Consumption (hundred cubic feet)						
1,000 or Less	674	4,336	6	37	35	411
1,001 to 5,000	1,011	9,732	10	249	242	2,223
5,001 to 10,000	339	6,254	19	247	239	2,042
10,001 to 25,000	232	7,767	34	360	349	2,796
25,001 to 50,000	85	5,534	65	293	284	2,161
50,001 to 100,000	30	3,969	132	218	211	1,450
Over 100,000	21	5,875	285	525	510	3,441
Provider of Natural Gas (more than one may apply)						
Local Utility	2,255	38,362	17	1,631	1,582	12,577
Some Other Provider	149	6,372	43	389	377	2,537

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Building Floorspace (Square Feet)									
1,001 to 5,000	219	78.7	42.6	23.7	46.3	92.0	1.9	0.70	8.88
5,001 to 10,000	408	54.8	42.5	13.9	28.8	65.7	3.4	0.46	8.34
10,001 to 25,000	667	42.5	40.8	14.4	29.2	52.1	5.6	0.36	8.41
25,001 to 50,000	1,483	41.5	39.1	16.0	31.5	55.3	11.1	0.31	7.46
50,001 to 100,000	2,498	35.4	39.1	10.1	27.6	48.8	19.7	0.28	7.90
100,001 to 200,000	5,029	36.3	26.1	6.1	23.6	55.2	36.2	0.26	7.19
200,001 to 500,000	10,234	35.0	35.5	10.0	22.7	47.2	69.2	0.24	6.76
Over 500,000	39,551	43.0	28.8	2.8	20.0	71.9	268.2	0.29	6.78
Principal Building Activity									
Education	1,223	36.9	28.0	14.9	31.9	60.8	8.9	0.27	7.27
Food Sales	383	50.2	38.0	18.9	39.8	69.4	3.4	0.44	8.85
Food Service	870	141.2	72.0	77.0	150.3	301.8	7.1	1.16	8.20
Health Care	3,283	92.5	44.1	19.1	40.1	65.7	21.5	0.60	6.54
Inpatient	28,222	109.8	56.2	77.1	112.3	145.1	176.8	0.69	6.26
Outpatient	574	50.2	20.6	16.2	34.2	56.0	4.6	0.40	8.01
Lodging	2,432	48.9	101.2	19.8	36.7	76.4	18.5	0.37	7.59
Retail (Other Than Mall)	362	30.9	41.3	16.5	28.7	66.8	2.9	0.25	8.11
Office	535	31.8	13.8	17.2	35.7	56.9	4.5	0.27	8.42
Public Assembly	678	36.4	63.0	13.0	28.9	53.5	5.3	0.28	7.83
Public Order and Safety	771	43.7	39.8	26.6	49.8	76.8	6.5	0.37	8.43
Religious Worship	362	30.3	70.2	12.9	29.5	53.0	3.0	0.25	8.33
Service	481	54.1	52.2	22.9	44.5	82.6	3.9	0.44	8.12
Warehouse and Storage	687	23.4	42.1	9.3	22.1	37.5	5.2	0.18	7.60
Other	1,885	67.6	59.7	22.6	46.3	82.8	15.3	0.55	8.09
Vacant	557	23.0	Q	7.4	21.7	44.6	4.5	0.19	8.14
Year Constructed									
Before 1920	693	50.3	58.8	24.6	46.8	70.7	5.7	0.41	8.16
1920 to 1945	659	47.6	44.5	17.5	36.0	68.2	5.1	0.37	7.67
1946 to 1959	670	45.1	47.2	21.9	39.0	76.8	5.1	0.35	7.67
1960 to 1969	802	44.0	41.1	18.2	38.0	70.9	6.1	0.33	7.56
1970 to 1979	872	44.5	35.9	19.4	36.3	71.7	6.3	0.32	7.24
1980 to 1989	931	43.7	30.2	15.2	30.3	71.8	7.5	0.35	8.04
1990 to 1999	727	37.2	25.1	15.1	32.0	69.7	5.9	0.30	8.05
2000 to 2003	1,042	35.8	38.7	14.5	35.0	69.1	8.6	0.30	8.25
Census Region and Division									
Northeast	1,047	45.2	36.7	22.5	46.2	80.8	9.0	0.39	8.56
New England	981	49.5	38.4	15.9	41.1	61.7	9.1	0.46	9.27
Middle Atlantic	1,062	44.4	36.3	25.1	48.4	82.9	8.9	0.37	8.41
Midwest	853	51.9	49.5	25.6	45.4	81.2	6.0	0.37	7.09
East North Central	938	53.5	49.8	27.4	47.7	85.0	6.7	0.38	7.12
West North Central	671	47.6	48.7	23.4	43.9	74.1	4.7	0.33	6.98
South	644	34.6	27.4	12.5	26.3	52.8	5.4	0.29	8.40
South Atlantic	683	33.2	20.8	12.7	30.1	55.7	6.3	0.31	9.20
East South Central	635	43.3	45.9	14.4	25.1	45.9	5.3	0.36	8.28
West South Central	603	32.2	33.5	9.6	24.0	58.9	4.4	0.24	7.37
West	649	39.8	30.9	11.5	27.2	58.4	4.7	0.29	7.28
Mountain	853	57.9	51.1	28.3	49.8	92.0	5.7	0.39	6.72
Pacific	516	29.7	21.6	7.1	17.2	37.7	4.1	0.23	7.88

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	849	54.7	51.2	29.6	46.4	85.7	6.2	0.40	7.35
5,500-7,000 HDD	917	51.3	46.9	25.3	46.1	80.2	6.8	0.38	7.44
4,000-5,499 HDD	941	40.3	33.2	20.2	38.4	70.1	7.8	0.33	8.27
Fewer than 4,000 HDD	538	33.0	29.2	11.5	23.4	46.2	4.5	0.28	8.41
2,000 CDD or More and --									
Fewer than 4,000 HDD	634	27.3	14.8	6.1	16.0	47.9	4.9	0.21	7.79
Number of Floors									
One	450	43.1	41.3	18.9	37.9	73.7	3.8	0.36	8.40
Two	772	41.6	42.8	16.6	33.9	63.9	5.9	0.32	7.61
Three	967	41.2	38.5	19.2	40.2	70.7	7.5	0.32	7.77
Four to Nine	3,929	47.9	29.2	13.7	41.8	70.3	27.4	0.33	6.98
Ten or More	17,396	39.8	22.5	5.2	23.2	54.9	130.2	0.30	7.49
Number of Workers (main shift)									
Fewer than 5	244	37.6	114.5	15.7	34.3	66.8	2.1	0.33	8.74
5 to 9	405	47.1	61.8	19.2	40.4	78.8	3.5	0.41	8.67
10 to 19	655	44.2	51.5	19.9	38.4	88.1	5.1	0.35	7.84
20 to 49	1,327	46.6	44.6	20.5	40.5	76.6	10.2	0.36	7.71
50 to 99	2,078	38.0	32.6	18.6	34.6	58.8	15.8	0.29	7.61
100 to 249	4,355	44.4	30.0	11.3	34.5	68.9	31.6	0.32	7.26
250 or More	14,736	44.2	17.9	4.1	21.8	55.5	102.7	0.31	6.97
Weekly Operating Hours									
Fewer than 40	272	31.9	61.6	12.9	30.3	53.7	2.3	0.27	8.59
40 to 48	425	35.0	27.3	16.3	32.3	59.9	3.5	0.29	8.34
49 to 60	598	35.6	29.0	17.4	35.9	64.7	4.8	0.29	8.07
61 to 84	816	40.8	36.8	20.2	44.9	90.9	6.4	0.32	7.78
85 to 167	1,069	47.7	27.5	23.1	62.2	173.1	8.2	0.36	7.65
Open Continuously	2,692	58.3	52.4	23.4	46.0	81.5	19.6	0.42	7.26
Ownership and Occupancy									
Nongovernment Owned	701	43.7	38.4	17.5	37.3	71.3	5.6	0.35	7.93
Owner Occupied	657	41.5	35.1	17.0	35.1	62.3	5.1	0.32	7.81
Nonowner Occupied	758	47.6	41.1	19.3	39.1	82.6	6.1	0.38	8.03
Unoccupied	Q	Q	N	8.4	18.7	47.1	Q	Q	Q
Government Owned	1,315	40.6	29.4	19.2	36.0	64.4	9.5	0.29	7.20
Federal	1,455	31.4	18.4	13.7	45.4	93.5	9.6	0.21	6.63
State	1,323	39.1	16.6	19.2	29.8	61.0	10.4	0.31	7.83
Local	1,297	42.6	44.0	19.2	40.3	64.4	9.2	0.30	7.05
Vacancy Status									
Completely Vacant	480	18.8	N	8.4	21.7	47.1	3.9	0.15	8.10
Mostly Vacant	Q	Q	Q	6.5	35.9	41.2	Q	Q	Q
Partially Vacant	1,169	36.5	26.1	16.3	34.3	63.9	9.4	0.29	8.04
Not At All Vacant	738	45.3	38.3	18.7	37.9	73.7	5.7	0.35	7.71

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Number of Establishments									
One	742	46.5	44.8	19.3	38.4	74.4	5.7	0.36	7.72
2 to 5	779	39.2	33.7	15.9	33.6	62.3	6.2	0.31	7.99
6 to 10	1,186	34.4	9.2	6.8	27.0	54.7	9.3	0.27	7.86
11 to 20	2,685	26.2	14.2	6.1	16.9	35.7	20.0	0.20	7.47
More than 20	Q	31.4	14.0	12.1	30.1	40.3	Q	0.25	7.82
Currently Unoccupied	480	18.8	N	8.4	21.7	47.1	3.9	0.15	8.10
Predominant Exterior Wall Material									
Brick, Stone or Stucco	846	46.4	40.8	17.0	36.6	72.5	6.5	0.36	7.69
Concrete (Block or Poured)	803	46.4	47.2	21.7	41.3	77.9	6.2	0.36	7.71
Concrete Panels	2,100	37.3	19.6	16.3	32.6	62.6	16.0	0.28	7.60
Siding or Shingles	317	41.4	35.3	22.3	40.9	69.4	2.8	0.37	8.88
Metal Panels	458	31.4	32.4	12.8	28.1	60.3	3.8	0.26	8.39
Window Glass	1,311	20.2	12.1	28.3	28.7	47.9	7.8	0.12	5.94
Other	1,012	37.6	26.5	17.0	23.4	57.2	7.4	0.28	7.35
No One Major Type	Q	Q	Q	7.4	29.6	39.5	Q	Q	Q
Predominant Roof Material									
Built-Up	1,110	47.4	39.3	19.2	41.7	78.3	8.5	0.36	7.68
Shingles (Not Wood)	444	46.1	45.2	19.5	35.8	61.8	3.7	0.38	8.25
Metal Surfacing	431	32.6	37.3	13.7	28.8	60.3	3.5	0.26	8.05
Synthetic or Rubber	1,450	44.4	30.0	21.2	41.3	83.9	10.8	0.33	7.43
Slate or Tile	425	41.1	34.2	13.9	34.4	79.6	3.7	0.36	8.69
Wooden Materials	343	38.6	33.0	12.8	27.1	54.4	2.7	0.30	7.90
Concrete	677	Q	20.8	9.5	21.7	98.7	5.0	Q	7.36
Other	Q	Q	Q	32.0	47.5	61.8	Q	Q	Q
No One Major Type	1,219	42.0	Q	34.9	49.5	68.0	9.5	0.33	7.80
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	1,035	50.0	42.2	21.4	40.1	74.1	7.6	0.37	7.32
Addition or Annex	1,865	58.6	54.7	26.4	47.9	85.0	12.5	0.39	6.71
Reduction In Floorspace	2,781	51.8	48.2	29.1	62.1	128.1	21.7	0.40	7.80
Cosmetic Improvements	1,010	47.8	38.9	20.9	39.0	70.8	7.5	0.36	7.44
Wall or Roof Replacement	1,152	42.6	34.6	18.4	37.9	62.1	8.4	0.31	7.28
Interior Wall Re-Configuration	1,191	47.2	36.1	21.6	39.7	71.1	8.7	0.35	7.33
HVAC Equipment Upgrade	1,480	53.4	40.5	19.2	40.9	74.1	10.7	0.39	7.24
Lighting Upgrade	1,270	47.6	38.2	18.4	39.4	69.7	9.4	0.35	7.44
Window Replacement	1,205	47.0	41.4	18.4	35.6	67.2	8.9	0.35	7.37
Plumbing System Upgrade	1,303	48.7	40.0	20.9	42.4	71.3	9.6	0.36	7.38
Insulation Upgrade	897	43.1	32.8	18.4	37.9	69.4	6.9	0.33	7.66
Other Renovation	2,147	57.4	Q	27.8	41.2	133.6	Q	Q	Q
No Renovations Since 1980	546	41.0	42.8	17.9	37.7	70.8	4.3	0.33	7.93
Building Newer than 1980	845	39.3	28.8	15.1	31.9	69.7	6.8	0.32	8.08

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Energy Sources (more than one may apply)									
Electricity	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Natural Gas	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Fuel Oil	3,808	47.3	35.0	11.3	35.9	68.7	27.4	0.34	7.20
District Heat	1,856	18.7	6.6	1.3	3.4	9.7	13.2	0.13	7.09
District Chilled Water	1,956	19.2	6.0	1.7	6.6	43.7	14.1	0.14	7.19
Propane	2,197	41.7	52.5	19.8	43.0	109.0	16.0	0.30	7.30
Other	1,188	50.7	36.6	17.3	25.3	45.1	8.6	0.36	7.20
Space-Heating Energy Sources									
Natural Gas	808	47.3	42.7	19.4	37.9	71.3	6.2	0.37	7.73
Natural Gas Main	819	49.6	44.5	20.7	38.9	71.7	6.3	0.38	7.69
Natural Gas Secondary	678	28.3	27.1	10.3	22.4	49.2	5.6	0.23	8.23
Other Excluding Natural Gas	574	17.1	9.7	6.1	23.5	65.0	4.8	0.14	8.38
Buildings without Heating	Q	Q	Q	5.9	12.9	54.7	Q	Q	8.40
Primary Space-Heating Energy Source									
Electricity	609	27.8	24.2	11.2	27.2	72.8	5.1	0.23	8.38
Natural Gas	819	49.6	44.5	20.7	38.9	71.7	6.3	0.38	7.69
Fuel Oil	522	Q	19.5	4.3	12.7	28.6	4.3	Q	8.28
District Heat	Q	10.5	3.4	1.1	2.8	7.9	Q	0.08	7.71
Propane	Q	Q	Q	2.9	2.9	2.9	Q	Q	Q
Other	Q	Q	Q	0.0	20.7	25.1	Q	Q	Q
Cooling Energy Sources									
Natural Gas	5,156	87.6	66.4	16.4	42.9	105.2	38.9	0.66	7.54
Other Excluding Natural Gas	785	41.9	33.9	17.9	36.6	70.8	6.1	0.33	7.78
Buildings without Cooling	435	42.4	89.1	17.2	37.9	72.5	3.4	0.33	7.79
Water-Heating Energy Sources									
Natural Gas	1,013	50.8	40.9	20.2	41.5	81.1	7.7	0.38	7.58
Other Excluding Natural Gas	515	28.5	23.5	15.0	32.8	62.8	4.3	0.24	8.37
Bldgs without Water Heating	210	23.9	42.7	11.7	25.6	41.0	1.9	0.21	8.98
Cooking Energy Sources									
Natural Gas	1,819	53.8	43.7	30.9	68.6	173.1	13.5	0.40	7.41
Other Excluding Natural Gas	1,273	42.4	38.6	21.8	36.0	68.0	9.4	0.31	7.37
Buildings without Cooking	494	36.4	30.7	15.7	31.9	61.4	4.0	0.30	8.16
Energy End Uses (more than one may apply)									
Buildings with Space Heating	790	43.1	35.9	18.4	37.4	70.9	6.1	0.33	7.76
Buildings with Cooling	820	43.0	34.8	17.9	36.6	70.9	6.4	0.33	7.77
Buildings with Water Heating	853	44.1	35.8	19.1	38.9	74.5	6.6	0.34	7.73
Buildings with Cooking	1,715	51.8	42.9	26.6	56.2	144.0	12.7	0.38	7.41
Buildings with Manufacturing	1,402	42.3	40.1	13.3	37.4	62.6	10.3	0.31	7.37
Buildings with Electricity Generation	4,964	49.8	33.8	20.7	41.6	72.0	35.6	0.36	7.18

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	5.9	12.9	54.7	Q	Q	8.40
1 to 50	408	23.5	34.9	6.9	20.2	40.9	3.6	0.21	8.81
51 to 99	820	43.6	37.2	14.5	29.2	66.8	6.6	0.35	8.00
100	834	45.4	35.8	21.5	40.4	75.1	6.4	0.35	7.66
Percent of Floorspace Cooled									
Not Cooled	435	42.4	89.1	17.2	37.9	72.5	3.4	0.33	7.79
1 to 50	729	36.1	52.5	16.5	31.5	62.6	5.8	0.29	7.91
51 to 99	1,088	45.0	36.1	17.0	34.8	65.0	8.3	0.34	7.64
100	774	46.5	29.3	19.3	40.4	76.6	6.0	0.36	7.76
Heating Equipment (more than one may apply)									
Heat Pumps	1,431	39.1	31.5	11.8	32.0	52.5	11.9	0.32	8.30
Packaged Heat Pumps	1,584	40.8	28.8	11.3	36.0	55.5	13.0	0.34	8.23
Split-System Heat Pumps	813	28.2	25.8	9.3	23.0	41.5	7.2	0.25	8.82
Individual Room Heat Pumps	2,561	37.0	33.4	19.4	36.0	60.3	20.5	0.30	7.99
Furnaces	497	42.7	44.3	19.7	36.2	67.4	3.9	0.33	7.80
Individual Space Heaters	857	41.0	38.1	19.2	32.3	59.1	6.3	0.30	7.39
District Heat	1,582	16.6	5.7	1.1	2.8	9.7	11.2	0.12	7.08
Boilers	2,334	55.5	47.6	29.7	54.4	91.5	17.2	0.41	7.35
Packaged Heating Units	962	41.4	34.5	14.3	32.8	75.6	7.6	0.33	7.93
Other	539	25.5	26.7	17.2	30.8	55.8	4.3	0.20	8.01
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	582	47.5	43.6	18.8	37.0	68.9	4.4	0.36	7.56
Heat Pumps	1,290	38.9	31.4	12.3	32.0	55.7	10.7	0.32	8.32
Packaged Heat Pumps	1,405	42.1	29.4	11.8	33.5	60.0	11.6	0.35	8.24
Split-System Heat Pumps	727	29.0	26.9	9.3	26.8	41.5	6.4	0.26	8.84
Individual Room Heat Pumps	2,638	34.7	31.8	19.4	36.0	60.3	21.1	0.28	7.99
Individual Air Conditioners	1,015	43.7	48.0	17.5	37.4	68.6	7.8	0.33	7.64
District Chilled Water	1,956	19.2	6.0	1.7	6.6	43.7	14.1	0.14	7.19
Central Chillers	6,235	53.4	37.1	21.1	41.7	76.4	44.4	0.38	7.12
Packaged Air Conditioning Units	947	44.4	38.3	18.2	36.0	73.6	7.4	0.34	7.77
Swamp Coolers	1,001	61.7	62.5	19.2	36.2	92.0	6.7	0.41	6.66
Other	3,126	62.8	45.9	11.9	30.9	112.3	23.2	0.47	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	800	47.8	44.7	19.2	38.0	68.2	6.2	0.37	7.70
Cooling	865	47.1	40.4	16.5	38.5	70.8	6.6	0.36	7.62
Water Heating Equipment									
Centralized System	763	46.9	41.1	19.8	39.9	76.8	6.0	0.37	7.86
Distributed System	564	32.7	32.5	14.6	36.2	68.0	4.5	0.26	8.06
Combination of Centralized and Distributed System	2,941	46.0	26.8	18.8	39.6	73.3	20.9	0.33	7.12

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per-centile	Median	75th Per-centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
**All Buildings* ..... **	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	1,715	51.8	42.8	26.6	56.1	144.0	12.7	0.38	7.41
Activities with Large Amounts of Hot Water	2,235	56.3	50.2	27.2	62.9	141.0	16.0	0.40	7.16
Separate Computer Area	2,276	41.2	29.9	14.4	30.9	58.2	16.7	0.30	7.34
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	2,369	47.2	29.2	19.7	37.9	83.8	17.5	0.35	7.37
Economizer Cycle	2,242	46.9	30.4	18.9	41.8	85.7	16.4	0.34	7.30
HVAC Maintenance	1,021	43.5	34.6	17.9	37.4	70.1	7.8	0.33	7.68
Energy Management and Control System (EMCS)	2,979	39.8	29.7	14.7	39.7	70.8	21.3	0.29	7.17
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	726	40.2	35.3	17.0	35.9	68.0	5.7	0.32	7.85
Cooling	745	39.7	31.4	16.9	35.8	69.7	5.8	0.31	7.83
Lighting	594	39.0	30.9	17.8	37.3	70.1	4.8	0.31	8.01
Office Equipment	535	36.5	35.4	15.6	33.6	63.6	4.2	0.29	7.94
Annual Consumption (hundred cubic feet)									
1,000 or Less	53	8.2	8.8	6.5	15.2	30.3	0.6	0.09	11.60
1,001 to 5,000	239	24.8	22.1	22.3	39.7	69.7	2.2	0.23	9.20
5,001 to 10,000	707	38.3	23.3	35.0	63.8	146.5	6.0	0.33	8.54
10,001 to 25,000	1,503	44.9	36.5	38.9	73.6	156.1	12.0	0.36	8.02
25,001 to 50,000	3,348	51.3	50.6	46.4	75.9	150.1	25.5	0.39	7.61
50,001 to 100,000	7,040	53.2	50.8	40.1	73.3	130.4	48.4	0.37	6.87
Over 100,000	24,743	86.8	69.1	59.4	94.4	141.6	167.0	0.59	6.75
Provider of Natural Gas (more than one may apply)									
Local Utility	701	41.2	34.9	17.2	36.2	70.2	5.6	0.33	7.95
Some Other Provider	2,521	59.1	44.7	27.2	57.6	94.8	17.0	0.40	6.73

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Building Floorspace (Square Feet)												
1,001 to 5,000	46	91	65	40	513	1,074	869	628	90.4	84.9	74.9	63.7
5,001 to 10,000	38	57	64	44	621	959	1,349	763	61.3	59.0	47.5	57.2
10,001 to 25,000	51	119	70	60	1,173	2,436	2,066	1,378	43.9	48.7	33.8	43.6
25,001 to 50,000	45	115	47	44	977	2,262	1,589	1,196	45.6	50.7	29.4	36.6
50,001 to 100,000	58	94	59	25	1,645	1,930	2,153	955	35.5	48.7	27.3	26.3
100,001 to 200,000	65	86	67	24	1,706	1,777	2,241	921	38.3	48.4	29.7	25.6
200,001 to 500,000	60	71	41	28	1,588	1,673	1,419	999	37.6	42.3	28.6	27.5
Over 500,000	51	51	49	Q	956	1,052	1,625	973	53.4	48.8	30.0	48.3
Principal Building Activity												
Education	51	113	47	48	1,347	2,184	2,291	1,222	38.2	51.8	20.6	39.6
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	50	87	Q	Q	379	623	Q	Q	133.2	139.3	Q
Health Care	47	64	87	38	464	657	987	436	100.9	97.0	88.4	86.1
Inpatient	41	50	80	27	351	395	812	247	117.4	127.2	98.6	108.1
Outpatient	Q	14	Q	Q	Q	262	Q	Q	Q	51.5	Q	Q
Lodging	35	66	55	52	982	1,015	1,338	920	Q	65.0	41.1	56.6
Retail (Other Than Mall)	16	37	23	12	385	688	1,148	645	42.3	54.1	20.4	18.3
Office	89	104	33	35	2,301	2,447	1,915	1,544	38.8	42.3	17.2	23.0
Public Assembly	16	43	22	18	712	770	699	542	Q	56.4	32.1	32.4
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	15	37	20	8	384	899	923	424	38.4	41.4	21.7	18.1
Service	23	57	28	Q	368	934	822	Q	62.2	61.3	34.6	Q
Warehouse and Storage	25	61	20	Q	985	1,921	1,617	971	25.8	31.9	12.1	Q
Other	45	Q	Q	Q	531	Q	Q	Q	85.5	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	42	66	Q	Q	950	1,175	Q	Q	43.8	56.4	Q	Q
1920 to 1945	88	94	23	18	1,845	1,344	790	699	47.9	69.6	28.8	25.7
1946 to 1959	56	85	46	24	1,406	1,681	953	620	39.5	50.5	48.1	38.3
1960 to 1969	58	94	50	46	1,276	1,819	1,428	1,113	45.4	51.8	35.1	40.9
1970 to 1979	55	138	74	74	1,162	2,737	2,265	1,494	47.6	50.4	32.5	49.4
1980 to 1989	40	77	89	75	1,016	1,342	2,520	1,592	39.6	57.7	35.5	47.4
1990 to 1999	44	94	121	46	949	2,126	3,708	1,395	46.2	44.1	32.6	33.0
2000 to 2003	32	35	39	16	576	939	1,261	654	56.3	37.6	31.3	23.8
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	Q	235	N	122	Q	4,382	N	2,102	53.3	53.6	N	57.9
5,500-7,000 HDD	188	405	N	66	3,692	7,947	N	1,211	51.0	51.0	N	54.1
4,000-5,499 HDD	165	44	104	14	4,328	834	2,508	443	38.1	52.3	41.5	30.8
Fewer than 4,000 HDD	N	N	249	99	N	N	6,748	3,761	N	N	36.8	26.2
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	107	11	N	N	4,054	296	N	N	26.5	37.9
Number of Floors												
One	101	209	192	142	2,061	3,915	5,853	3,111	48.9	53.5	32.8	45.5
Two	89	210	98	79	1,972	4,485	2,781	2,203	45.3	46.9	35.2	35.8
Three	60	109	47	17	1,464	2,239	1,252	714	41.3	48.6	37.9	23.7
Four to Nine	112	125	87	42	2,539	2,075	2,036	1,019	44.1	60.4	42.9	41.4
Ten or More	52	29	36	Q	1,145	449	1,389	766	45.8	65.6	25.7	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Number of Workers (main shift)												
Fewer than 5	49	121	55	39	1,191	2,608	1,974	1,249	41.0	46.3	27.9	31.4
5 to 9	40	63	54	35	693	1,231	1,464	695	58.1	51.0	36.7	50.8
10 to 19	46	94	60	35	1,258	1,769	1,533	758	36.9	53.2	38.9	45.7
20 to 49	65	157	97	63	1,955	2,620	2,282	1,355	33.4	59.9	42.7	46.6
50 to 99	58	91	46	39	1,183	1,990	1,905	1,078	48.8	45.9	24.2	35.9
100 to 249	57	75	68	27	1,118	1,407	1,574	1,028	51.0	53.3	43.4	26.6
250 or More	100	82	80	72	1,783	1,538	2,579	1,650	55.8	53.5	30.9	43.9
Weekly Operating Hours												
Fewer than 40	Q	49	17	22	Q	1,420	764	593	Q	34.7	21.7	37.6
40 to 48	43	109	50	40	1,346	2,107	2,262	1,198	31.9	51.6	22.0	33.6
49 to 60	80	160	74	50	2,148	3,548	2,813	1,682	37.1	45.0	26.2	29.6
61 to 84	75	111	69	50	1,434	2,205	2,402	1,425	52.3	50.2	28.8	35.1
85 to 167	38	106	71	34	958	1,626	1,613	1,028	39.9	65.4	43.8	33.0
Open Continuously	163	149	180	114	2,812	2,257	3,455	1,886	58.1	65.9	52.2	60.6
Ownership and Occupancy												
Nongovernment Owned	348	513	367	230	7,646	9,795	9,888	5,988	45.5	52.3	37.1	38.4
Owner Occupied	201	253	145	87	4,156	4,972	4,873	2,547	48.4	51.0	29.8	34.0
Nonowner Occupied	144	248	221	143	3,302	4,276	4,956	3,352	43.5	58.1	44.6	42.5
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	67	171	93	81	1,535	3,368	3,422	1,825	43.9	50.7	27.3	44.1
Federal	Q	Q	6	Q	Q	Q	356	Q	Q	Q	16.9	Q
State	Q	27	36	22	Q	499	1,205	463	Q	54.6	30.3	48.0
Local	53	132	51	46	1,136	2,497	1,862	1,135	47.1	53.1	27.3	40.3
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	91	113	55	49	2,146	2,450	2,410	1,440	42.4	46.1	22.8	34.2
Not At All Vacant	317	554	404	259	6,754	10,049	10,821	6,221	47.0	55.1	37.4	41.7
Number of Establishments												
One	287	507	366	258	5,740	9,415	9,850	5,513	50.1	53.9	37.1	46.8
2 to 5	69	127	61	40	1,877	2,420	1,945	1,351	37.0	52.7	31.3	29.4
6 to 10	20	15	Q	6	474	353	Q	227	41.8	41.5	Q	26.0
11 to 20	Q	Q	Q	Q	Q	Q	391	Q	Q	Q	28.7	Q
More than 20	Q	Q	15	Q	Q	Q	756	Q	Q	Q	20.5	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material												
Brick, Stone or Stucco	280	410	256	147	5,607	7,366	7,125	3,453	50.0	55.7	35.9	42.5
Concrete (Block or Poured)	65	137	91	47	1,623	2,466	2,096	1,138	39.8	55.7	43.3	41.6
Concrete Panels	Q	59	30	61	Q	1,072	1,538	1,535	Q	54.9	19.5	39.5
Siding or Shingles	17	28	25	13	510	684	534	269	32.8	40.9	46.2	49.8
Metal Panels	Q	30	43	34	Q	1,050	1,541	986	Q	28.7	27.8	34.8
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	2.9	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Predominant Roof Material												
Built-Up	139	260	184	137	2,935	4,573	4,450	3,250	47.3	56.9	41.4	42.1
Shingles (Not Wood)	64	121	68	48	1,169	2,419	1,938	993	55.1	50.0	35.0	48.0
Metal Surfacing	Q	62	67	45	Q	1,542	2,726	1,127	Q	40.0	24.5	40.0
Synthetic or Rubber	165	193	115	52	3,308	3,767	3,291	1,472	49.8	51.3	35.0	35.5
Slate or Tile	Q	16	16	16	Q	243	484	468	Q	64.8	32.5	35.2
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	172	278	123	90	3,567	4,692	2,809	2,202	48.2	59.1	43.8	41.1
Addition or Annex	61	116	67	51	1,239	1,793	1,122	883	49.3	64.8	59.9	57.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	135	196	81	70	2,980	3,309	2,011	1,773	45.4	59.2	40.1	39.6
Wall or Roof Replacement	66	113	45	46	1,979	2,010	1,226	1,113	33.2	56.0	37.0	41.6
Interior Wall Re-Configuration	87	134	54	56	2,005	2,347	1,417	1,250	43.6	56.9	38.2	45.0
HVAC Equipment Upgrade	114	188	88	63	2,265	3,003	1,713	1,501	50.2	62.8	51.3	41.9
Lighting Upgrade	113	159	54	59	2,582	2,703	1,354	1,465	43.8	58.8	39.8	40.5
Window Replacement	84	99	22	30	2,145	1,657	547	650	39.3	59.9	39.4	46.1
Plumbing System Upgrade	82	110	41	45	1,913	1,639	912	1,252	43.1	67.0	45.2	35.6
Insulation Upgrade	34	53	25	17	883	1,090	511	476	38.0	48.5	48.2	34.9
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	127	199	87	83	3,072	4,065	3,013	1,971	41.2	49.1	29.0	42.3
Building Newer than 1980	117	206	250	137	2,542	4,406	7,489	3,641	45.9	46.9	33.3	37.6
Energy Sources (more than one may apply)												
Electricity	415	683	460	311	9,181	13,162	13,306	7,813	45.2	51.9	34.6	39.8
Natural Gas	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Fuel Oil	148	136	131	76	3,714	2,123	2,962	1,584	39.8	64.2	44.3	48.3
District Heat	Q	14	14	Q	666	680	811	Q	21.7	21.0	16.7	Q
District Chilled Water	Q	Q	14	Q	Q	Q	694	Q	Q	Q	20.1	Q
Propane	Q	35	Q	Q	Q	877	787	632	Q	39.9	Q	42.6
Other	Q	20	Q	Q	Q	377	Q	Q	Q	53.0	Q	Q
Space-Heating Energy Sources												
Natural Gas	393	668	410	279	7,238	12,180	10,693	6,848	54.3	54.8	38.3	40.7
Natural Gas Main	367	630	377	262	6,439	11,321	9,299	5,911	57.0	55.7	40.6	44.3
Natural Gas Secondary	26	37	32	17	800	858	1,393	938	32.5	43.3	23.2	18.5
Other Excluding Natural Gas	20	14	49	19	1,938	951	2,413	713	Q	15.2	20.4	26.8
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source												
Electricity	24	45	69	33	675	1,185	2,954	1,348	35.3	38.1	23.5	24.4
Natural Gas	367	630	377	262	6,439	11,321	9,299	5,911	57.0	55.7	40.6	44.3
Fuel Oil	16	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	526	Q	741	Q	8.6	Q	12.2	Q
Propane	N	N	Q	N	N	N	Q	N	N	N	Q	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Cooling Energy Sources												
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	341	614	440	282	8,203	11,834	12,979	6,989	41.6	51.9	33.9	40.3
Buildings without Cooling	31	46	Q	20	625	1,074	Q	556	49.9	43.3	Q	36.4
Water-Heating Energy Sources												
Natural Gas	317	513	363	270	5,601	8,799	8,306	6,114	56.6	58.3	43.7	44.2
Other Excluding Natural Gas	85	151	81	33	3,159	3,685	4,257	1,212	27.0	41.0	19.1	27.2
Bldgs without Water Heating	Q	20	16	7	Q	679	748	487	Q	29.1	20.9	15.3
Cooking Energy Sources												
Natural Gas	175	262	259	135	3,580	3,965	5,480	2,412	48.7	66.0	47.3	55.9
Other Excluding Natural Gas	33	61	27	15	563	1,237	946	473	57.9	49.6	28.9	32.3
Buildings without Cooking	208	360	174	161	5,038	7,961	6,885	4,928	41.3	45.3	25.2	32.6
Energy End Uses (more than one may apply)												
Buildings with Space Heating	413	682	459	298	9,176	13,130	13,106	7,561	45.0	51.9	35.0	39.4
Buildings with Cooling	384	637	454	291	8,556	12,090	13,120	7,257	44.9	52.7	34.6	40.0
Buildings with Water Heating	402	664	445	303	8,761	12,484	12,563	7,326	45.9	53.2	35.4	41.4
Buildings with Cooking	207	323	287	150	4,143	5,202	6,426	2,885	50.0	62.1	44.6	52.1
Buildings with Manufacturing	29	32	14	Q	516	711	524	551	57.2	45.6	27.3	38.5
Buildings with Electricity Generation	136	165	133	83	2,554	2,901	3,127	1,820	53.3	57.0	42.6	45.7
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	24	23	29	18	808	876	1,281	1,041	30.0	26.3	22.7	17.2
51 to 99	65	79	60	55	1,199	1,336	1,858	1,573	54.4	59.3	32.3	35.3
100	324	580	370	225	7,169	10,919	9,966	4,948	45.1	53.1	37.1	45.4
Percent of Floorspace Cooled												
Not Cooled	31	46	Q	20	625	1,074	Q	556	49.9	43.3	Q	36.4
1 to 50	119	187	69	63	3,222	3,954	3,025	1,931	37.0	47.3	22.8	32.6
51 to 99	118	177	79	63	2,507	3,111	2,362	1,753	47.2	57.0	33.3	36.1
100	146	273	307	164	2,828	5,025	7,733	3,573	51.8	54.3	39.7	46.0
Heating Equipment (more than one may apply)												
Heat Pumps	51	32	92	43	924	754	2,758	1,117	55.3	42.3	33.2	38.1
Packaged Heat Pumps	27	24	53	Q	549	563	1,560	651	49.9	42.9	33.7	Q
Split-System Heat Pumps	Q	Q	25	8	Q	Q	982	279	Q	Q	25.9	29.9
Individual Room Heat Pumps	Q	Q	28	Q	Q	Q	918	Q	Q	Q	30.5	Q
Furnaces	117	298	143	95	2,355	6,265	4,303	2,381	49.7	47.5	33.3	39.9
Individual Space Heaters	93	155	60	61	1,992	3,362	2,100	1,515	46.5	46.0	28.4	40.2
District Heat	Q	Q	13	Q	548	Q	800	Q	16.3	Q	15.8	Q
Boilers	269	365	207	167	5,142	5,729	3,941	3,362	52.4	63.8	52.5	49.6
Packaged Heating Units	134	167	190	74	2,520	3,209	5,338	2,551	53.1	52.0	35.5	29.0
Other	Q	22	9	Q	Q	562	716	Q	Q	38.3	13.3	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	101	172	71	36	1,937	3,032	2,171	842	51.9	56.6	32.7	43.0
Heat Pumps	55	36	93	42	996	803	2,800	1,232	55.7	44.9	33.2	34.3
Packaged Heat Pumps	32	28	Q	Q	620	593	1,512	627	51.1	46.5	33.9	Q
Split-System Heat Pumps	Q	Q	27	Q	Q	Q	1,003	Q	Q	Q	27.0	Q
Individual Room Heat Pumps	Q	Q	29	11	Q	Q	958	598	Q	Q	30.1	18.5
Individual Air Conditioners	111	164	74	48	2,742	2,835	2,252	1,285	40.5	58.0	33.0	37.7
District Chilled Water	Q	Q	14	Q	Q	Q	694	Q	Q	Q	20.1	Q
Central Chillers	118	157	134	76	1,523	2,498	3,433	1,646	77.6	62.9	39.0	46.4
Packaged Air Conditioning Units	244	391	262	160	5,309	7,199	7,044	4,254	46.0	54.3	37.1	37.7
Swamp Coolers	Q	Q	Q	67	Q	Q	Q	1,077	Q	25.9	Q	62.5
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	121	240	127	98	2,791	4,392	3,081	2,011	43.5	54.8	41.2	48.6
Cooling	167	308	155	125	4,177	5,122	4,092	2,657	40.0	60.2	37.9	47.2
Water Heating Equipment												
Centralized System	286	430	281	192	5,521	8,122	7,626	4,084	51.9	52.9	36.9	46.9
Distributed System	51	101	63	31	1,819	2,100	2,288	1,352	28.2	48.2	27.5	23.2
Combination of Centralized and Distributed System	65	133	100	80	1,421	2,263	2,649	1,890	45.6	58.6	37.8	42.5
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	207	323	287	149	4,143	5,202	6,426	2,873	50.0	62.1	44.6	52.0
Activities with Large Amounts of Hot Water	168	308	256	171	3,304	4,701	5,214	2,804	50.8	65.5	49.1	61.0
Separate Computer Area	238	283	191	136	4,882	5,605	6,290	3,838	48.7	50.5	30.4	35.5
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	159	240	175	114	3,002	4,347	4,588	2,656	52.9	55.3	38.1	43.0
Economizer Cycle	178	296	167	140	3,379	5,231	4,425	3,620	52.6	56.6	37.8	38.6
HVAC Maintenance	366	567	400	277	8,148	10,784	11,127	6,926	44.9	52.5	36.0	39.9
Energy Management and Control System (EMCS)	101	171	111	80	2,291	3,257	3,741	2,337	44.2	52.4	29.6	34.4
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	305	447	296	206	7,022	9,184	9,217	5,757	43.4	48.7	32.1	35.8
Cooling	283	435	310	220	6,859	8,746	9,914	5,919	41.3	49.8	31.3	37.2
Lighting	240	510	272	190	5,902	10,070	9,418	5,681	40.7	50.7	28.9	33.5
Office Equipment	106	198	80	78	3,001	4,439	2,970	2,259	35.2	44.7	27.0	34.4

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Annual Consumption (hundred cubic feet)												
1,000 or Less	4	11	11	9	884	698	1,610	1,145	Q	16.1	7.0	7.9
1,001 to 5,000	49	85	70	38	1,633	2,770	3,420	1,909	29.7	30.6	20.5	20.1
5,001 to 10,000	46	97	59	37	1,010	1,983	2,255	1,005	45.1	48.9	26.3	37.3
10,001 to 25,000	77	119	81	71	1,926	2,232	2,162	1,447	39.8	53.5	37.5	49.4
25,001 to 50,000	53	114	64	52	1,371	2,135	1,258	770	38.7	53.4	51.2	68.0
50,001 to 100,000	43	85	55	27	810	1,450	1,092	618	53.3	58.6	50.7	44.5
Over 100,000	144	172	118	75	1,546	1,895	1,514	919	93.3	90.9	78.2	81.2
Provider of Natural Gas (more than one may apply)												
Local Utility	327	568	412	273	7,977	11,278	12,067	7,040	41.0	50.4	34.2	38.8
Some Other Provider	113	155	59	50	1,562	2,378	1,579	853	72.2	65.1	37.3	58.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Building Floorspace (Square Feet)												
1,001 to 5,000	456	782	599	317	9.84	8.57	9.21	7.94	0.89	0.73	0.69	0.51
5,001 to 10,000	348	427	582	332	9.15	7.54	9.08	7.60	0.56	0.45	0.43	0.44
10,001 to 25,000	502	945	656	422	9.74	7.96	9.41	7.02	0.43	0.39	0.32	0.31
25,001 to 50,000	408	738	402	317	9.14	6.44	8.60	7.24	0.42	0.33	0.25	0.27
50,001 to 100,000	531	662	493	182	9.08	7.04	8.39	7.26	0.32	0.34	0.23	0.19
100,001 to 200,000	454	573	555	156	6.94	6.66	Q	6.59	0.27	0.32	0.25	0.17
200,001 to 500,000	457	423	286	178	7.64	5.97	7.05	6.46	0.29	0.25	0.20	0.18
Over 500,000	Q	295	293	Q	7.80	5.75	6.02	7.60	0.42	0.28	0.18	Q
Principal Building Activity												
Education	412	740	397	339	8.02	6.55	8.42	7.01	0.31	0.34	0.17	0.28
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	355	747	Q	Q	7.04	8.61	Q	Q	0.94	1.20	Q
Health Care	310	381	630	217	6.62	5.98	7.23	5.79	0.67	0.58	0.64	0.50
Inpatient	255	279	565	143	6.19	5.55	7.05	5.36	0.73	0.71	0.69	0.58
Outpatient	Q	103	Q	Q	Q	7.60	Q	Q	Q	0.39	Q	Q
Lodging	295	419	447	Q	8.44	6.34	8.12	8.06	Q	0.41	0.33	0.46
Retail (Other Than Mall)	141	274	212	91	8.69	7.38	9.06	7.73	0.37	0.40	0.18	0.14
Office	827	826	287	261	9.27	7.97	8.71	7.34	0.36	0.34	0.15	0.17
Public Assembly	142	315	188	129	9.11	7.26	8.39	7.36	Q	0.41	0.27	0.24
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	142	285	176	61	9.61	7.66	8.80	7.95	0.37	0.32	0.19	0.14
Service	Q	438	260	Q	Q	7.66	9.16	Q	Q	0.47	0.32	Q
Warehouse and Storage	234	399	187	Q	9.19	6.50	9.57	7.07	0.24	0.21	0.12	0.16
Other	355	Q	Q	Q	7.81	Q	Q	Q	0.67	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	390	502	Q	Q	9.37	7.58	Q	Q	0.41	0.43	Q	Q
1920 to 1945	783	582	208	135	8.87	6.23	9.14	7.50	0.42	0.43	0.26	0.19
1946 to 1959	427	635	386	162	7.69	7.49	Q	6.83	0.30	0.38	0.41	0.26
1960 to 1969	509	640	407	316	8.80	6.80	8.13	6.93	0.40	0.35	0.29	0.28
1970 to 1979	473	927	555	511	8.55	6.71	7.53	6.94	0.41	0.34	0.24	0.34
1980 to 1989	360	585	755	570	8.94	7.56	8.45	7.55	0.35	0.44	0.30	0.36
1990 to 1999	340	675	1,075	361	7.75	7.20	8.90	7.85	0.36	0.32	0.29	0.26
2000 to 2003	271	296	333	112	8.37	8.38	8.45	7.21	0.47	0.32	0.26	0.17
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	Q	1,814	N	763	8.07	7.72	N	6.27	0.43	0.41	N	0.36
5,500-7,000 HDD	1,593	2,788	N	521	8.46	6.89	N	7.94	0.43	0.35	N	0.43
4,000-5,499 HDD	1,461	242	906	93	8.85	5.55	8.69	6.81	0.34	0.29	0.36	0.21
Fewer than 4,000 HDD	N	N	2,116	804	N	N	8.52	8.15	N	N	0.31	0.21
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	844	81	N	N	7.85	7.25	N	N	0.21	0.28
Number of Floors												
One	927	1,670	1,753	1,055	9.20	7.97	9.14	7.46	0.45	0.43	0.30	0.34
Two	754	1,477	846	551	8.43	7.02	8.64	7.00	0.38	0.33	0.30	0.25
Three	549	742	395	129	9.08	6.82	Q	7.64	0.38	0.33	0.32	0.18
Four to Nine	878	782	637	263	7.84	6.24	7.28	6.25	0.35	0.38	0.31	0.26
Ten or More	445	173	235	Q	8.49	5.86	6.59	8.35	0.39	0.38	0.17	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Number of Workers (main shift)												
Fewer than 5	469	993	530	316	9.59	8.21	9.62	8.03	0.39	0.38	0.27	0.25
5 to 9	396	508	500	262	9.82	8.09	9.31	7.42	0.57	0.41	0.34	0.38
10 to 19	404	662	531	245	8.70	7.03	8.90	7.07	0.32	0.37	0.35	0.32
20 to 49	602	1,081	811	457	9.21	6.89	8.32	7.23	0.31	0.41	0.36	0.34
50 to 99	495	630	386	269	8.59	6.89	8.36	6.96	0.42	0.32	0.20	0.25
100 to 249	400	479	578	195	7.02	6.39	8.45	7.14	0.36	0.34	0.37	0.19
250 or More	787	492	530	518	7.90	5.98	6.65	7.16	0.44	0.32	0.21	0.31
Weekly Operating Hours												
Fewer than 40	Q	400	159	180	Q	8.13	9.61	8.05	Q	0.28	0.21	0.30
40 to 48	407	838	493	279	9.48	7.70	9.90	6.92	0.30	0.40	0.22	0.23
49 to 60	741	1,151	665	371	9.29	7.21	9.02	7.44	0.35	0.32	0.24	0.22
61 to 84	649	792	577	356	8.65	7.15	8.34	7.12	0.45	0.36	0.24	0.25
85 to 167	330	719	608	249	8.61	6.76	8.61	7.35	0.34	0.44	0.38	0.24
Open Continuously	1,273	943	1,364	826	7.79	6.35	7.57	7.23	0.45	0.42	0.39	0.44
Ownership and Occupancy												
Nongovernment Owned	3,023	3,669	3,122	1,745	8.69	7.16	8.51	7.58	0.40	0.37	0.32	0.29
Owner Occupied	1,733	1,762	1,226	641	8.62	6.95	8.44	7.40	0.42	0.35	0.25	0.25
Nonowner Occupied	1,265	1,820	1,888	1,098	8.80	7.33	8.55	7.70	0.38	0.43	0.38	0.33
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	530	1,175	744	516	7.88	6.88	7.98	6.41	0.35	0.35	0.22	0.28
Federal	Q	Q	34	Q	Q	Q	5.73	Q	Q	Q	Q	Q
State	Q	219	287	168	Q	8.04	7.88	7.53	Q	0.44	0.24	0.36
Local	406	887	423	278	7.58	6.70	8.32	6.07	0.36	0.36	0.23	0.24
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	839	861	452	325	9.22	7.63	8.22	6.60	0.39	0.35	0.19	0.23
Not At All Vacant	2,650	3,855	3,405	1,918	8.35	6.96	8.42	7.40	0.39	0.38	0.31	0.31
Number of Establishments												
One	2,391	3,580	3,100	1,879	8.32	7.06	8.48	7.29	0.42	0.38	0.31	0.34
2 to 5	642	943	507	285	9.24	7.39	8.33	7.16	0.34	0.39	0.26	0.21
6 to 10	175	101	Q	43	8.85	6.89	Q	7.28	0.37	0.29	Q	0.19
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	121	Q	Q	Q	7.80	Q	Q	Q	0.16	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material												
Brick, Stone or Stucco	2,352	2,875	2,115	1,061	8.39	7.01	8.27	7.23	0.42	0.39	0.30	0.31
Concrete (Block or Poured)	567	945	785	325	8.77	6.88	8.66	6.86	0.35	0.38	0.37	0.29
Concrete Panels	Q	440	220	Q	Q	7.47	7.31	7.62	Q	0.41	0.14	0.30
Siding or Shingles	175	228	226	107	10.46	8.15	9.16	7.95	0.34	0.33	0.42	0.40
Metal Panels	Q	247	402	247	Q	8.19	9.39	7.19	Q	0.23	0.26	0.25
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.03	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Predominant Roof Material												
Built-Up	1,166	1,827	1,523	1,013	8.40	7.02	8.26	7.40	0.40	0.40	0.34	0.31
Shingles (Not Wood)	623	877	623	358	9.68	7.25	9.19	7.51	0.53	0.36	0.32	0.36
Metal Surfacing	Q	445	618	328	Q	7.21	9.26	7.27	Q	0.29	0.23	0.29
Synthetic or Rubber	1,328	1,369	877	332	8.06	7.08	7.60	6.35	0.40	0.36	0.27	0.23
Slate or Tile	Q	114	136	135	Q	7.25	8.68	8.18	Q	0.47	0.28	0.29
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	1,443	1,839	950	619	8.39	6.63	7.72	6.85	0.40	0.39	0.34	0.28
Addition or Annex	475	682	489	336	7.79	5.87	7.27	6.61	0.38	0.38	0.44	0.38
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	1,143	1,318	647	479	8.45	6.73	8.03	6.83	0.38	0.40	0.32	0.27
Wall or Roof Replacement	552	758	345	311	8.39	6.74	7.61	6.73	0.28	0.38	0.28	0.28
Interior Wall Re-Configuration	750	887	405	388	8.58	6.65	7.48	6.89	0.37	0.38	0.29	0.31
HVAC Equipment Upgrade	970	1,201	679	430	8.53	6.37	7.73	6.84	0.43	0.40	0.40	0.29
Lighting Upgrade	971	1,075	414	409	8.57	6.76	7.68	6.89	0.38	0.40	0.31	0.28
Window Replacement	726	641	159	208	8.61	6.46	7.38	6.92	0.34	0.39	0.29	0.32
Plumbing System Upgrade	682	733	316	319	8.27	6.68	7.68	7.18	0.36	0.45	0.35	0.26
Insulation Upgrade	296	383	184	115	8.83	7.25	7.49	6.89	0.34	0.35	0.36	0.24
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	1,139	1,449	752	599	9.00	7.26	8.61	7.18	0.37	0.36	0.25	0.30
Building Newer than 1980	971	1,556	2,163	1,043	8.33	7.54	8.67	7.62	0.38	0.35	0.29	0.29
Energy Sources (more than one may apply)												
Electricity	3,553	4,843	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Natural Gas	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Fuel Oil	1,155	842	981	561	7.83	6.18	7.48	7.34	0.31	0.40	0.33	0.35
District Heat	103	Q	107	Q	7.14	6.43	7.92	Q	0.16	0.14	0.13	Q
District Chilled Water	Q	Q	110	Q	Q	Q	7.92	Q	Q	Q	0.16	Q
Propane	Q	244	251	Q	Q	6.98	Q	7.09	Q	0.28	Q	0.30
Other	Q	128	Q	Q	Q	6.41	Q	Q	Q	0.34	Q	Q
Space-Heating Energy Sources												
Natural Gas	3,351	4,719	3,435	2,010	8.53	7.07	8.38	7.20	0.46	0.39	0.32	0.29
Natural Gas Main	3,115	4,450	3,140	1,882	8.49	7.06	8.32	7.19	0.48	0.39	0.34	0.32
Natural Gas Secondary	237	269	295	129	9.11	7.24	9.11	7.41	0.30	0.31	0.21	0.14
Other Excluding Natural Gas	182	116	418	146	9.05	7.98	8.50	7.66	Q	0.12	0.17	0.21
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source												
Electricity	232	339	611	252	9.74	7.51	8.81	7.66	0.34	0.29	0.21	0.19
Natural Gas	3,115	4,450	3,140	1,882	8.49	7.06	8.32	7.19	0.48	0.39	0.34	0.32
Fuel Oil	136	Q	Q	Q	8.30	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	8.75	Q	8.28	Q	0.07	Q	0.10	Q
Propane	N	N	Q	N	N	N	Q	N	N	N	Q	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Cooling Energy Sources												
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	2,934	4,347	3,704	2,060	8.61	7.08	8.42	7.32	0.36	0.37	0.29	0.29
Buildings without Cooling	247	364	Q	146	7.91	7.84	Q	7.22	0.40	0.34	Q	0.26
Water-Heating Energy Sources												
Natural Gas	2,648	3,555	2,942	1,948	8.35	6.94	8.10	7.20	0.47	0.40	0.35	0.32
Other Excluding Natural Gas	783	1,135	760	255	9.19	7.51	9.35	7.73	0.25	0.31	0.18	0.21
Bldgs without Water Heating	Q	154	164	59	Q	7.81	10.50	7.88	Q	0.23	0.22	0.12
Cooking Energy Sources												
Natural Gas	1,455	1,663	2,051	988	8.34	6.36	7.91	7.32	0.41	0.42	0.37	0.41
Other Excluding Natural Gas	231	457	209	110	7.09	7.45	7.65	7.19	0.41	0.37	0.22	0.23
Buildings without Cooking	1,867	2,724	1,607	1,163	8.97	7.56	9.25	7.24	0.37	0.34	0.23	0.24
Energy End Uses (more than one may apply)												
Buildings with Space Heating	3,533	4,834	3,853	2,156	8.56	7.09	8.40	7.23	0.39	0.37	0.29	0.29
Buildings with Cooling	3,307	4,480	3,816	2,115	8.61	7.03	8.40	7.28	0.39	0.37	0.29	0.29
Buildings with Water Heating	3,431	4,690	3,702	2,202	8.53	7.07	8.33	7.26	0.39	0.38	0.29	0.30
Buildings with Cooking	1,686	2,120	2,259	1,098	8.14	6.56	7.88	7.31	0.41	0.41	0.35	0.38
Buildings with Manufacturing	244	178	136	Q	8.26	5.49	9.52	7.53	0.47	0.25	0.26	0.29
Buildings with Electricity Generation	1,069	1,031	996	623	7.86	6.23	7.47	7.48	0.42	0.36	0.32	0.34
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	214	190	284	144	8.83	8.24	9.73	8.05	0.26	0.22	0.22	0.14
51 to 99	613	569	487	408	9.41	7.19	8.12	7.35	0.51	0.43	0.26	0.26
100	2,706	4,075	3,082	1,605	8.36	7.03	8.34	7.14	0.38	0.37	0.31	0.32
Percent of Floorspace Cooled												
Not Cooled	247	364	Q	146	7.91	7.84	Q	7.22	0.40	0.34	Q	0.26
1 to 50	1,032	1,315	655	463	8.66	7.04	9.47	7.35	0.32	0.33	0.22	0.24
51 to 99	1,007	1,252	631	451	8.51	7.06	8.03	7.12	0.40	0.40	0.27	0.26
100	1,268	1,912	2,531	1,202	8.66	7.01	8.25	7.31	0.45	0.38	0.33	0.34
Heating Equipment (more than one may apply)												
Heat Pumps	420	234	802	Q	8.22	7.35	8.75	8.16	0.45	0.31	0.29	0.31
Packaged Heat Pumps	242	174	434	Q	8.85	7.21	Q	8.41	0.44	0.31	0.28	Q
Split-System Heat Pumps	Q	Q	246	62	Q	Q	9.70	7.44	Q	Q	0.25	0.22
Individual Room Heat Pumps	Q	Q	235	Q	Q	Q	8.38	Q	Q	Q	0.26	Q
Furnaces	1,010	2,124	1,242	719	8.62	7.14	8.67	7.57	0.43	0.34	0.29	0.30
Individual Space Heaters	771	1,032	466	451	8.32	6.67	7.83	7.40	0.39	0.31	0.22	0.30
District Heat	Q	Q	101	Q	6.94	Q	7.97	Q	0.11	Q	0.13	Q
Boilers	2,222	2,457	1,582	1,156	8.25	6.72	7.65	6.93	0.43	0.43	0.40	0.34
Packaged Heating Units	1,139	1,196	1,618	524	8.51	7.17	8.53	7.09	0.45	0.37	0.30	0.21
Other	Q	150	83	Q	Q	6.94	8.72	Q	Q	0.27	0.12	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	851	1,139	607	270	8.46	6.64	8.54	7.45	0.44	0.38	0.28	0.32
Heat Pumps	455	269	818	Q	8.20	7.46	8.79	8.17	0.46	0.33	0.29	0.28
Packaged Heat Pumps	277	203	425	Q	8.72	7.37	Q	8.43	0.45	0.34	0.28	Q
Split-System Heat Pumps	Q	Q	263	Q	Q	Q	9.71	Q	Q	Q	0.26	Q
Individual Room Heat Pumps	Q	Q	241	81	Q	Q	8.36	7.30	Q	Q	0.25	0.14
Individual Air Conditioners	948	1,136	613	343	8.55	6.91	8.26	7.08	0.35	0.40	0.27	0.27
District Chilled Water	Q	Q	110	Q	Q	Q	7.92	Q	Q	Q	0.16	Q
Central Chillers	936	1,021	953	550	7.92	6.50	7.12	7.20	0.61	0.41	0.28	0.33
Packaged Air Conditioning Units	2,097	2,724	2,245	1,143	8.60	6.96	8.58	7.13	0.40	0.38	0.32	0.27
Swamp Coolers	Q	Q	Q	449	Q	Q	Q	6.68	Q	0.19	Q	0.42
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	1,076	1,652	1,059	732	8.86	6.87	8.34	7.49	0.39	0.38	0.34	0.36
Cooling	1,484	2,128	1,231	918	8.88	6.90	7.95	7.32	0.36	0.42	0.30	0.35
Water Heating Equipment												
Centralized System	2,507	3,127	2,337	1,375	8.76	7.28	8.30	7.17	0.45	0.39	0.31	0.34
Distributed System	422	764	556	246	8.23	7.55	8.85	7.84	0.23	0.36	0.24	0.18
Combination of Centralized and Distributed System	501	799	809	582	7.74	6.02	8.07	7.25	0.35	0.35	0.31	0.31
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	1,686	2,120	2,259	1,091	8.14	6.56	7.88	7.30	0.41	0.41	0.35	0.38
Activities with Large Amounts of Hot Water	1,282	1,952	1,990	1,242	7.64	6.34	7.77	7.26	0.39	0.42	0.38	0.44
Separate Computer Area	1,890	1,900	1,469	971	7.94	6.71	7.68	7.13	0.39	0.34	0.23	0.25
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	1,266	1,626	1,331	847	7.97	6.76	7.61	7.42	0.42	0.37	0.29	0.32
Economizer Cycle	1,400	2,040	1,264	999	7.87	6.89	7.55	7.15	0.41	0.39	0.29	0.28
HVAC Maintenance	3,094	3,959	3,297	2,006	8.46	6.99	8.24	7.25	0.38	0.37	0.30	0.29
Energy Management and Control System (EMCS)	793	1,089	845	590	7.84	6.38	7.63	7.34	0.35	0.33	0.23	0.25
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	2,618	3,181	2,544	1,497	8.60	7.11	8.61	7.27	0.37	0.35	0.28	0.26
Cooling	2,470	3,061	2,647	1,607	8.72	7.03	8.54	7.30	0.36	0.35	0.27	0.27
Lighting	2,174	3,723	2,427	1,386	9.06	7.30	8.92	7.28	0.37	0.37	0.26	0.24
Office Equipment	974	1,406	736	550	9.21	7.09	9.17	7.07	0.32	0.32	0.25	0.24

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
**All Buildings* ..... **	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Annual Consumption (hundred cubic feet)												
1,000 or Less	54	116	143	98	13.99	10.34	12.64	10.85	Q	0.17	0.09	0.09
1,001 to 5,000	507	732	685	300	10.45	8.64	9.76	7.81	0.31	0.26	0.20	0.16
5,001 to 10,000	450	777	538	277	9.88	8.02	9.06	7.41	0.45	0.39	0.24	0.28
10,001 to 25,000	697	890	699	510	9.08	7.46	8.61	7.14	0.36	0.40	0.32	0.35
25,001 to 50,000	422	837	532	370	7.94	7.35	8.26	7.06	0.31	0.39	0.42	0.48
50,001 to 100,000	362	452	449	188	8.39	5.32	8.11	6.83	0.45	0.31	0.41	0.30
Over 100,000	1,061	1,040	820	519	7.35	6.04	6.93	6.95	0.69	0.55	0.54	0.56
Provider of Natural Gas (more than one may apply)												
Local Utility	2,886	4,140	3,531	2,021	8.82	7.28	8.56	7.39	0.36	0.37	0.29	0.29
Some Other Provider	865	951	403	318	7.67	6.14	6.83	6.34	0.55	0.40	0.25	0.37

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Building Floorspace (Square Feet)									
1,001 to 5,000	Q	41	68	Q	417	729	Q	99.5	93.6
5,001 to 10,000	Q	31	43	Q	482	654	Q	64.8	66.0
10,001 to 25,000	Q	45	90	Q	931	1,681	Q	47.9	53.6
25,001 to 50,000	Q	39	70	Q	829	1,422	Q	47.4	49.5
50,001 to 100,000	Q	43	73	Q	1,263	1,554	Q	34.1	47.2
100,001 to 200,000	Q	41	67	Q	1,445	1,264	Q	28.3	52.7
200,001 to 500,000	Q	55	56	Q	1,484	1,277	Q	37.3	44.1
Over 500,000	Q	47	44	Q	865	989	Q	54.0	44.4
Principal Building Activity									
Education	Q	49	99	Q	1,247	1,804	Q	39.5	54.6
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	35	Q	Q	228	Q	Q	152.9
Health Care	Q	41	49	Q	396	484	Q	103.8	100.6
Inpatient	Q	37	38	Q	306	287	Q	120.3	131.2
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	39	Q	Q	507	Q	Q	77.5
Retail (Other Than Mall)	Q	13	29	Q	269	485	Q	48.2	59.2
Office	Q	72	84	Q	1,887	1,929	Q	38.2	43.7
Public Assembly	Q	12	35	Q	602	550	Q	Q	64.2
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	29	Q	Q	624	Q	Q	46.3
Service	Q	Q	44	Q	Q	723	Q	Q	61.5
Warehouse and Storage	Q	24	34	Q	913	1,259	Q	26.0	26.7
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	30	48	Q	704	819	Q	43.0	58.0
1920 to 1945	Q	73	65	Q	1,584	959	Q	46.2	68.2
1946 to 1959	Q	52	67	Q	1,237	1,360	Q	41.9	49.0
1960 to 1969	Q	51	68	Q	1,113	1,215	Q	45.6	56.0
1970 to 1979	Q	48	110	Q	1,034	1,980	Q	46.8	55.8
1980 to 1989	Q	31	64	Q	838	1,126	Q	37.5	56.4
1990 to 1999	Q	32	63	Q	818	1,403	Q	39.3	44.8
2000 to 2003	Q	Q	28	Q	Q	708	Q	Q	39.2
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	N	Q	151	N	Q	2,660	N	53.3	56.7
5,500-7,000 HDD	73	116	361	1,465	2,227	6,909	49.5	52.0	52.3
4,000-5,499 HDD	N	165	N	N	4,328	N	N	38.1	N
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N
Number of Floors									
One	Q	92	159	Q	1,889	2,820	Q	48.6	56.5
Two	Q	83	146	Q	1,755	3,025	Q	47.4	48.4
Three	Q	51	86	Q	1,125	1,658	Q	45.0	51.9
Four to Nine	45	67	93	614	1,925	1,658	73.8	34.7	56.0
Ten or More	Q	50	27	Q	1,021	409	Q	49.2	67.1

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Number of Workers (main shift)									
Fewer than 5	Q	39	92	Q	887	1,956	Q	43.5	46.9
5 to 9	Q	34	44	Q	496	784	Q	69.3	56.0
10 to 19	Q	39	65	Q	1,069	1,105	Q	36.3	59.2
20 to 49	Q	60	111	Q	1,812	1,855	Q	33.1	60.0
50 to 99	Q	44	71	Q	994	1,418	Q	44.6	49.7
100 to 249	Q	41	59	Q	885	1,085	Q	46.0	54.6
250 or More	Q	86	70	Q	1,574	1,367	Q	54.5	51.2
Weekly Operating Hours									
Fewer than 40	Q	Q	43	Q	Q	1,180	Q	Q	36.3
40 to 48	Q	38	89	Q	1,188	1,554	Q	31.9	57.0
49 to 60	Q	69	108	Q	1,824	2,629	Q	37.8	41.2
61 to 84	Q	65	87	Q	1,197	1,541	Q	54.6	56.4
85 to 167	Q	35	83	Q	821	1,181	Q	42.3	70.7
Open Continuously	40	123	102	510	2,302	1,485	79.1	53.4	68.7
Ownership and Occupancy									
Nongovernment Owned	61	287	366	1,219	6,427	6,793	49.7	44.7	53.9
Owner Occupied	42	159	170	791	3,365	3,244	53.4	47.2	52.3
Nonowner Occupied	Q	125	186	Q	2,874	3,023	Q	43.6	61.4
Unoccupied	N	Q	Q	N	Q	Q	N	Q	Q
Government Owned	Q	55	146	Q	1,289	2,777	Q	42.9	52.6
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	Q	49	113	Q	1,028	2,018	Q	48.0	55.9
Vacancy Status									
Completely Vacant	N	Q	Q	N	Q	Q	N	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	26	65	89	571	1,576	1,983	46.4	41.0	44.9
Not At All Vacant	46	271	412	880	5,874	7,026	52.2	46.2	58.6
Number of Establishments									
One	45	243	386	826	4,915	6,833	54.0	49.4	56.5
2 to 5	Q	52	91	Q	1,515	1,700	Q	34.1	53.7
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	N	Q	Q	N	Q	Q	N	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	53	228	338	864	4,743	5,826	60.9	48.0	58.0
Concrete (Block or Poured)	Q	60	90	Q	1,484	1,690	Q	40.2	53.1
Concrete Panels	Q	Q	40	Q	Q	757	Q	Q	53.2
Siding or Shingles	Q	Q	14	Q	Q	358	Q	Q	38.1
Metal Panels	Q	Q	13	Q	Q	455	Q	Q	28.1
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Predominant Roof Material									
Built-Up	Q	126	205	Q	2,621	3,492	Q	48.1	58.6
Shingles (Not Wood)	Q	55	90	Q	970	1,705	Q	57.0	53.1
Metal Surfacing	Q	Q	31	Q	Q	786	Q	Q	39.0
Synthetic or Rubber	45	120	152	745	2,563	2,988	59.8	46.9	50.7
Slate or Tile	Q	Q	13	Q	Q	188	Q	Q	67.3
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	27	145	202	581	2,987	3,211	47.0	48.5	62.9
Addition or Annex	Q	58	80	Q	1,203	1,216	Q	47.8	65.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	Q	119	146	439	2,541	2,197	37.9	46.7	66.3
Wall or Roof Replacement	Q	55	84	Q	1,607	1,293	Q	34.2	65.3
Interior Wall Re-Configuration	Q	69	104	Q	1,748	1,630	Q	39.5	63.5
HVAC Equipment Upgrade	Q	95	135	Q	1,896	2,016	Q	50.1	66.7
Lighting Upgrade	Q	93	119	Q	2,136	1,876	Q	43.7	63.6
Window Replacement	Q	68	81	Q	1,739	1,196	Q	39.1	67.3
Plumbing System Upgrade	Q	64	85	Q	1,613	1,111	Q	39.7	76.4
Insulation Upgrade	Q	32	35	Q	771	664	Q	41.4	53.3
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	17	110	156	387	2,685	3,122	44.2	40.8	50.0
Building Newer than 1980	Q	88	154	Q	2,044	3,236	Q	43.2	47.6
Energy Sources (more than one may apply)									
Electricity	73	343	512	1,465	7,716	9,568	49.5	44.4	53.5
Natural Gas	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Fuel Oil	Q	124	96	Q	3,188	1,494	Q	39.0	64.2
District Heat	Q	Q	Q	Q	482	Q	Q	20.1	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	N	Q	26	N	Q	630	N	Q	42.0
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources									
Natural Gas	69	324	501	1,198	6,041	8,758	57.8	53.6	57.2
Natural Gas Main	66	301	477	1,061	5,377	8,230	62.0	56.0	57.9
Natural Gas Secondary	Q	23	24	Q	663	528	Q	34.0	45.5
Other Excluding Natural Gas	Q	17	10	Q	Q	781	Q	Q	13.1
Buildings without Heating	N	Q	Q	N	Q	Q	N	Q	Q
Primary Space-Heating Energy Source									
Electricity	Q	22	31	Q	636	795	Q	35.3	39.4
Natural Gas	66	301	477	1,061	5,377	8,230	62.0	56.0	57.9
Fuel Oil	Q	12	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	377	Q	Q	Q	Q
Propane	N	N	N	N	N	N	N	N	N
Other	N	Q	Q	N	Q	Q	N	Q	Q

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Cooling Energy Sources									
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	57	284	459	1,197	7,006	8,566	47.3	40.6	53.6
Buildings without Cooling	Q	27	38	Q	478	848	Q	56.6	45.2
Water-Heating Energy Sources									
Natural Gas	49	269	389	682	4,919	6,417	71.2	54.6	60.7
Other Excluding Natural Gas	20	65	110	693	2,467	2,733	28.7	26.5	40.1
Bldgs without Water Heating	Q	Q	13	Q	Q	419	Q	Q	31.4
Cooking Energy Sources									
Natural Gas	Q	154	202	Q	3,106	3,052	Q	49.7	66.2
Other Excluding Natural Gas	Q	Q	54	Q	442	1,053	Q	58.9	51.4
Buildings without Cooking	46	162	256	870	4,168	5,465	52.8	38.9	46.9
Energy End Uses (more than one may apply)									
Buildings with Space Heating	73	340	511	1,465	7,711	9,539	49.5	44.1	53.6
Buildings with Cooling	68	316	474	1,319	7,238	8,722	51.9	43.6	54.3
Buildings with Water Heating	68	334	499	1,375	7,386	9,150	49.8	45.2	54.5
Buildings with Cooking	27	181	256	595	3,548	4,105	44.7	50.9	62.4
Buildings with Manufacturing	Q	27	13	Q	476	418	Q	57.6	32.0
Buildings with Electricity Generation	Q	112	126	Q	2,136	2,311	Q	52.6	54.7
Percent of Floorspace Heated									
Not Heated	N	Q	Q	N	Q	Q	N	Q	Q
1 to 50	Q	21	20	Q	725	686	Q	29.1	29.9
51 to 99	Q	54	65	Q	923	1,044	Q	58.8	62.2
100	59	265	425	1,107	6,063	7,809	53.0	43.7	54.5
Percent of Floorspace Cooled									
Not Cooled	Q	27	38	Q	478	848	Q	56.6	45.2
1 to 50	Q	99	139	Q	2,777	2,921	Q	35.5	47.6
51 to 99	Q	92	120	Q	2,043	2,060	Q	45.2	58.5
100	22	125	214	410	2,418	3,741	53.1	51.6	57.3
Heating Equipment (more than one may apply)									
Heat Pumps	Q	37	22	Q	799	591	Q	46.2	36.7
Packaged Heat Pumps	Q	23	18	Q	497	469	Q	47.3	37.6
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	Q	92	211	Q	2,060	4,284	Q	44.9	49.2
Individual Space Heaters	Q	68	99	Q	1,553	2,290	Q	43.5	43.3
District Heat	Q	Q	Q	Q	399	Q	Q	19.5	Q
Boilers	57	213	287	925	4,217	4,274	61.2	50.5	67.2
Packaged Heating Units	Q	99	128	Q	2,078	2,302	Q	47.8	55.6
Other	Q	Q	13	Q	Q	326	Q	Q	39.8

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	Q	76	106	Q	1,739	1,890	Q	44.0	56.2
Heat Pumps	Q	39	25	Q	817	618	Q	47.5	40.4
Packaged Heat Pumps	Q	25	21	Q	515	491	Q	49.2	42.2
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Air Conditioners	Q	85	126	Q	2,263	2,026	Q	37.6	62.2
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	Q	96	120	Q	1,177	1,863	Q	81.3	64.2
Packaged Air Conditioning Units	48	196	295	676	4,633	5,119	70.4	42.4	57.7
Swamp Coolers	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	Q	97	175	Q	2,384	3,072	Q	40.6	56.9
Cooling	29	139	225	628	3,549	3,491	45.4	39.1	64.6
Water Heating Equipment									
Centralized System	40	246	330	921	4,599	6,013	43.4	53.5	54.8
Distributed System	Q	36	76	Q	1,618	1,523	Q	22.2	49.9
Combination of Centralized and Distributed System	Q	52	93	Q	1,169	1,614	Q	44.3	57.8
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	27	181	256	595	3,548	4,105	44.7	50.9	62.4
Activities with Large Amounts of Hot Water	38	130	221	652	2,652	3,310	58.7	48.9	66.9
Separate Computer Area	48	190	220	685	4,197	4,260	69.7	45.3	51.8
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	Q	124	192	Q	2,526	3,281	Q	49.0	58.4
Economizer Cycle	43	135	236	640	2,738	3,973	67.6	49.1	59.3
HVAC Maintenance	62	303	439	1,221	6,927	8,008	51.0	43.8	54.9
Energy Management and Control System (EMCS)	Q	90	141	Q	1,961	2,522	Q	45.8	55.9
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	33	272	341	961	6,062	6,822	33.9	44.9	50.0
Cooling	34	249	328	931	5,928	6,398	36.8	42.0	51.2
Lighting	31	209	392	890	5,013	7,425	34.3	41.8	52.8
Office Equipment	Q	96	140	Q	2,632	3,116	Q	36.3	44.9

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Annual Consumption (hundred cubic feet)									
1,000 or Less	Q	3	7	Q	Q	425	Q	Q	16.4
1,001 to 5,000	11	38	57	331	1,303	1,910	31.8	29.2	30.1
5,001 to 10,000	Q	40	74	Q	859	1,445	Q	46.8	51.0
10,001 to 25,000	Q	67	86	Q	1,595	1,554	Q	41.9	55.3
25,001 to 50,000	Q	48	86	Q	1,265	1,601	Q	38.2	53.6
50,001 to 100,000	Q	31	53	Q	638	960	Q	49.3	55.3
Over 100,000	Q	115	149	Q	1,333	1,674	Q	86.1	89.1
Provider of Natural Gas (more than one may apply)									
Local Utility	59	268	415	1,212	6,765	7,922	48.9	39.6	52.4
Some Other Provider	Q	94	133	Q	1,212	2,071	Q	77.5	64.1

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Building Floorspace (Square Feet)									
1,001 to 5,000	23	25	11	346	325	209	66.6	75.3	53.5
5,001 to 10,000	13	34	Q	305	620	Q	44.0	54.9	Q
10,001 to 25,000	29	28	Q	756	987	565	37.9	28.6	Q
25,001 to 50,000	44	17	12	840	714	363	52.6	24.4	Q
50,001 to 100,000	Q	27	Q	Q	806	Q	Q	33.1	Q
100,001 to 200,000	19	Q	Q	512	1,238	Q	37.8	30.8	Q
200,001 to 500,000	Q	23	Q	Q	786	Q	Q	28.9	Q
Over 500,000	Q	18	Q	Q	Q	Q	Q	21.6	Q
Principal Building Activity									
Education	14	25	Q	380	1,274	Q	38.1	19.6	Q
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	42	Q	Q	339	Q	Q	123.8	Q
Health Care	Q	Q	17	Q	508	196	Q	87.5	86.2
Inpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	27	25	Q	508	630	Q	52.6	39.9	Q
Retail (Other Than Mall)	Q	9	Q	Q	465	Q	Q	20.4	Q
Office	19	12	Q	518	821	321	37.4	14.7	28.5
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q	Q	Q	Q	Q
Service	13	Q	Q	211	Q	Q	60.7	Q	Q
Warehouse and Storage	Q	Q	Q	662	Q	Q	41.8	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	Q	Q	Q	385	Q	Q	73.1	Q	Q
1946 to 1959	18	Q	Q	321	496	Q	56.7	Q	Q
1960 to 1969	26	20	Q	603	556	Q	43.3	35.6	Q
1970 to 1979	28	22	22	758	815	459	36.5	27.3	47.7
1980 to 1989	Q	35	Q	Q	1,055	346	Q	32.8	73.0
1990 to 1999	31	65	17	723	2,249	610	42.7	29.1	27.7
2000 to 2003	Q	20	Q	Q	654	Q	Q	30.9	Q
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	84	N	N	1,722	N	N	48.8	N	N
5,500-7,000 HDD	43	N	N	Q	N	N	Q	N	N
4,000-5,499 HDD	44	58	Q	834	1,705	Q	52.3	33.9	Q
Fewer than 4,000 HDD	N	131	Q	N	3,643	Q	N	35.9	34.9
2,000 CDD or More and --									
Fewer than 4,000 HDD	N	Q	Q	N	Q	Q	N	22.1	43.7
Number of Floors									
One	50	82	31	1,095	2,590	978	45.7	31.8	31.8
Two	64	46	34	1,461	1,439	571	43.7	31.9	58.9
Three	23	Q	Q	581	600	Q	39.2	Q	Q
Four to Nine	33	41	Q	417	1,182	Q	78.0	35.1	Q
Ten or More	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Number of Workers (main shift)									
Fewer than 5	29	26	Q	653	727	485	44.7	35.3	30.0
5 to 9	19	23	10	447	616	393	42.4	37.5	24.9
10 to 19	29	22	7	664	688	246	43.3	31.9	27.2
20 to 49	46	36	31	764	900	498	59.6	40.4	62.8
50 to 99	21	25	Q	572	1,067	Q	36.4	23.3	Q
100 to 249	Q	Q	Q	Q	993	Q	Q	45.5	Q
250 or More	Q	33	Q	Q	1,335	Q	Q	24.8	Q
Weekly Operating Hours									
Fewer than 40	Q	8	Q	Q	334	Q	Q	23.3	Q
40 to 48	20	21	16	553	834	564	36.5	25.8	28.8
49 to 60	51	24	Q	919	1,203	323	55.7	19.8	Q
61 to 84	24	31	11	665	1,211	482	35.8	25.4	23.2
85 to 167	Q	41	Q	Q	1,010	Q	Q	40.1	Q
Open Continuously	47	86	43	773	1,733	676	60.4	49.5	63.9
Ownership and Occupancy									
Nongovernment Owned	147	170	72	3,002	4,621	1,575	48.8	36.7	46.0
Owner Occupied	84	77	23	1,728	2,243	771	48.5	34.5	30.4
Nonowner Occupied	63	92	49	1,253	2,368	799	50.0	38.9	61.2
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	25	41	26	591	1,705	706	41.7	23.8	37.2
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	20	28	11	479	973	310	41.2	28.6	35.6
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	N	Q	Q	N	Q	Q	N
Partially Vacant	24	24	7	467	1,088	270	51.0	22.4	27.6
Not At All Vacant	142	186	91	3,023	5,212	2,006	47.0	35.6	45.4
Number of Establishments									
One	121	172	83	2,582	4,735	1,810	47.0	36.4	45.7
2 to 5	36	25	Q	721	1,018	Q	50.3	24.7	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	72	112	51	1,541	3,205	1,336	46.8	35.1	37.9
Concrete (Block or Poured)	48	Q	Q	776	1,055	467	61.3	Q	69.5
Concrete Panels	19	Q	Q	315	Q	Q	59.1	20.3	Q
Siding or Shingles	14	Q	Q	326	Q	Q	44.0	Q	Q
Metal Panels	17	22	Q	595	725	Q	29.1	30.7	Q
Window Glass	Q	Q	N	Q	Q	N	Q	Q	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	N	Q	Q	N	Q	Q	N

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Predominant Roof Material									
Built-Up	55	80	47	1,081	2,076	635	51.4	38.5	74.6
Shingles (Not Wood)	30	35	15	714	1,009	458	42.6	34.5	33.7
Metal Surfacing	31	27	16	756	1,117	603	41.1	24.3	26.5
Synthetic or Rubber	42	57	16	779	1,792	483	53.7	31.7	33.6
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	N	Q	Q	N	Q	Q	N
Other	N	Q	N	N	Q	N	N	Q	N
No One Major Type	N	Q	N	N	Q	N	N	Q	N
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	75	59	29	1,481	1,279	613	50.9	46.5	47.1
Addition or Annex	Q	Q	14	577	Q	235	63.0	Q	61.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	50	32	24	1,112	814	508	45.0	39.1	46.4
Wall or Roof Replacement	28	20	Q	717	557	Q	39.1	35.9	Q
Interior Wall Re-Configuration	30	20	Q	717	665	Q	41.8	29.3	Q
HVAC Equipment Upgrade	54	Q	21	987	896	345	54.6	53.3	61.7
Lighting Upgrade	40	18	21	828	608	362	48.0	28.8	59.3
Window Replacement	19	Q	Q	461	Q	Q	40.7	Q	Q
Plumbing System Upgrade	25	16	Q	527	427	Q	47.3	37.6	Q
Insulation Upgrade	18	Q	Q	427	Q	Q	41.1	Q	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	43	31	21	943	1,089	537	46.1	28.0	38.2
Building Newer than 1980	52	120	49	1,169	3,958	1,131	44.8	30.4	43.6
Energy Sources (more than one may apply)									
Electricity	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Natural Gas	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Fuel Oil	40	74	Q	629	1,696	Q	64.1	43.5	Q
District Heat	Q	Q	Q	Q	526	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources									
Natural Gas	167	183	94	3,422	4,852	2,110	48.8	37.7	44.4
Natural Gas Main	154	166	85	3,091	4,175	1,817	49.7	39.7	46.8
Natural Gas Secondary	Q	17	Q	Q	677	Q	Q	25.0	Q
Other Excluding Natural Gas	Q	27	Q	Q	1,398	Q	Q	19.2	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	14	37	10	390	1,463	331	35.6	25.3	29.0
Natural Gas	154	166	85	3,091	4,175	1,817	49.7	39.7	46.8
Fuel Oil	Q	Q	N	Q	Q	N	Q	Q	N
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	N	Q	N	N	Q	N	N	Q	N
Other	Q	Q	N	Q	Q	N	Q	Q	N

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Cooling Energy Sources									
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	155	195	97	3,269	6,147	2,245	47.5	31.8	43.2
Buildings without Cooling	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water-Heating Energy Sources									
Natural Gas	123	157	81	2,382	3,649	1,456	51.7	43.0	55.5
Other Excluding Natural Gas	41	48	15	952	2,425	715	43.5	19.6	21.6
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources									
Natural Gas	60	131	47	913	2,741	786	65.4	47.6	59.8
Other Excluding Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings without Cooking	104	70	48	2,496	3,208	1,320	41.8	21.9	36.1
Energy End Uses (more than one may apply)									
Buildings with Space Heating	171	210	99	3,591	6,250	2,256	47.7	33.5	43.7
Buildings with Cooling	163	207	98	3,368	6,258	2,254	48.4	33.1	43.3
Buildings with Water Heating	165	204	96	3,334	6,074	2,171	49.4	33.6	44.3
Buildings with Cooking	67	140	51	1,097	3,118	961	61.0	44.9	53.2
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	39	73	24	591	1,672	301	66.2	43.5	80.1
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	19	Q	Q	525	Q	Q	35.3	Q
51 to 99	14	26	10	292	1,201	224	49.0	21.9	42.4
100	154	165	82	3,109	4,525	1,774	49.6	36.4	46.2
Percent of Floorspace Cooled									
Not Cooled	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	48	36	8	1,033	1,570	391	46.2	23.2	21.5
51 to 99	57	37	14	1,051	1,611	312	54.1	23.0	44.0
100	58	134	75	1,284	3,076	1,551	45.5	43.5	48.6
Heating Equipment (more than one may apply)									
Heat Pumps	Q	66	17	Q	1,947	373	Q	33.8	45.1
Packaged Heat Pumps	Q	Q	Q	Q	1,057	Q	Q	Q	Q
Split-System Heat Pumps	Q	20	Q	Q	737	Q	Q	27.8	Q
Individual Room Heat Pumps	Q	19	Q	Q	736	Q	Q	25.4	Q
Furnaces	87	64	21	1,981	2,050	784	43.8	31.5	26.2
Individual Space Heaters	56	31	12	1,072	1,195	399	51.9	25.5	29.8
District Heat	Q	Q	Q	Q	514	Q	Q	Q	Q
Boilers	78	93	58	1,454	1,795	767	53.9	51.8	75.6
Packaged Heating Units	39	92	34	907	2,361	966	42.8	39.1	35.2
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	65	31	15	1,142	1,001	407	57.3	31.2	36.6
Heat Pumps	Q	68	16	Q	2,023	392	Q	33.4	42.0
Packaged Heat Pumps	Q	Q	Q	Q	1,045	Q	Q	Q	Q
Split-System Heat Pumps	Q	21	Q	Q	755	Q	Q	28.2	Q
Individual Room Heat Pumps	Q	20	Q	Q	776	Q	Q	25.2	Q
Individual Air Conditioners	38	45	17	809	1,232	484	47.4	36.6	35.0
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	38	54	29	635	1,495	453	59.1	35.9	64.2
Packaged Air Conditioning Units	96	125	55	2,080	3,426	1,313	46.0	36.6	42.2
Swamp Coolers	N	Q	Q	N	Q	Q	N	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	66	57	33	1,320	1,344	545	49.8	42.4	Q
Cooling	83	56	46	1,631	1,666	777	50.8	33.9	59.8
Water Heating Equipment									
Centralized System	100	123	58	2,109	3,334	1,495	47.5	36.8	38.6
Distributed System	25	30	7	576	1,005	260	43.7	29.5	27.2
Combination of Centralized and Distributed System	39	52	Q	649	1,735	416	60.6	29.9	75.4
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	67	140	51	1,097	3,118	961	61.0	44.9	53.2
Activities with Large Amounts of Hot Water	86	130	49	1,391	2,806	833	62.1	46.5	58.9
Separate Computer Area	63	89	37	1,345	3,137	900	46.7	28.3	41.1
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	49	61	48	1,067	2,053	619	45.7	29.5	77.0
Economizer Cycle	60	74	37	1,258	2,413	608	47.9	30.8	61.0
HVAC Maintenance	127	187	83	2,776	5,494	1,767	45.8	34.0	46.7
Energy Management and Control System (EMCS)	30	49	22	735	1,805	488	40.4	27.4	45.9
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	106	126	69	2,362	4,413	1,576	45.0	28.5	44.0
Cooling	108	128	73	2,347	4,811	1,635	45.9	26.7	44.7
Lighting	118	121	54	2,645	4,449	1,529	44.7	27.1	35.6
Office Equipment	58	41	11	1,323	1,369	421	44.1	29.8	26.7

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Annual Consumption (hundred cubic feet)									
1,000 or Less	4	5	2	272	639	225	15.7	8.1	8.9
1,001 to 5,000	27	32	18	860	1,484	815	31.6	21.6	22.4
5,001 to 10,000	23	27	Q	538	1,123	Q	43.2	23.6	Q
10,001 to 25,000	33	38	16	678	1,074	463	49.1	35.7	35.1
25,001 to 50,000	28	29	Q	534	629	Q	52.7	46.7	Q
50,001 to 100,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 100,000	Q	60	Q	Q	766	Q	Q	77.9	Q
Provider of Natural Gas (more than one may apply)									
Local Utility	153	190	94	3,356	5,730	2,205	45.6	33.2	42.5
Some Other Provider	22	27	Q	307	Q	Q	71.8	31.4	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Building Floorspace (Square Feet)									
1,001 to 5,000	29	18	Q	334	265	363	87.9	68.4	60.2
5,001 to 10,000	23	Q	Q	519	Q	496	44.2	Q	53.4
10,001 to 25,000	14	38	22	514	630	748	28.1	61.1	29.0
25,001 to 50,000	17	23	21	512	464	733	33.5	49.1	28.7
50,001 to 100,000	18	Q	18	888	Q	730	20.5	Q	24.2
100,001 to 200,000	16	Q	12	760	Q	651	21.5	Q	17.8
200,001 to 500,000	Q	Q	14	470	Q	675	Q	Q	20.8
Over 500,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
Principal Building Activity									
Education	16	21	28	797	420	802	20.6	48.8	34.8
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	37	Q	Q	211	Q	Q	175.7	Q	Q
Health Care	26	19	19	282	162	274	91.4	115.5	68.7
Inpatient	23	Q	Q	235	Q	Q	96.0	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	16	Q	Q	515	Q	Q	31.5
Retail (Other Than Mall)	7	Q	5	436	Q	455	16.2	Q	11.4
Office	12	19	17	Q	379	1,165	15.2	50.0	14.2
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	336	Q	Q	19.4	Q	Q
Service	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	614	Q	Q	11.3	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	8	Q	12	271	Q	580	29.9	Q	21.5
1946 to 1959	14	Q	15	358	Q	478	37.7	Q	32.2
1960 to 1969	14	27	18	567	441	672	25.4	62.2	27.0
1970 to 1979	30	49	25	991	712	782	29.8	68.8	31.7
1980 to 1989	30	38	37	1,119	525	1,067	26.4	72.8	34.8
1990 to 1999	38	18	28	848	487	908	45.4	36.8	31.0
2000 to 2003	Q	Q	8	433	Q	415	27.9	Q	19.9
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	N	104	Q	N	1,722	Q	N	60.4	46.8
5,500-7,000 HDD	N	53	13	N	829	383	N	63.5	33.7
4,000-5,499 HDD	Q	N	14	Q	N	443	Q	N	30.8
Fewer than 4,000 HDD	72	N	99	1,777	N	3,761	40.3	N	26.2
2,000 CDD or More and --									
Fewer than 4,000 HDD	71	Q	Q	2,748	Q	Q	26.0	Q	Q
Number of Floors									
One	78	70	71	2,284	1,301	1,811	34.3	54.1	39.3
Two	18	44	35	771	836	1,367	23.7	52.9	25.3
Three	Q	Q	10	Q	Q	564	Q	Q	17.7
Four to Nine	26	Q	25	550	318	701	47.2	53.4	35.9
Ten or More	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Number of Workers (main shift)									
Fewer than 5	15	22	17	762	462	787	19.6	47.2	22.2
5 to 9	21	15	21	456	294	401	45.7	49.4	51.9
10 to 19	31	22	13	598	334	424	51.8	65.7	29.9
20 to 49	30	26	37	884	445	910	33.8	58.3	40.9
50 to 99	15	23	15	657	500	577	22.5	46.9	26.4
100 to 249	Q	Q	17	Q	Q	786	Q	Q	21.1
250 or More	33	Q	29	Q	519	1,131	31.4	83.9	25.5
Weekly Operating Hours									
Fewer than 40	5	Q	Q	277	Q	427	19.5	Q	31.1
40 to 48	12	27	13	864	421	777	14.0	64.9	16.7
49 to 60	29	26	24	1,287	615	1,067	22.6	42.6	22.2
61 to 84	27	20	30	710	422	1,003	38.3	48.3	29.6
85 to 167	26	Q	21	520	Q	721	50.3	Q	28.5
Open Continuously	51	66	49	1,046	866	1,020	49.0	75.8	47.7
Ownership and Occupancy									
Nongovernment Owned	125	119	111	3,692	2,073	3,916	33.8	57.6	28.3
Owner Occupied	44	41	45	1,859	828	1,719	23.9	49.9	26.3
Nonowner Occupied	80	78	65	1,789	1,238	2,114	44.7	63.0	30.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	27	43	38	1,011	724	1,101	26.2	58.8	34.5
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	343	Q	Q	53.0
Local	12	29	17	578	457	678	20.6	63.3	24.8
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	N	Q	Q	N	Q	Q	N	Q	Q
Partially Vacant	23	31	19	1,051	507	933	22.0	60.4	19.9
Not At All Vacant	128	131	128	3,603	2,266	3,955	35.4	57.7	32.4
Number of Establishments									
One	110	141	117	3,306	2,214	3,299	33.4	63.5	35.5
2 to 5	26	17	23	656	436	915	38.9	38.8	25.0
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	93	63	84	2,583	1,094	2,358	35.9	57.4	35.6
Concrete (Block or Poured)	20	19	29	574	322	816	34.8	57.8	35.2
Concrete Panels	10	Q	15	636	Q	892	15.2	70.9	16.9
Siding or Shingles	Q	Q	Q	Q	Q	Q	Q	Q	Q
Metal Panels	15	Q	9	529	504	482	27.5	51.1	17.8
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Predominant Roof Material									
Built-Up	57	76	61	1,738	1,048	2,203	32.7	72.1	27.9
Shingles (Not Wood)	18	22	26	471	377	616	37.3	58.5	41.5
Metal Surfacing	24	32	13	1,007	730	397	23.5	43.6	33.5
Synthetic or Rubber	42	28	25	1,016	498	974	41.5	55.5	25.3
Slate or Tile	Q	Q	15	Q	Q	406	Q	Q	35.8
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	N	Q	Q	N	Q	Q	N	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	35	53	38	917	874	1,328	38.0	60.3	28.4
Addition or Annex	21	35	16	416	532	351	49.4	66.0	44.8
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	25	38	32	689	598	1,174	36.6	63.8	27.3
Wall or Roof Replacement	13	28	18	448	452	661	28.2	62.0	27.6
Interior Wall Re-Configuration	17	35	21	483	565	684	36.1	62.7	30.4
HVAC Equipment Upgrade	19	38	25	472	658	843	39.8	57.3	29.9
Lighting Upgrade	15	34	26	384	592	873	38.9	56.8	29.5
Window Replacement	Q	Q	14	Q	Q	380	Q	Q	35.9
Plumbing System Upgrade	Q	25	19	Q	486	766	Q	52.3	24.9
Insulation Upgrade	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Renovation	N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	36	46	38	1,387	672	1,299	26.2	68.2	28.9
Building Newer than 1980	80	63	74	2,400	1,251	2,390	33.4	50.7	30.8
Energy Sources (more than one may apply)									
Electricity	151	162	149	4,698	2,797	5,016	32.2	57.9	29.7
Natural Gas	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Fuel Oil	34	Q	37	Q	448	1,136	34.6	89.3	32.1
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources									
Natural Gas	133	157	122	3,731	2,547	4,301	35.7	61.6	28.4
Natural Gas Main	127	148	113	3,308	2,277	3,633	38.2	65.1	31.2
Natural Gas Secondary	Q	Q	9	Q	Q	668	Q	Q	13.1
Other Excluding Natural Gas	17	Q	15	869	Q	533	19.8	Q	28.9
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	23	11	22	1,160	334	1,015	19.5	31.9	21.9
Natural Gas	127	148	113	3,308	2,277	3,633	38.2	65.1	31.2
Fuel Oil	N	Q	N	N	Q	N	N	Q	N
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	N	N	N	N	N	N	N	N	N
Other	N	N	Q	N	N	Q	N	N	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Cooling Energy Sources									
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	148	154	128	4,587	2,634	4,355	32.2	58.4	29.3
Buildings without Cooling	Q	Q	14	Q	Q	408	Q	Q	35.0
Water-Heating Energy Sources									
Natural Gas	126	143	127	3,201	2,276	3,838	39.3	62.9	33.1
Other Excluding Natural Gas	18	Q	18	1,117	381	831	16.3	40.3	21.2
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources									
Natural Gas	82	58	77	1,953	796	1,616	41.9	73.4	47.3
Other Excluding Natural Gas	14	Q	Q	394	Q	Q	35.1	Q	Q
Buildings without Cooking	56	94	66	2,357	1,815	3,113	23.6	52.0	21.2
Energy End Uses (more than one may apply)									
Buildings with Space Heating	151	161	138	4,600	2,726	4,835	32.7	58.9	28.4
Buildings with Cooling	150	156	135	4,608	2,649	4,608	32.4	58.9	29.2
Buildings with Water Heating	144	159	145	4,318	2,656	4,669	33.3	59.7	31.0
Buildings with Cooking	96	68	83	2,346	982	1,904	40.7	68.8	43.4
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	36	44	39	1,154	583	1,237	31.6	75.3	31.8
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	Q	10	499	Q	851	Q	Q	11.8
51 to 99	24	25	30	433	483	1,090	56.0	52.8	27.6
100	123	127	97	3,667	2,054	2,894	33.5	62.0	33.7
Percent of Floorspace Cooled									
Not Cooled	Q	Q	14	Q	Q	408	Q	Q	35.0
1 to 50	24	45	18	1,064	873	1,059	22.8	52.0	16.6
51 to 99	28	31	32	439	682	1,072	63.3	46.0	29.9
100	97	79	85	3,106	1,095	2,478	31.4	72.5	34.3
Heating Equipment (more than one may apply)									
Heat Pumps	Q	Q	18	Q	Q	849	Q	Q	20.8
Packaged Heat Pumps	Q	Q	7	Q	Q	426	Q	Q	17.2
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	58	51	44	1,469	1,045	1,337	39.6	49.0	32.8
Individual Space Heaters	17	29	32	506	595	920	33.9	49.1	34.5
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q
Boilers	56	95	71	1,380	1,216	2,146	40.5	78.5	33.3
Packaged Heating Units	63	33	41	2,012	640	1,911	31.5	52.2	21.2
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	25	17	19	764	304	538	32.7	55.9	35.7
Heat Pumps	Q	Q	17	Q	Q	914	Q	Q	18.8
Packaged Heat Pumps	Q	Q	6	Q	Q	404	Q	Q	15.9
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Air Conditioners	12	34	14	536	607	678	22.7	56.0	21.3
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	51	43	33	1,485	484	1,162	34.5	88.8	28.8
Packaged Air Conditioning Units	81	79	81	2,306	1,501	2,753	35.1	52.9	29.4
Swamp Coolers	Q	45	22	Q	763	315	Q	59.7	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	37	59	38	1,193	901	1,111	30.7	65.8	34.6
Cooling	52	73	52	1,649	1,089	1,567	31.6	66.9	33.5
Water Heating Equipment									
Centralized System	101	90	102	2,798	1,557	2,527	36.1	57.9	40.2
Distributed System	26	13	18	1,023	322	1,030	25.6	41.5	17.5
Combination of Centralized and Distributed System	17	55	25	497	777	1,112	33.9	70.8	22.7
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	96	68	82	2,346	982	1,892	40.7	68.8	43.3
Activities with Large Amounts of Hot Water	77	80	91	1,575	1,126	1,678	48.7	71.1	54.3
Separate Computer Area	65	77	59	2,253	1,296	2,543	29.0	59.5	23.2
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	67	54	60	1,917	978	1,678	34.7	55.6	35.6
Economizer Cycle	56	73	66	1,404	1,164	2,456	39.9	63.0	27.0
HVAC Maintenance	131	138	138	3,866	2,404	4,522	33.9	57.5	30.6
Energy Management and Control System (EMCS)	39	44	37	1,448	680	1,657	26.8	64.0	22.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	100	117	89	3,227	1,933	3,824	31.1	60.5	23.3
Cooling	109	120	100	3,468	2,070	3,849	31.4	58.1	25.9
Lighting	97	95	95	3,440	1,864	3,817	28.2	51.0	25.0
Office Equipment	28	40	38	1,180	721	1,538	23.8	55.1	24.7

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific	West South Central	Mountain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Annual Consumption (hundred cubic feet)									
1,000 or Less	4	Q	7	746	Q	925	5.5	Q	7.1
1,001 to 5,000	20	19	19	1,121	591	1,317	17.7	32.3	14.6
5,001 to 10,000	24	22	16	889	387	618	27.2	56.5	25.2
10,001 to 25,000	27	Q	38	625	Q	977	42.6	70.9	39.1
25,001 to 50,000	31	23	29	511	431	339	60.4	54.5	85.1
50,001 to 100,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 100,000	32	48	27	466	461	Q	68.8	104.4	57.9
Provider of Natural Gas (more than one may apply)									
Local Utility	129	138	135	4,132	2,399	4,641	31.1	57.6	29.1
Some Other Provider	Q	32	18	Q	487	366	Q	66.4	48.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Building Floorspace (Square Feet)															
1,001 to 5,000	56	81	35	55	16	660	979	421	789	234	85.0	82.9	82.5	69.8	66.6
5,001 to 10,000	47	53	27	59	16	644	944	526	1,212	367	72.5	56.5	51.2	49.0	43.9
10,001 to 25,000	88	103	50	47	13	1,679	2,134	958	1,781	501	52.4	48.0	51.7	26.4	25.9
25,001 to 50,000	59	87	52	34	18	1,251	1,839	1,031	1,441	463	47.2	47.2	50.4	23.7	38.6
50,001 to 100,000	55	88	42	41	11	1,043	2,129	1,300	1,569	642	52.4	41.5	32.3	26.0	16.5
100,001 to 200,000	35	114	31	Q	9	970	2,090	1,320	1,550	714	36.2	54.5	23.4	34.0	12.4
200,001 to 500,000	54	61	38	31	15	1,001	1,471	1,380	1,161	666	53.6	41.7	27.3	26.8	22.5
Over 500,000	Q	71	53	27	Q	Q	1,263	1,176	1,005	Q	Q	56.5	44.9	26.8	Q
Principal Building Activity															
Education	65	113	26	48	9	1,227	2,281	968	1,700	869	53.0	49.4	26.4	28.2	10.1
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	27	49	Q	64	31	174	368	Q	393	277	154.3	134.4	Q	161.9	110.9
Health Care	38	69	36	64	29	383	665	454	720	323	98.4	103.5	78.3	89.5	89.4
Inpatient	27	56	30	59	26	237	414	302	589	264	114.1	136.3	99.9	99.4	98.8
Outpatient	Q	12	Q	Q	Q	Q	251	Q	Q	Q	Q	49.4	Q	Q	Q
Lodging	34	86	36	34	18	609	1,183	958	967	538	55.5	72.8	Q	35.3	32.8
Retail (Other Than Mall)	27	27	16	16	Q	593	595	451	931	Q	46.1	45.8	36.1	17.0	Q
Office	60	106	60	22	14	1,252	2,575	1,977	1,539	865	48.0	41.0	30.1	14.4	16.1
Public Assembly	32	30	Q	25	Q	639	537	Q	700	Q	49.7	55.0	Q	35.4	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	14	38	14	13	Q	277	973	412	774	Q	49.2	38.9	32.8	16.5	Q
Service	49	37	18	23	Q	697	717	422	511	Q	70.9	52.1	Q	44.8	Q
Warehouse and Storage	33	44	33	16	Q	963	1,672	1,071	1,463	Q	34.5	26.4	30.7	11.2	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed															
Before 1920	55	46	25	Q	Q	832	1,042	599	Q	Q	66.4	43.7	41.9	Q	Q
1920 to 1945	49	70	77	17	Q	762	1,296	1,563	821	Q	64.8	54.1	49.0	21.3	Q
1946 to 1959	37	97	29	Q	Q	642	1,831	1,000	945	Q	57.5	52.8	29.0	44.8	Q
1960 to 1969	61	94	36	39	19	1,005	1,759	1,061	1,246	563	60.2	53.2	33.7	31.2	33.3
1970 to 1979	95	125	43	59	19	1,732	2,291	1,199	1,697	739	54.8	54.4	35.6	34.9	26.3
1980 to 1989	42	109	43	70	19	688	1,831	946	2,111	893	60.7	59.3	45.7	33.0	21.5
1990 to 1999	61	82	45	86	31	1,460	1,887	1,053	2,704	1,073	41.4	43.5	43.1	31.8	28.6
2000 to 2003	19	38	Q	24	13	524	913	693	785	517	36.5	41.1	41.6	30.6	25.6
Census Region and Division															
Northeast	Q	188	165	N	N	Q	3,692	4,328	N	N	53.3	51.0	38.1	N	N
New England	N	73	N	N	N	N	1,465	N	N	N	N	49.5	N	N	N
Middle Atlantic	Q	116	165	N	N	Q	2,227	4,328	N	N	53.3	52.0	38.1	N	N
Midwest	235	405	44	N	N	4382.0	7,947	834	N	N	53.6	51.0	52.3	N	N
East North Central	151	361	N	N	N	2660.0	6,909	N	N	N	56.7	52.3	N	N	N
West North Central	84	43	44	N	N	1722.0	Q	834	N	N	48.8	Q	52.3	N	N
South	N	N	104	249	107	N	N	2,508	6,748	4,054	N	N	41.5	36.8	26.5
South Atlantic	N	N	58	131	Q	N	N	1,705	3,643	Q	N	N	33.9	35.9	22.1
East South Central	N	N	Q	Q	Q	N	N	Q	Q	Q	N	N	Q	34.9	43.7
West South Central	N	N	Q	72	71	N	N	Q	1,777	2,748	N	N	Q	40.3	26.0
West	122	66	14	99	11	2102.0	1,211	443	3,761	296	57.9	54.1	30.8	26.2	37.9
Mountain	104	53	N	N	Q	1722.0	829	N	N	Q	60.4	63.5	N	N	Q
Pacific	Q	13	14	99	Q	Q	383	443	3,761	Q	46.8	33.7	30.8	26.2	117.3

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Number of Floors															
One	140	213	81	161	49	2,572	3,898	1,862	4,894	1,715	54.3	54.7	43.4	32.9	28.7
Two	131	164	89	75	18	2,461	3,745	1,964	2,436	835	53.2	43.8	45.1	30.7	21.6
Three	60	96	35	Q	Q	1,140	2,239	996	1,060	Q	52.5	42.9	34.8	34.7	Q
Four to Nine	74	133	74	60	27	1,270	2,171	2,103	1,392	735	58.1	61.1	35.0	43.4	36.3
Ten or More	Q	53	49	14	Q	Q	798	1,188	727	Q	Q	66.6	41.3	19.3	Q
Number of Workers (main shift)															
Fewer than 5	65	108	35	49	7	1,279	2,639	807	1,797	501	50.9	41.0	43.0	27.1	14.7
5 to 9	41	63	30	46	12	796	1,164	616	1,166	341	51.5	54.6	48.2	39.4	35.0
10 to 19	62	81	31	37	23	997	1,575	1,055	1,196	494	62.1	51.4	29.8	31.3	46.6
20 to 49	100	112	80	71	19	1,748	2,227	1,742	1,894	601	57.3	50.3	46.1	37.6	31.9
50 to 99	60	93	33	38	10	1,338	1,838	1,036	1,363	580	45.0	50.6	31.9	27.7	16.8
100 to 249	44	83	37	54	10	872	1,409	1,071	1,418	357	50.4	58.8	34.5	38.3	26.6
250 or More	46	118	80	52	38	614	1,998	1,786	1,675	1,475	74.7	59.1	45.0	30.8	25.7
Weekly Operating Hours															
Fewer than 40	22	50	Q	Q	Q	477	1,536	Q	746	Q	46.8	32.6	Q	30.2	Q
40 to 48	53	105	35	38	Q	1,049	1,988	1,296	1,901	680	50.7	52.7	26.9	19.8	16.6
49 to 60	107	116	70	57	12	2,297	3,050	1,525	2,372	948	46.8	38.1	45.8	24.2	12.9
61 to 84	71	108	53	58	14	1,182	2,237	1,450	2,020	579	59.8	48.5	36.6	28.9	24.6
85 to 167	68	74	43	50	13	1,127	1,348	1,060	1,107	582	60.5	55.0	40.6	45.5	22.9
Open Continuously	97	205	119	121	65	1,514	2,691	2,548	2,364	1,294	63.9	76.2	46.8	51.1	50.1
Ownership and Occupancy															
Nongovernment Owned	325	485	279	274	95	5,871	9,578	6,537	8,201	3,131	55.3	50.6	42.7	33.4	30.4
Owner Occupied	142	248	147	118	31	2,758	4,941	3,647	3,859	1,343	51.6	50.1	40.3	30.5	23.4
Nonowner Occupied	180	226	131	155	64	3,003	4,009	2,859	4,260	1,755	60.0	56.3	45.7	36.4	36.3
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	94	174	48	74	23	1,774	3,273	1,576	2,308	1,219	52.8	53.1	30.2	31.8	19.2
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	15.8	Q	Q
State	13	28	13	34	Q	375	447	414	878	Q	34.9	62.8	31.7	38.5	Q
Local	78	125	30	36	15	1,331	2,281	872	1,289	856	58.2	54.7	34.3	27.6	17.2
Vacancy Status															
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	38.2	Q	5.2
Partially Vacant	88	108	59	33	21	1,640	2,503	1,679	1,515	1,110	53.4	43.0	35.2	21.8	18.9
Not At All Vacant	323	539	262	313	98	5,798	9,691	6,297	8,868	3,192	55.7	55.6	41.6	35.3	30.6
Number of Establishments															
One	300	501	247	289	80	5,184	9,094	5,555	7,980	2,706	58.0	55.1	44.4	36.2	29.7
2 to 5	96	104	36	37	24	1,838	2,164	1,402	1,528	661	52.3	48.2	25.5	24.2	37.0
6 to 10	14	20	Q	Q	Q	360	393	Q	Q	Q	39.0	50.8	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Predominant Exterior Wall Material															
Brick, Stone or Stucco	211	419	199	197	68	3,414	7,509	4,772	5,721	2,134	61.7	55.7	41.7	34.4	31.9
Concrete (Block or Poured)	99	92	63	67	19	1,712	1,918	1,231	1,695	767	57.7	48.1	51.3	39.4	24.7
Concrete Panels	43	70	28	21	13	788	1,144	969	938	840	54.7	61.3	28.9	22.0	15.0
Siding or Shingles	17	33	Q	Q	Q	501	833	Q	Q	Q	34.6	39.1	Q	Q	Q
Metal Panels	41	24	19	35	Q	1,017	774	592	1,424	Q	40.4	31.1	32.0	24.4	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	28.3	Q
Predominant Roof Material															
Built-Up	156	240	138	143	43	2,588	4,234	2,924	3,909	1,554	60.3	56.7	47.3	36.6	27.7
Shingles (Not Wood)	67	111	51	61	11	1,115	2,379	983	1,594	448	59.7	46.8	51.7	38.3	24.5
Metal Surfacing	61	44	21	50	Q	1,500	1,111	656	1,913	601	40.9	39.4	32.3	25.9	20.7
Synthetic or Rubber	112	221	90	61	42	1,998	4,257	2,281	2,049	1,254	56.1	51.9	39.4	29.6	33.6
Slate or Tile	Q	20	Q	24	Q	Q	370	Q	627	Q	Q	54.9	Q	37.6	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)															
Any Type of Renovation Since 1980	168	254	116	94	33	2,731	4,313	2,969	2,478	780	61.4	58.8	39.0	37.7	41.8
Addition or Annex	88	102	40	47	18	1,351	1,594	987	756	348	65.2	64.0	Q	62.2	52.7
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	140	171	84	61	25	2,172	2,912	2,428	1,918	642	64.7	58.8	34.7	31.6	39.6
Wall or Roof Replacement	81	96	47	29	17	1,327	1,835	1,727	1,046	393	61.2	52.3	27.0	27.6	43.5
Interior Wall Re-Configuration	98	122	57	38	17	1,605	1,958	1,881	1,162	413	61.0	62.2	30.2	33.0	40.1
HVAC Equipment Upgrade	123	154	88	68	20	1,956	2,537	1,996	1,488	506	62.7	60.7	44.0	46.0	39.6
Lighting Upgrade	121	138	66	45	Q	1,971	2,467	1,890	1,391	385	61.3	55.9	35.1	32.3	40.1
Window Replacement	70	102	41	19	Q	1,118	1,732	1,523	495	Q	62.5	58.9	26.7	38.4	Q
Plumbing System Upgrade	83	96	52	35	Q	1,272	1,545	1,588	1,051	Q	65.5	62.1	32.5	33.5	Q
Insulation Upgrade	38	38	28	20	Q	696	836	773	484	Q	55.1	45.2	36.1	41.0	Q
Other Renovation	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
No Renovations Since 1980	129	177	94	74	23	2,243	3,905	2,453	2,432	1,087	57.6	45.3	38.1	30.5	21.1
Building Newer than 1980	121	228	117	179	63	2,671	4,632	2,692	5,600	2,483	45.4	49.3	43.6	32.0	25.4
Energy Sources (more than one may apply)															
Electricity	418	659	327	347	119	7,644	12,850	8,113	10,509	4,345	54.7	51.3	40.3	33.0	27.3
Natural Gas	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Fuel Oil	81	159	125	92	34	1,255	2,450	3,550	1,907	1,221	64.7	64.9	35.3	48.1	28.1
District Heat	Q	Q	Q	Q	Q	347	789	593	Q	Q	Q	22.1	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	Q	37	Q	Q	Q	Q	789	Q	Q	Q	Q	46.7	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Space-Heating Energy Sources															
Natural Gas	407	637	302	316	88	7,142	11,538	6,236	9,362	2,679	56.9	55.2	48.4	33.7	32.8
Natural Gas Main	381	603	286	288	78	6,515	10,640	5,617	7,965	2,233	58.5	56.7	50.9	36.2	35.0
Natural Gas Secondary	26	33	16	28	10	627	898	620	1,397	446	41.2	37.2	26.5	19.7	21.7
Other Excluding Natural Gas	Q	21	22	20	30	498	1,267	Q	925	1,452	21.3	16.2	Q	21.2	20.5
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	483.0	Q	Q
Primary Space-Heating Energy Source															
Electricity	31	41	25	38	36	700	1,206	759	1,933	1,564	44.5	34.2	32.7	19.7	22.9
Natural Gas	381	603	286	288	78	6,515	10,640	5,617	7,965	2,233	58.5	56.7	50.9	36.2	35.0
Fuel Oil	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
District Heat	3	Q	Q	Q	Q	331	Q	482	Q	Q	8.2	Q	5.6	Q	Q
Propane	N	N	N	Q	N	N	N	N	Q	N	N	N	N	Q	N
Other	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q	Q	N
Cooling Energy Sources															
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	383	577	282	319	115	6,959	11,282	7,651	9,806	4,307	55.0	51.2	36.9	32.5	26.8
Buildings without Cooling	27	47	Q	15	Q	587	1,213	Q	469	Q	46.3	38.8	Q	32.4	Q
Water-Heating Energy Sources															
Natural Gas	335	497	253	278	101	5,482	8,466	4,892	7,068	2,913	61.2	58.7	51.6	39.3	34.7
Other Excluding Natural Gas	76	136	68	56	15	1,792	3,649	2,994	2,689	1,189	42.5	37.2	22.8	20.6	12.5
Bldgs without Water Heating	Q	26	Q	14	Q	Q	735	Q	752	Q	Q	35.8	Q	18.2	Q
Cooking Energy Sources															
Natural Gas	152	262	153	189	75	2,217	4,071	3,464	3,518	2,167	68.4	64.3	44.2	53.6	34.8
Other Excluding Natural Gas	29	71	15	10	Q	511	1,343	559	396	410	57.6	52.8	26.3	25.9	27.5
Buildings without Cooking	237	326	159	148	32	4,917	7,437	4,091	6,594	1,773	48.3	43.9	38.8	22.5	18.0
Energy End Uses (more than one may apply)															
Buildings with Space Heating	417	657	324	336	118	7,640	12,805	8,109	10,288	4,132	54.6	51.3	40.0	32.6	28.4
Buildings with Cooling	391	612	312	332	119	7,058	11,637	7,942	10,040	4,345	55.4	52.6	39.3	33.1	27.3
Buildings with Water Heating	411	632	321	333	116	7,274	12,115	7,886	9,757	4,102	56.6	52.2	40.7	34.2	28.2
Buildings with Cooking	181	332	168	199	87	2,728	5,413	4,023	3,915	2,577	66.4	61.4	41.7	50.8	33.7
Buildings with Manufacturing	25	19	37	16	Q	522	480	692	522	Q	47.3	38.8	53.9	31.3	Q
Buildings with Electricity Generation	85	198	102	102	32	1,418	3,236	2,236	2,260	1,252	60.1	61.1	45.4	45.1	25.3
Percent of Floorspace Heated															
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	483.0	Q	Q
1 to 50	20	22	27	22	3	597	770	946	1,242	451	32.8	28.7	28.9	18.1	6.2
51 to 99	66	62	52	57	22	1,082	1,350	1,132	1,879	522	61.3	46.2	45.8	30.3	42.9
100	331	573	245	256	92	5,961	10,685	6,030	7,167	3,159	55.6	53.6	40.7	35.7	29.2
Percent of Floorspace Cooled															
Not Cooled	27	47	Q	15	Q	587	1,213	Q	469	Q	46.3	38.8	Q	32.4	Q
1 to 50	129	159	86	53	Q	2,420	3,668	2,787	2,595	661	53.3	43.4	30.9	20.3	16.9
51 to 99	110	155	81	70	21	1,984	2,806	2,197	2,050	694	55.2	55.4	36.9	34.4	30.3
100	153	297	145	209	86	2,654	5,162	2,958	5,395	2,990	57.6	57.5	49.1	38.7	28.9

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Heating Equipment (more than one may apply)															
Heat Pumps	30	63	42	62	20	540	951	1,274	2,090	698	56.3	65.8	32.8	29.8	28.9
Packaged Heat Pumps	Q	Q	25	Q	13	Q	655	778	1,093	505	Q	66.1	32.1	Q	26.6
Split-System Heat Pumps	Q	Q	Q	17	Q	Q	Q	Q	640	Q	Q	Q	Q	27.3	Q
Individual Room Heat Pumps	Q	Q	15	17	Q	Q	Q	449	762	Q	Q	Q	32.8	22.3	Q
Furnaces	168	248	87	119	31	3,534	5,239	1,911	3,529	1,091	47.6	47.3	45.6	33.8	28.1
Individual Space Heaters	108	120	72	52	16	2,259	2,849	1,662	1,685	513	47.6	42.2	43.1	30.9	31.9
District Heat	Q	Q	Q	Q	Q	323	Q	511	Q	Q	Q	Q	Q	Q	Q
Boilers	227	383	204	148	47	3,450	5,903	4,328	3,273	1,219	65.7	64.8	47.2	45.2	38.3
Packaged Heating Units	105	180	94	131	54	1,863	3,229	2,380	4,441	1,704	56.4	55.9	39.4	29.5	31.7
Other	17	14	Q	Q	Q	499	393	Q	Q	Q	33.7	35.7	Q	Q	Q
Cooling Equipment (more than one may apply)															
Residential-Type Central Air Conditioners	104	132	71	53	18	1,670	2,493	1,708	1,418	692	62.5	52.8	41.8	37.7	26.4
Heat Pumps	31	68	44	63	20	568	1,036	1,271	2,216	740	54.6	65.9	34.9	28.4	27.5
Packaged Heat Pumps	19	Q	27	Q	13	320	721	818	1,015	478	60.1	67.0	33.3	Q	28.0
Split-System Heat Pumps	Q	Q	Q	19	Q	Q	Q	Q	645	Q	Q	Q	Q	28.9	Q
Individual Room Heat Pumps	Q	Q	15	18	Q	Q	Q	412	931	Q	Q	Q	35.7	19.7	Q
Individual Air Conditioners	109	155	59	58	18	1,766	2,730	2,149	1,739	729	61.8	56.7	27.3	33.1	24.4
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	84	176	103	77	47	1,360	2,353	1,824	2,057	1,505	61.5	74.7	56.2	37.4	31.0
Packaged Air Conditioning Units	235	373	186	202	61	4,195	6,748	4,769	6,199	1,896	56.1	55.3	39.0	32.5	32.0
Swamp Coolers	31	Q	Q	Q	Q	500	Q	Q	Q	Q	61.4	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)															
Heating	132	229	108	90	27	2,495	3,951	2,409	2,310	1,111	53.0	58.0	44.9	39.0	24.4
Cooling	171	292	144	105	43	2,936	4,728	3,755	3,021	1,608	58.1	61.8	38.4	34.8	27.0
Water Heating Equipment															
Centralized System	285	402	199	224	79	4,862	7,466	4,960	5,532	2,533	58.6	53.9	40.1	40.6	31.2
Distributed System	48	97	36	47	18	973	2,378	1,428	2,135	645	49.7	40.9	25.4	22.2	27.2
Combination of Centralized and Distributed System	78	133	86	62	19	1,439	2,271	1,498	2,090	924	54.4	58.5	57.3	29.5	20.7
Energy-Related Space Functions (more than one may apply)															
Commercial Food Preparation	181	332	168	199	87	2,728	5,402	4,023	3,915	2,577	66.4	61.4	41.7	50.8	33.7
Activities with Large Amounts of Hot Water	193	296	139	204	71	2,903	4,514	3,303	3,485	1,818	66.4	65.5	42.2	58.5	39.2
Separate Computer Area	158	332	164	135	60	3,065	5,960	4,677	4,731	2,182	51.4	55.8	35.0	28.5	27.4
HVAC Conservation Features (more than one may apply)															
Variable Air-Volume System	135	246	129	127	51	2,506	4,172	2,922	2,931	2,063	53.8	59.0	44.2	43.2	24.8
Economizer Cycle	185	298	125	122	50	3,349	4,824	3,401	3,573	1,508	55.3	61.9	36.9	34.2	33.0
HVAC Maintenance	342	577	282	302	106	6,236	10,916	7,234	8,831	3,767	54.8	52.8	39.0	34.2	28.2
Energy Management and Control System (EMCS)	103	170	79	73	37	2,071	3,275	2,224	2,549	1,507	50.0	51.9	35.7	28.7	24.6

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone[a] for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Total Floorspace of Buildings Using Natural Gas (million square feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[b]															
Heating	271	445	252	205	82	5,471	9,069	6,259	7,493	2,887	49.4	49.0	40.2	27.3	28.3
Cooling	273	421	244	218	94	5,274	8,512	6,533	7,662	3,457	51.8	49.5	37.3	28.4	27.1
Lighting	309	432	201	218	52	5,799	9,297	5,309	7,796	2,869	53.3	46.5	37.8	28.0	18.3
Office Equipment	127	171	84	65	16	2,606	4,072	2,335	2,753	904	48.6	41.9	35.9	23.6	17.5
Annual Consumption (hundred cubic feet)															
1,000 or Less	7	9	4	13	3	512	709	863	1,556	697	13.5	12.8	Q	8.2	3.8
1,001 to 5,000	51	84	36	59	12	1,598	2,690	1,425	3,143	878	31.7	31.4	24.9	18.9	13.5
5,001 to 10,000	62	84	37	37	19	1,132	1,782	967	1,343	1,030	55.2	47.1	38.5	27.5	18.1
10,001 to 25,000	94	111	51	65	27	1,515	2,388	1,535	1,658	671	62.0	46.7	33.5	39.0	40.4
25,001 to 50,000	74	86	50	60	Q	1,198	1,780	1,309	842	405	61.6	48.4	38.0	71.3	34.6
50,001 to 100,000	39	75	58	Q	Q	673	1,321	859	Q	Q	58.6	56.6	67.1	Q	Q
Over 100,000	91	209	91	83	36	1,017	2,181	1,155	1,022	499	89.7	95.7	78.7	81.2	71.6
Provider of Natural Gas (more than one may apply)															
Local Utility	360	532	269	312	109	6,785	10,649	7,347	9,557	4,024	53.1	49.9	36.6	32.6	27.1
Some Other Provider	80	159	81	42	Q	1,143	2,543	1,276	1,032	Q	69.8	62.6	63.6	40.5	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] Climate zone (30-year average) definitions: Zone 1 = Under 2,000 CDD and more than 7,000 HDD; Zone 2 = Under 2,000 CDD and 5,500-7,000 HDD; Zone 3 = Under 2,000 CDD and 4,000-5,499 HDD; Zone 4 = Under 2,000 CDD and fewer than 4,000 HDD; Zone 5 = 2,000 CDD or more and fewer than 4,000 HDD. (See "Glossary" for definitions of CDD and HDD.)

[b] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Principal Building Activity									
Education	Q	137	101	419	3,629	2,997	53.9	37.6	33.7
Food Sales	16	Q	Q	339	Q	Q	46.6	Q	Q
Food Service	149	48	N	774	622	N	192.5	77.2	N
Health Care	12	37	187	233	520	1,792	49.5	70.8	104.4
Inpatient	N	Q	181	N	Q	1,662	N	Q	109.0
Outpatient	12	20	Q	233	377	Q	49.5	52.3	Q
Lodging	Q	83	113	Q	1,750	2,374	Q	47.6	47.4
Retail (Other Than Mall)	38	39	12	726	1,406	734	52.7	27.7	15.7
Office	59	115	87	1,400	3,138	3,670	42.4	36.7	23.7
Public Assembly	19	54	26	464	1,259	1,000	41.5	42.9	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	28	49	Q	663	1,785	Q	42.7	27.7	Q
Service	55	71	Q	783	1,394	Q	69.8	50.7	Q
Warehouse and Storage	18	66	45	522	2,538	2,434	34.2	26.0	18.4
Other	Q	42	38	Q	458	681	Q	91.1	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	32	76	31	569	1,532	658	56.6	49.4	47.1
1920 to 1945	61	90	71	987	1,917	1,776	62.1	47.2	39.9
1946 to 1959	48	94	68	797	2,407	1,455	60.0	39.1	46.7
1960 to 1969	47	123	78	867	2,894	1,873	53.8	42.5	41.7
1970 to 1979	82	117	142	1,225	3,166	3,268	66.7	37.0	43.5
1980 to 1989	60	114	108	855	2,727	2,887	70.2	41.9	37.5
1990 to 1999	97	123	85	1,189	3,634	3,353	81.2	33.9	25.2
2000 to 2003	19	48	55	287	1,484	1,660	65.7	32.6	33.4
Census Region and Division									
Northeast	84	155	176	1,134	3,795	4,251	74.4	40.7	41.5
New England	Q	28	Q	Q	772	Q	Q	35.7	Q
Middle Atlantic	73	127	143	899	3,024	3,793	80.9	42.0	37.7
Midwest	148	327	208	2,033	6,628	4,501	72.7	49.4	46.2
East North Central	111	234	167	1,382	4,656	3,531	80.6	50.2	47.3
West North Central	36	94	41	651	1,972	970	56.0	47.4	42.4
South	129	175	156	2,218	5,808	5,285	58.2	30.2	29.5
South Atlantic	59	72	79	946	2,508	2,873	61.9	28.9	27.6
East South Central	18	53	27	418	1,387	476	43.7	38.3	57.5
West South Central	52	50	49	854	1,914	1,936	61.3	26.0	25.4
West	84	129	98	1,391	3,529	2,893	60.1	36.6	33.9
Mountain	35	69	58	532	1,318	947	66.4	52.1	61.3
Pacific	48	60	40	859	2,211	1,947	56.3	27.3	20.6
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	103	202	114	1,304	3,972	2,369	78.8	50.8	48.1
5,500-7,000 HDD	134	278	247	1,923	6,102	4,824	69.9	45.5	51.1
4,000-5,499 HDD	62	143	121	948	3,289	3,877	65.1	43.6	31.3
Fewer than 4,000 HDD	114	122	111	2,001	4,792	3,717	57.2	25.4	29.8
2,000 CDD or More and --									
Fewer than 4,000 HDD	32	41	46	601	1,606	2,144	52.8	25.8	21.2

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Number of Floors									
One	301	287	56	4,443	7,865	2,632	67.7	36.5	21.3
Two	100	268	109	1,638	6,281	3,522	60.8	42.7	30.8
Three	39	116	78	614	3,190	1,864	64.3	36.3	41.9
Four to Nine	Q	110	252	Q	2,339	5,250	Q	46.9	48.0
Ten or More	N	Q	143	N	Q	3,663	N	Q	39.1
Number of Workers (main shift)									
Fewer than 5	175	77	Q	3,395	3,081	Q	51.6	25.2	Q
5 to 9	108	80	Q	1,575	2,330	Q	68.6	34.2	Q
10 to 19	96	120	Q	1,110	3,353	Q	86.8	35.8	Q
20 to 49	59	279	45	635	5,694	1,883	92.4	49.1	23.8
50 to 99	Q	140	87	Q	3,265	2,834	Q	42.8	30.8
100 to 249	Q	75	153	Q	1,709	3,414	Q	43.6	44.8
250 or More	N	15	319	N	329	7,220	N	45.8	44.2
Weekly Operating Hours									
Fewer than 40	55	37	Q	1,239	1,460	Q	44.5	25.4	Q
40 to 48	74	132	36	1,787	3,605	1,521	41.5	36.6	23.4
49 to 60	88	209	66	1,636	5,552	3,003	53.8	37.7	21.9
61 to 84	90	153	62	945	3,915	2,607	95.3	39.1	23.6
85 to 167	94	104	52	691	2,141	2,393	135.5	48.5	21.6
Open Continuously	44	151	412	477	3,088	6,846	92.1	48.9	60.2
Ownership and Occupancy									
Nongovernment Owned	403	601	453	6,048	15,230	12,039	66.7	39.5	37.7
Owner Occupied	166	272	248	3,099	7,592	5,856	53.7	35.8	42.4
Nonowner Occupied	234	323	198	2,881	7,222	5,783	81.4	44.8	34.2
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	42	185	185	728	4,531	4,891	57.4	40.9	37.8
Federal	Q	Q	23	Q	Q	765	Q	Q	30.3
State	Q	39	44	Q	1,036	1,295	Q	37.3	34.0
Local	27	138	118	583	3,215	2,831	46.3	42.9	41.6
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	29	130	150	618	2,912	4,916	46.3	44.5	30.5
Not At All Vacant	413	641	480	6,071	16,209	11,565	68.1	39.5	41.5
Number of Establishments									
One	384	604	430	5,549	14,298	10,672	69.2	42.2	40.3
2 to 5	54	139	105	1,065	3,911	2,617	50.6	35.5	40.1
6 to 10	Q	25	18	Q	625	664	Q	39.3	27.4
11 to 20	N	8	25	N	386	885	N	21.3	28.3
More than 20	Q	Q	51	Q	Q	1,655	Q	Q	31.1
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Predominant Exterior Wall Material									
Brick, Stone or Stucco	270	454	370	3,722	11,431	8,398	72.5	39.7	44.0
Concrete (Block or Poured)	75	165	100	1,102	3,702	2,520	67.9	44.6	39.7
Concrete Panels	Q	59	101	Q	1,217	3,292	Q	48.1	30.7
Siding or Shingles	42	33	Q	720	996	Q	58.0	33.5	Q
Metal Panels	38	62	26	903	1,991	1,129	41.5	31.4	23.4
Window Glass	Q	Q	9	Q	Q	549	Q	Q	17.1
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	149	297	275	1,736	6,828	6,644	85.8	43.4	41.4
Shingles (Not Wood)	108	133	59	2,009	3,345	1,165	54.0	39.7	50.9
Metal Surfacing	64	100	25	1,350	3,225	1,206	47.1	30.9	20.7
Synthetic or Rubber	80	189	257	922	4,482	6,434	86.7	42.1	40.0
Slate or Tile	28	33	Q	418	935	Q	67.2	35.8	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	118	273	271	1,767	5,857	5,646	67.0	46.7	48.0
Addition or Annex	28	110	157	391	2,028	2,618	72.9	54.3	59.8
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	85	195	202	1,296	4,379	4,398	65.5	44.5	46.0
Wall or Roof Replacement	40	91	139	736	2,253	3,338	54.1	40.3	41.7
Interior Wall Re-Configuration	46	108	178	770	2,479	3,769	59.7	43.5	47.1
HVAC Equipment Upgrade	51	181	220	769	3,566	4,148	66.8	50.8	53.1
Lighting Upgrade	46	153	187	793	3,286	4,025	58.0	46.5	46.4
Window Replacement	34	99	102	539	2,206	2,255	63.9	44.9	45.1
Plumbing System Upgrade	44	91	142	570	2,049	3,095	77.8	44.6	46.0
Insulation Upgrade	18	49	60	341	1,285	1,334	54.2	38.4	44.9
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	151	227	119	2,678	6,058	3,384	56.5	37.4	35.1
Building Newer than 1980	175	286	248	2,331	7,845	7,900	75.3	36.4	31.4
Energy Sources (more than one may apply)									
Electricity	445	786	638	6,775	19,761	16,926	65.7	39.8	37.7
Natural Gas	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Fuel Oil	Q	97	385	Q	2,030	8,102	Q	47.5	47.5
District Heat	Q	Q	40	Q	Q	1,955	Q	Q	20.3
District Chilled Water	Q	Q	21	Q	Q	1,375	Q	Q	15.5
Propane	Q	26	67	Q	696	1,672	Q	37.1	40.2
Other	Q	17	24	Q	437	334	Q	39.4	72.3

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Space-Heating Energy Sources									
Natural Gas	401	740	608	6,187	17,733	13,038	64.8	41.7	46.6
Natural Gas Main	376	689	572	5,741	15,927	11,302	65.4	43.2	50.6
Natural Gas Secondary	25	51	36	446	1,807	1,736	56.2	28.5	20.9
Other Excluding Natural Gas	30	43	29	454	1,878	3,683	66.9	23.1	7.9
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	52	85	35	749	2,816	2,597	69.4	30.0	13.3
Natural Gas	376	689	572	5,741	15,927	11,302	65.4	43.2	50.6
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	18	Q	Q	1,672	Q	Q	11.0
Propane	N	Q	N	N	Q	N	N	Q	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Natural Gas	Q	Q	66	Q	Q	683	Q	Q	96.1
Other Excluding Natural Gas	397	725	554	6,098	18,102	15,806	65.2	40.1	35.1
Buildings without Cooling	43	42	Q	641	1,362	Q	66.8	31.0	Q
Water-Heating Energy Sources									
Natural Gas	316	604	543	3,995	13,529	11,296	79.1	44.6	48.1
Other Excluding Natural Gas	107	153	91	2,024	4,942	5,348	52.8	30.9	17.0
Bldgs without Water Heating	22	29	Q	757	1,290	Q	29.1	22.9	Q
Cooking Energy Sources									
Natural Gas	173	246	412	1,190	4,975	9,273	145.1	49.3	44.5
Other Excluding Natural Gas	13	53	70	201	1,549	1,468	63.1	34.5	47.9
Buildings without Cooking	260	487	156	5,385	13,237	6,190	48.2	36.8	25.2
Energy End Uses (more than one may apply)									
Buildings with Space Heating	431	783	637	6,641	19,611	16,722	64.9	40.0	38.1
Buildings with Cooling	402	744	620	6,135	18,399	16,489	65.6	40.4	37.6
Buildings with Water Heating	423	757	634	6,019	18,471	16,644	70.3	41.0	38.1
Buildings with Cooking	185	299	483	1,391	6,524	10,741	133.3	45.8	44.9
Buildings with Manufacturing	Q	47	43	Q	938	1,164	Q	49.8	36.8
Buildings with Electricity Generation	Q	124	388	Q	2,431	7,893	Q	50.9	49.1
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	34	51	9	712	2,271	1,024	48.3	22.6	8.4
51 to 99	60	97	103	930	2,420	2,615	64.1	40.2	39.3
100	337	635	526	4,999	14,920	13,083	67.4	42.5	40.2

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Percent of Floorspace Cooled									
Not Cooled	43	42	Q	641	1,362	Q	66.8	31.0	Q
1 to 50	84	250	104	1,708	6,358	4,066	49.2	39.3	25.6
51 to 99	79	154	205	1,136	3,879	4,717	69.1	39.6	43.5
100	240	340	310	3,291	8,162	7,706	72.8	41.7	40.3
Heating Equipment (more than one may apply)									
Heat Pumps	19	82	116	294	2,402	2,857	65.8	34.0	40.7
Packaged Heat Pumps	Q	45	79	Q	1,359	1,801	Q	33.0	43.9
Split-System Heat Pumps	Q	22	12	Q	738	600	Q	30.5	20.7
Individual Room Heat Pumps	Q	33	46	Q	881	1,298	Q	38.0	35.4
Furnaces	234	278	140	4,068	7,668	3,568	57.6	36.3	39.3
Individual Space Heaters	65	169	134	1,210	4,315	3,444	53.4	39.2	38.9
District Heat	Q	Q	32	Q	Q	1,813	Q	Q	17.7
Boilers	66	405	538	741	7,270	10,163	89.3	55.7	52.9
Packaged Heating Units	134	235	196	1,633	6,393	5,592	81.8	36.7	35.1
Other	Q	23	14	Q	636	941	Q	36.1	15.2
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	112	164	103	2,034	3,775	2,173	55.1	43.4	47.6
Heat Pumps	28	82	117	415	2,373	3,043	68.2	34.4	38.4
Packaged Heat Pumps	Q	44	79	Q	1,315	1,784	Q	33.6	44.0
Split-System Heat Pumps	Q	23	12	Q	753	589	Q	30.6	20.2
Individual Room Heat Pumps	Q	33	48	Q	851	1,513	Q	39.1	31.4
Individual Air Conditioners	53	177	168	922	4,330	3,862	58.0	40.9	43.4
District Chilled Water	Q	Q	21	Q	Q	1,375	Q	Q	15.5
Central Chillers	Q	120	363	Q	2,163	6,896	Q	55.5	52.7
Packaged Air Conditioning Units	232	444	381	3,180	10,963	9,663	73.0	40.5	39.4
Swamp Coolers	23	41	Q	218	703	Q	105.9	58.0	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	123	301	162	1,980	6,674	3,621	62.3	45.2	44.7
Cooling	152	349	255	2,507	7,544	5,997	60.4	46.2	42.6
Water Heating Equipment									
Centralized System	333	528	328	4,557	12,516	8,279	73.1	42.2	39.6
Distributed System	77	108	62	1,283	3,389	2,887	59.7	31.9	21.5
Combination of Centralized and Distributed System	Q	120	244	Q	2,566	5,478	Q	46.9	44.6
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	185	298	483	1,391	6,512	10,741	133.3	45.8	44.9
Activities with Large Amounts of Hot Water	157	290	455	1,022	5,671	9,329	153.5	51.2	48.8
Separate Computer Area	28	307	513	578	7,533	12,505	49.3	40.8	41.0

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	67	213	409	665	4,638	9,292	100.5	45.8	44.0
Economizer Cycle	63	271	447	704	5,534	10,418	88.9	49.0	42.9
HVAC Maintenance	312	669	628	4,256	16,257	16,471	73.4	41.1	38.1
Energy Management and Control System (EMCS)	Q	155	287	Q	3,554	7,882	Q	43.7	36.4
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	300	548	405	4,846	14,185	12,149	61.9	38.6	33.4
Cooling	302	551	396	4,731	14,114	12,593	63.8	39.0	31.5
Lighting	388	613	212	5,980	15,710	9,381	64.8	39.0	22.6
Office Equipment	137	246	79	2,579	6,854	3,237	53.1	36.0	24.3
Annual Consumption (hundred cubic feet)									
1,000 or Less	32	3	Q	2,069	1,293	974	15.7	2.1	0.2
1,001 to 5,000	168	72	2	3,508	5,095	1,128	47.9	14.1	1.4
5,001 to 10,000	107	127	5	714	4,273	1,266	150.2	29.8	3.6
10,001 to 25,000	93	239	17	390	5,306	2,071	239.5	45.0	8.0
25,001 to 50,000	Q	193	47	Q	2,755	2,685	Q	70.0	17.5
50,001 to 100,000	N	108	103	N	844	3,125	N	127.4	33.1
Over 100,000	N	Q	465	N	Q	5,681	N	Q	81.8
Provider of Natural Gas (more than one may apply)									
Local Utility	422	707	453	6,480	18,272	13,611	65.1	38.7	33.3
Some Other Provider	26	100	251	336	1,653	4,383	77.2	60.7	57.2

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Building Floorspace (Square Feet)									
1,001 to 5,000	85	98	59	1,222	1,214	648	69.5	81.0	91.5
5,001 to 10,000	56	90	56	1,131	1,733	828	49.8	51.9	67.7
10,001 to 25,000	103	141	57	2,392	2,909	1,752	42.9	48.4	32.3
25,001 to 50,000	90	102	58	1,827	2,700	1,498	49.3	37.7	38.7
50,001 to 100,000	68	112	57	1,636	3,178	1,869	41.4	35.1	30.5
100,001 to 200,000	63	120	59	1,501	2,745	2,399	42.0	43.6	24.5
200,001 to 500,000	45	104	50	1,496	2,748	1,435	30.1	37.8	34.8
Over 500,000	62	105	Q	893	2,535	Q	69.1	41.4	Q
Principal Building Activity									
Education	109	110	41	2,581	2,816	1,648	42.3	39.2	24.6
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	47	72	78	491	422	482	95.8	169.4	162.6
Health Care	66	131	39	633	1,410	501	104.1	92.6	77.5
Inpatient	58	112	28	444	1,141	220	130.2	98.3	128.2
Outpatient	Q	18	11	Q	269	282	Q	68.4	37.9
Lodging	38	129	41	Q	2,123	1,154	Q	61.0	35.7
Retail (Other Than Mall)	34	27	27	675	1,028	1,162	50.5	26.7	23.4
Office	91	129	42	2,109	4,459	1,640	43.0	29.0	25.3
Public Assembly	30	43	26	1,047	965	711	Q	45.0	36.4
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	37	29	14	1,086	943	600	33.7	31.2	22.7
Service	35	64	37	608	1,278	610	57.0	49.9	59.8
Warehouse and Storage	35	64	29	1,039	2,667	1,788	33.8	24.0	16.4
Other	Q	Q	29	Q	408	521	Q	75.7	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division									
Northeast	185	153	76	4,201	3,454	1,525	44.1	44.4	50.0
New England	30	Q	Q	677	Q	Q	44.9	Q	Q
Middle Atlantic	155	131	57	3,525	2,985	1,206	44.0	43.7	47.2
Midwest	245	310	129	4,201	5,898	3,064	58.2	52.5	42.1
East North Central	180	242	91	3,138	4,321	2,110	57.2	56.0	42.9
West North Central	65	68	38	1,063	1,577	954	61.3	42.9	40.4
South	87	213	160	2,129	6,213	4,969	40.7	34.3	32.3
South Atlantic	Q	77	86	996	2,426	2,903	48.0	31.6	29.5
East South Central	12	63	24	386	1,110	785	30.2	56.8	30.6
West South Central	27	74	51	746	2,677	1,280	36.5	27.5	39.5
West	54	195	62	1,566	4,198	2,049	34.8	46.4	30.1
Mountain	22	115	25	393	1,677	726	56.3	68.3	34.7
Pacific	32	80	36	1,173	2,521	1,323	27.6	31.8	27.5
Climate Zone: 30-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	142	197	80	2,237	3,425	1,984	63.3	57.6	40.1
5,500-7,000 HDD	212	327	120	4,168	5,882	2,800	50.9	55.6	42.7
4,000-5,499 HDD	131	122	74	3,161	3,207	1,745	41.4	37.9	42.5
Fewer than 4,000 HDD	70	168	110	1,966	5,054	3,489	35.4	33.2	31.5
2,000 CDD or More and --									
Fewer than 4,000 HDD	17	57	44	565	2,195	1,590	30.7	26.1	27.6

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Number of Floors									
One	117	312	214	2,559	7,157	5,224	45.6	43.7	41.0
Two	153	237	86	3,223	5,432	2,786	47.5	43.7	30.8
Three	119	71	43	2,688	1,666	1,313	44.3	42.8	32.9
Four to Nine	132	176	60	2,602	3,266	1,802	50.6	53.8	33.0
Ten or More	51	74	Q	1,025	2,242	Q	49.4	33.1	Q
Number of Workers (main shift)									
Fewer than 5	100	112	53	2,447	2,975	1,601	40.7	37.7	32.8
5 to 9	66	80	46	1,359	1,696	1,029	48.7	47.1	44.8
10 to 19	85	89	60	2,026	1,886	1,406	42.2	47.4	42.8
20 to 49	117	172	94	2,622	3,332	2,258	44.7	51.6	41.4
50 to 99	62	116	56	1,136	3,005	2,016	54.9	38.5	27.8
100 to 249	62	111	55	1,147	2,613	1,367	53.9	42.5	40.0
250 or More	79	191	64	1,361	4,256	1,932	57.8	44.9	33.3
Weekly Operating Hours									
Fewer than 40	40	50	14	1,120	1,487	653	35.8	33.5	21.5
40 to 48	97	107	38	2,678	2,907	1,328	36.1	36.9	28.6
49 to 60	132	158	72	2,841	4,918	2,432	46.5	32.2	29.8
61 to 84	103	132	70	2,168	3,236	2,064	47.5	40.7	34.0
85 to 167	55	103	91	1,039	2,155	2,031	53.0	47.7	45.0
Open Continuously	144	321	141	2,251	5,059	3,101	64.2	63.5	45.6
Ownership and Occupancy									
Nongovernment Owned	441	666	350	9,318	15,243	8,756	47.4	43.7	40.0
Owner Occupied	271	262	154	5,409	7,195	3,943	50.0	36.4	39.1
Nonowner Occupied	170	392	194	3,788	7,504	4,594	44.8	52.3	42.2
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	130	205	77	2,779	4,519	2,852	46.8	45.4	26.9
Federal	7	21	Q	163	569	Q	42.3	36.4	Q
State	16	67	12	477	1,360	601	32.7	49.6	20.7
Local	108	117	58	2,139	2,591	1,900	50.3	45.1	30.5
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	125	135	48	2,555	4,155	1,737	49.0	32.5	27.6
Not At All Vacant	439	719	377	9,264	14,947	9,635	47.4	48.1	39.1
Number of Establishments									
One	421	670	327	8,689	13,334	8,496	48.4	50.3	38.5
2 to 5	99	125	74	2,172	3,365	2,056	45.3	37.1	36.1
6 to 10	15	19	Q	372	618	Q	40.2	31.2	Q
11 to 20	Q	22	Q	Q	689	Q	Q	31.8	Q
More than 20	Q	22	Q	Q	1,210	Q	Q	18.5	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Predominant Exterior Wall Material									
Brick, Stone or Stucco	427	459	208	9,195	9,498	4,857	46.4	48.3	42.7
Concrete (Block or Poured)	103	175	62	1,883	3,739	1,701	54.8	46.7	36.4
Concrete Panels	Q	114	55	Q	2,597	1,942	Q	43.7	28.2
Siding or Shingles	24	30	29	553	685	759	42.7	44.4	37.8
Metal Panels	Q	65	51	Q	2,163	1,647	Q	30.1	31.0
Window Glass	Q	8	Q	Q	361	Q	Q	23.0	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	254	358	108	4,836	7,622	2,751	52.5	47.0	39.2
Shingles (Not Wood)	122	119	60	2,074	2,762	1,683	58.6	43.2	35.5
Metal Surfacing	17	86	85	504	2,438	2,839	33.6	35.3	30.1
Synthetic or Rubber	130	248	148	2,731	5,411	3,696	47.6	45.8	40.1
Slate or Tile	28	21	16	740	477	357	37.5	43.0	46.0
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	348	316	N	6,712	6,558	N	51.8	48.1	N
Addition or Annex	128	167	N	2,246	2,791	N	57.1	59.9	N
Reduction In Floorspace	Q	Q	N	Q	Q	N	Q	Q	N
Cosmetic Improvements	238	244	N	5,105	4,967	N	46.5	49.2	N
Wall or Roof Replacement	120	149	N	3,225	3,103	N	37.3	48.2	N
Interior Wall Re-Configuration	151	181	N	3,465	3,554	N	43.5	50.8	N
HVAC Equipment Upgrade	229	224	N	4,163	4,319	N	54.9	51.9	N
Lighting Upgrade	191	195	N	4,254	3,850	N	44.9	50.6	N
Window Replacement	141	95	N	3,280	1,720	N	42.9	55.0	N
Plumbing System Upgrade	146	132	N	3,137	2,578	N	46.5	51.3	N
Insulation Upgrade	69	59	N	1,595	1,364	N	43.3	43.0	N
Other Renovation	Q	Q	N	Q	Q	N	Q	Q	N
No Renovations Since 1980	224	273	N	5,385	6,735	N	41.6	40.5	N
Building Newer than 1980	N	282	427	N	6,469	11,608	N	43.7	36.8
Energy Sources (more than one may apply)									
Electricity	571	871	427	12,091	19,763	11,608	47.2	44.1	36.8
Natural Gas	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Fuel Oil	138	249	104	3,084	4,932	2,367	44.6	50.6	44.1
District Heat	Q	25	Q	667	1,135	Q	Q	22.3	Q
District Chilled Water	Q	23	Q	Q	883	Q	Q	26.6	Q
Propane	Q	55	15	Q	1,250	724	Q	43.8	20.7
Other	Q	24	Q	Q	484	Q	Q	48.9	Q

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Space-Heating Energy Sources									
Natural Gas	541	814	394	10,050	17,081	9,828	53.9	47.6	40.1
Natural Gas Main	520	754	362	9,431	15,149	8,390	55.1	49.8	43.2
Natural Gas Secondary	22	59	32	619	1,932	1,438	35.1	30.7	22.1
Other Excluding Natural Gas	26	51	26	1,937	2,502	1,576	Q	20.3	16.7
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source									
Electricity	29	90	52	726	3,223	2,213	40.5	27.8	23.6
Natural Gas	520	754	362	9,431	15,149	8,390	55.1	49.8	43.2
Fuel Oil	13	Q	Q	Q	Q	Q	Q	Q	Q
District Heat	4	16	Q	514	968	Q	7.6	16.3	Q
Propane	N	N	Q	N	N	Q	N	N	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources									
Natural Gas	Q	38	Q	Q	419	Q	Q	90.1	Q
Other Excluding Natural Gas	468	806	403	10,345	18,622	11,038	45.2	43.3	36.5
Buildings without Cooling	68	27	Q	1,428	722	Q	47.8	37.7	Q
Water-Heating Energy Sources									
Natural Gas	439	681	343	8,044	13,116	7,661	54.6	51.9	44.7
Other Excluding Natural Gas	107	168	76	3,013	5,766	3,534	35.5	29.1	21.4
Bldgs without Water Heating	25	22	Q	1,041	881	Q	24.2	24.8	Q
Cooking Energy Sources									
Natural Gas	264	364	203	4,847	6,307	4,284	54.4	57.7	47.4
Other Excluding Natural Gas	41	74	22	727	1,755	736	57.0	41.9	29.3
Buildings without Cooking	266	434	203	6,523	11,701	6,588	40.8	37.1	30.8
Energy End Uses (more than one may apply)									
Buildings with Space Heating	567	865	420	11,988	19,582	11,404	47.3	44.2	36.8
Buildings with Cooling	503	844	419	10,669	19,041	11,313	47.2	44.3	37.0
Buildings with Water Heating	546	849	419	11,057	18,882	11,195	49.4	45.0	37.4
Buildings with Cooking	305	437	225	5,574	8,062	5,020	54.7	54.3	44.7
Buildings with Manufacturing	35	42	20	648	1,229	424	54.5	34.4	46.9
Buildings with Electricity Generation	123	285	110	1,836	5,646	2,920	67.1	50.5	37.6
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	31	35	28	1,344	1,565	1,097	23.3	22.3	25.6
51 to 99	105	92	63	2,111	2,231	1,623	49.8	41.2	38.7
100	431	738	329	8,532	15,787	8,683	50.5	46.7	37.9
Percent of Floorspace Cooled									
Not Cooled	68	27	Q	1,428	722	Q	47.8	37.7	Q
1 to 50	178	185	74	4,377	5,173	2,582	40.8	35.8	28.8
51 to 99	137	185	115	2,879	4,188	2,666	47.7	44.3	43.0
100	187	473	230	3,414	9,680	6,065	54.9	48.9	37.9

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Heating Equipment (more than one may apply)									
Heat Pumps	52	108	58	1,122	2,673	1,757	46.0	40.5	32.7
Packaged Heat Pumps	Q	78	24	519	1,899	904	64.2	41.1	26.7
Split-System Heat Pumps	Q	18	19	Q	736	545	Q	24.4	34.2
Individual Room Heat Pumps	21	33	27	642	785	768	33.1	42.0	35.0
Furnaces	221	274	158	4,508	6,468	4,327	49.0	42.3	36.6
Individual Space Heaters	116	157	95	2,594	3,986	2,389	44.8	39.4	39.7
District Heat	Q	19	Q	652	996	Q	Q	19.3	Q
Boilers	374	472	162	6,850	8,165	3,160	54.7	57.8	51.3
Packaged Heating Units	117	260	187	2,183	6,825	4,610	53.5	38.2	40.6
Other	Q	24	14	Q	870	672	Q	27.5	21.2
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	140	149	90	2,694	3,429	1,860	52.1	43.5	48.4
Heat Pumps	61	107	59	1,182	2,705	1,945	51.8	39.5	30.2
Packaged Heat Pumps	Q	76	24	596	1,855	902	68.2	41.2	26.6
Split-System Heat Pumps	Q	18	19	Q	730	566	Q	24.1	33.4
Individual Room Heat Pumps	21	33	28	605	867	907	35.1	38.6	30.7
Individual Air Conditioners	186	156	56	4,111	3,461	1,542	45.3	45.0	36.2
District Chilled Water	Q	23	Q	Q	883	Q	Q	26.6	Q
Central Chillers	114	274	97	1,869	5,296	1,936	61.0	51.8	50.3
Packaged Air Conditioning Units	283	495	280	5,894	10,897	7,015	48.0	45.4	39.9
Swamp Coolers	Q	56	Q	Q	905	Q	Q	61.8	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	221	365	N	4,630	7,645	N	47.8	47.8	N
Cooling	274	482	N	6,085	9,963	N	45.0	48.4	N
Water Heating Equipment									
Centralized System	343	577	270	6,539	12,019	6,795	52.4	48.0	39.7
Distributed System	92	91	63	2,462	3,051	2,046	37.5	29.9	30.9
Combination of Centralized and Distributed System	111	181	86	2,055	3,813	2,354	54.0	47.5	36.4
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	304	437	225	5,563	8,062	5,020	54.7	54.3	44.7
Activities with Large Amounts of Hot Water	249	437	217	4,152	7,176	4,694	59.9	60.9	46.2
Separate Computer Area	238	418	192	5,023	10,078	5,514	47.4	41.5	34.9
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	160	335	194	2,616	7,289	4,689	61.0	45.9	41.4
Economizer Cycle	156	429	196	2,876	8,712	5,068	54.2	49.3	38.7
HVAC Maintenance	456	760	393	9,645	16,923	10,416	47.3	44.9	37.7
Energy Management and Control System (EMCS)	111	241	112	2,167	6,029	3,431	51.1	39.9	32.5

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
**All Buildings* ..... **	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]									
Heating	409	569	275	8,877	14,453	7,850	46.1	39.4	35.1
Cooling	387	566	296	8,632	14,308	8,498	44.9	39.6	34.8
Lighting	415	523	274	9,376	13,751	7,944	44.3	38.0	34.5
Office Equipment	164	189	109	4,362	4,975	3,333	37.7	37.9	32.8
Annual Consumption (hundred cubic feet)									
1,000 or Less	14	15	7	1,617	1,670	1,049	8.5	8.9	6.5
1,001 to 5,000	90	99	53	2,818	4,392	2,522	31.8	22.5	21.1
5,001 to 10,000	75	100	65	1,466	2,803	1,984	51.1	35.6	32.5
10,001 to 25,000	117	153	79	2,316	3,187	2,265	50.6	47.9	34.8
25,001 to 50,000	75	127	82	1,497	2,376	1,661	50.4	53.4	49.1
50,001 to 100,000	52	118	42	810	2,293	866	63.6	51.4	48.0
Over 100,000	149	260	101	1,572	3,042	1,261	94.8	85.4	79.9
Provider of Natural Gas (more than one may apply)									
Local Utility	463	733	385	10,701	17,234	10,427	43.2	42.6	37.0
Some Other Provider	131	188	57	1,773	3,432	1,167	74.1	54.9	48.9

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use natural gas.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
All Buildings*	451	15,157	34	222	1,602	1,776
Building Floorspace (Square Feet)						
1,001 to 5,000	209	600	3	34	249	292
5,001 to 10,000	99	716	7	36	261	307
10,001 to 25,000	61	966	16	27	196	232
25,001 to 50,000	22	825	38	16	117	127
50,001 to 100,000	23	1,740	76	26	188	203
100,001 to 200,000	21	2,927	141	37	263	272
200,001 to 500,000	12	3,400	294	36	258	272
Over 500,000	4	3,981	927	10	69	71
Principal Building Activity						
Education	26	1,864	70	47	342	362
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	13	1,882	143	11	76	79
Inpatient	7	1,683	240	9	65	67
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	28	2,193	78	35	255	272
Retail (Other Than Mall)	37	501	14	Q	Q	117
Office	65	4,075	62	18	126	149
Public Assembly	42	939	23	29	208	230
Public Order and Safety	23	620	27	8	57	Q
Religious Worship	38	453	12	18	130	Q
Service	93	626	7	Q	Q	Q
Warehouse and Storage	37	1,268	34	9	66	74
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
Before 1920	75	961	13	38	273	304
1920 to 1945	52	1,986	38	54	390	417
1946 to 1959	75	2,048	27	48	347	392
1960 to 1969	61	1,685	28	Q	Q	Q
1970 to 1979	59	2,187	37	22	161	182
1980 to 1989	63	3,079	49	9	66	78
1990 to 1999	49	2,086	43	9	65	72
2000 to 2003	17	1,125	67	Q	Q	Q
Census Region and Division						
Northeast	254	6,080	24	175	1,265	1,393
New England	122	1,577	13	69	501	557
Middle Atlantic	132	4,502	34	106	764	836
Midwest	76	2,832	37	24	170	176
East North Central	35	1,871	53	Q	Q	Q
West North Central	41	961	23	Q	Q	Q
South	84	4,122	49	14	104	125
South Atlantic	59	2,639	45	13	93	112
East South Central	15	341	23	1	7	Q
West South Central	11	1,141	108	1	4	5
West	37	2,123	58	9	63	81
Mountain	10	626	Q	Q	Q	Q
Pacific	27	1,497	56	4	29	Q

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
**All Buildings* ..... **	451	15,157	34	222	1,602	1,776
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	145	2,499	17	63	451	471
5,500-7,000 HDD	148	4,052	27	63	455	530
4,000-5,499 HDD	97	4,628	48	90	648	713
Fewer than 4,000 HDD	49	2,337	48	6	42	54
2,000 CDD or More and --						
Fewer than 4,000 HDD	13	1,642	130	1	6	8
Number of Floors						
One	209	2,518	12	47	335	397
Two	142	2,724	19	69	496	550
Three	57	1,914	34	39	279	304
Four to Nine	34	4,101	120	55	400	428
Ten or More	9	3,899	452	13	93	97
Number of Workers (main shift)						
Fewer than 5	252	1,459	6	69	498	578
5 to 9	67	625	9	17	120	151
10 to 19	38	1,024	27	33	239	254
20 to 49	36	1,602	44	36	257	274
50 to 99	22	2,131	99	27	195	204
100 to 249	20	2,149	109	19	138	146
250 or More	16	6,168	393	22	156	169
Weekly Operating Hours						
Fewer than 40	83	576	7	15	110	133
40 to 48	107	1,994	19	58	416	457
49 to 60	100	3,015	30	32	228	260
61 to 84	55	2,089	38	40	288	309
85 to 167	35	1,508	43	18	132	151
Open Continuously	69	5,976	86	59	428	466
Ownership and Occupancy						
Nongovernment Owned	371	11,374	31	154	1,107	1,249
Owner Occupied	209	6,092	29	81	588	671
Nonowner Occupied	161	5,215	32	72	520	578
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	80	3,783	47	69	495	526
Federal	4	381	Q	Q	Q	Q
State	24	962	40	23	166	170
Local	52	2,441	47	39	284	299
Vacancy Status						
Completely Vacant	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	49	4,346	88	30	213	231
Not At All Vacant	399	10,718	27	191	1,380	1,536

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
**All Buildings* ..... **	451	15,157	34	222	1,602	1,776
Number of Establishments						
One	373	9,213	25	183	1,318	1,466
2 to 5	65	2,657	41	28	198	224
6 to 10	6	524	94	Q	Q	Q
11 to 20	3	1,119	384	Q	Q	Q
More than 20	3	1,567	527	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material						
Brick, Stone or Stucco	158	7,735	49	144	1,041	1,135
Concrete (Block or Poured)	83	2,526	31	24	175	206
Concrete Panels	10	1,943	189	Q	Q	Q
Siding or Shingles	128	753	6	41	295	323
Metal Panels	63	1,171	19	8	60	77
Window Glass	2	486	198	0	1	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	81	5,565	69	37	264	302
Shingles (Not Wood)	167	1,814	11	63	453	529
Metal Surfacing	114	1,309	11	21	153	165
Synthetic or Rubber	65	4,687	72	46	335	367
Slate or Tile	12	454	37	12	83	94
Wooden Materials	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation Since 1980	149	5,651	38	105	757	806
Addition or Annex	41	2,507	61	Q	Q	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	107	4,201	39	77	555	593
Wall or Roof Replacement	66	3,081	46	54	386	422
Interior Wall Re-Configuration	66	3,087	47	44	321	352
HVAC Equipment Upgrade	65	3,505	54	34	244	277
Lighting Upgrade	72	3,529	49	53	386	417
Window Replacement	62	2,332	38	50	362	391
Plumbing System Upgrade	48	2,785	58	45	321	343
Insulation Upgrade	48	1,386	29	21	151	170
Other Renovation	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	172	3,216	19	94	677	778
Building Newer than 1980	129	6,289	49	23	168	192

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
All Buildings*	451	15,157	34	222	1,602	1,776
Energy Sources (more than one may apply)						
Electricity	448	15,142	34	222	1,601	1,774
Natural Gas	129	10,383	80	99	712	775
Fuel Oil	451	15,157	34	222	1,602	1,776
District Heat	4	1,731	393	1	10	10
District Chilled Water	3	986	284	2	12	13
Propane	77	2,139	28	54	387	410
Other	29	359	12	Q	Q	26
Space-Heating Energy Sources						
Fuel Oil	360	5,988	17	212	1,527	1,676
Fuel Oil Main	282	3,818	14	197	1,423	1,555
Fuel Oil Secondary	80	2,191	27	16	112	130
Other Excluding Fuel Oil	83	8,954	108	7	51	68
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	51	3,079	60	3	23	29
Natural Gas	77	6,258	81	15	109	132
Fuel Oil	282	3,818	14	197	1,423	1,555
District Heat	4	1,490	388	1	7	8
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	298	13,860	46	175	1,258	1,376
Buildings without Cooling	152	1,267	8	46	334	389
Water-Heating Energy Sources						
Fuel Oil	94	1,880	20	109	786	849
Other Excluding Fuel Oil	282	12,680	45	104	748	833
Buildings without Water Heating	74	597	8	10	69	94
Cooking Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	114	8,858	78	114	821	888
Buildings without Cooking	335	6,170	18	103	742	847
Energy End Uses (more than one may apply)						
Buildings with Space Heating	443	14,942	34	219	1,577	1,744
Buildings with Cooling	298	13,890	47	176	1,268	1,387
Buildings with Water Heating	376	14,560	39	213	1,533	1,682
Buildings with Cooking	115	8,987	78	119	860	929
Buildings with Manufacturing	25	1,008	40	7	49	56
Buildings with Electricity Generation	92	9,867	107	31	227	253

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
**All Buildings* ..... **	451	15,157	34	222	1,602	1,776
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	62	1,253	20	13	94	109
51 to 99	56	2,480	44	26	187	206
100	325	11,209	35	180	1,297	1,428
Heating Equipment (more than one may apply)						
Heat Pumps	21	2,417	114	6	44	50
Packaged Heat Pumps	12	1,635	137	3	22	Q
Split-System Heat Pumps	Q	533	92	Q	Q	Q
Individual Room Heat Pumps	7	983	145	Q	Q	Q
Furnaces	211	3,330	16	50	360	417
Individual Space Heaters	94	3,236	34	31	225	253
District Heat	4	1,592	395	1	8	8
Boilers	178	8,930	50	171	1,236	1,337
Packaged Heating Units	54	3,862	72	17	122	139
Other	40	1,095	27	5	36	46
Water Heating Equipment						
Centralized System	290	8,411	29	161	1,162	1,286
Distributed System	61	2,183	36	31	224	244
Combination of Centralized and Distributed System	26	3,965	154	20	147	153
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	115	8,987	78	119	860	929
Activities with Large Amounts of Hot Water	82	7,690	94	95	685	724
Separate Computer Area	80	10,251	129	96	695	732
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	61	7,827	128	35	254	273
Economizer Cycle	67	7,865	118	42	303	331
HVAC Maintenance	325	14,152	43	196	1,413	1,565
Energy Management and Control System (EMCS)	32	6,362	196	31	222	241
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]						
Heating	328	10,861	33	162	1,166	1,305
Cooling	219	10,489	48	135	975	1,074
Lighting	360	8,742	24	156	1,127	1,257
Office Equipment	147	3,311	22	92	663	714

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
All Buildings*	451	15,157	34	222	1,602	1,776
Annual Consumption (gallons)						
1,000 or Less	251	8,625	34	13	94	124
1,001 to 5,000	140	2,592	18	44	320	395
5,001 to 10,000	30	913	30	28	204	242
10,001 to 25,000	15	911	61	30	219	232
Over 25,000	14	2,116	153	106	765	782

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use fuel oil.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
All Buildings*	3,555	0.11	81.6	3.9	0.12	1.11
Building Floorspace (Square Feet)						
1,001 to 5,000	1,187	0.41	315.2	1.4	0.49	1.18
5,001 to 10,000	2,639	0.37	456.4	3.1	0.43	1.17
10,001 to 25,000	3,238	0.20	218.5	3.8	0.24	1.18
25,001 to 50,000	5,383	0.14	109.4	5.8	0.15	1.08
50,001 to 100,000	8,163	0.11	78.4	8.8	0.12	1.08
100,001 to 200,000	12,681	0.09	80.6	13.1	0.09	1.03
200,001 to 500,000	22,353	0.08	62.1	23.6	0.08	1.05
Over 500,000	16,057	0.02	10.7	16.4	0.02	1.02
Principal Building Activity						
Education	12,911	0.18	199.2	13.7	0.19	1.06
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	5,755	0.04	21.0	6.0	0.04	1.05
Inpatient	9,252	0.04	20.4	9.6	0.04	1.04
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	9,024	0.12	215.5	9.6	0.12	1.07
Retail (Other Than Mall)	3,084	Q	Q	3.2	Q	1.04
Office	1,932	0.03	13.3	2.3	0.04	1.18
Public Assembly	4,990	0.22	437.8	5.5	0.24	1.10
Public Order and Safety	2,489	Q	Q	Q	Q	Q
Religious Worship	3,431	0.29	Q	Q	Q	Q
Service	Q	Q	Q	1.8	0.27	1.17
Warehouse and Storage	1,779	0.05	Q	2.0	0.06	1.12
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
Before 1920	3,647	0.28	441.9	4.1	0.32	1.11
1920 to 1945	7,541	0.20	195.8	8.1	0.21	1.07
1946 to 1959	4,599	0.17	168.5	5.2	0.19	1.13
1960 to 1969	4,354	0.16	104.9	4.8	0.17	1.10
1970 to 1979	2,730	0.07	46.8	3.1	0.08	1.13
1980 to 1989	1,040	0.02	13.0	1.2	0.03	1.18
1990 to 1999	1,321	0.03	24.3	1.5	0.03	1.11
2000 to 2003	2,247	Q	Q	2.6	Q	1.14
Census Region and Division						
Northeast	4,985	0.21	176.2	5.5	0.23	1.10
New England	4,123	0.32	310.1	4.6	0.35	1.11
Middle Atlantic	5,777	0.17	137.3	6.3	0.19	1.09
Midwest	2,237	0.06	47.0	2.3	0.06	1.03
East North Central	Q	Q	Q	1.9	0.03	0.92
West North Central	2,418	0.10	106.9	2.7	Q	1.12
South	1,235	0.03	19.4	1.5	0.03	1.21
South Atlantic	1,582	0.04	27.4	1.9	0.04	1.21
East South Central	449	0.02	15.4	Q	Q	Q
West South Central	398	0.00	2.8	0.5	0.00	1.25
West	1,722	Q	18.2	Q	Q	1.28
Mountain	Q	Q	Q	Q	Q	1.32
Pacific	Q	0.02	Q	Q	Q	1.25

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
All Buildings*	3,555	0.11	81.6	3.9	0.12	1.11
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	3,115	0.18	178.7	3.3	0.19	1.04
5,500-7,000 HDD	3,074	0.11	88.5	3.6	0.13	1.16
4,000-5,499 HDD	6,710	0.14	104.9	7.4	0.15	1.10
Fewer than 4,000 HDD	861	0.02	11.5	1.1	0.02	1.28
2,000 CDD or More and --						
Fewer than 4,000 HDD	500	0.00	3.0	0.6	0.00	1.27
Number of Floors						
One	1,606	0.13	131.3	1.9	0.16	1.18
Two	3,496	0.18	186.7	3.9	0.20	1.11
Three	4,879	0.15	138.9	5.3	0.16	1.09
Four to Nine	11,666	0.10	79.5	12.5	0.10	1.07
Ten or More	10,736	0.02	12.5	11.3	0.02	1.05
Number of Workers (main shift)						
Fewer than 5	1,978	0.34	977.0	2.3	0.40	1.16
5 to 9	1,785	0.19	264.2	2.2	0.24	1.26
10 to 19	6,297	0.23	482.2	6.7	0.25	1.06
20 to 49	7,044	0.16	233.2	7.5	0.17	1.07
50 to 99	9,017	0.09	132.7	9.4	0.10	1.05
100 to 249	6,958	0.06	46.3	7.4	0.07	1.06
250 or More	9,949	0.03	12.4	10.8	0.03	1.08
Weekly Operating Hours						
Fewer than 40	1,323	0.19	285.7	1.6	0.23	1.20
40 to 48	3,879	0.21	179.3	4.3	0.23	1.10
49 to 60	2,275	0.08	51.5	2.6	0.09	1.14
61 to 84	5,213	0.14	103.8	5.6	0.15	1.07
85 to 167	3,729	0.09	86.8	4.3	0.10	1.15
Open Continuously	6,188	0.07	52.2	6.7	0.08	1.09
Ownership and Occupancy						
Nongovernment Owned	2,987	0.10	72.2	3.4	0.11	1.13
Owner Occupied	2,810	0.10	72.2	3.2	0.11	1.14
Nonowner Occupied	3,225	0.10	72.1	3.6	0.11	1.11
Unoccupied	Q	Q	N	Q	Q	Q
Government Owned	6,192	0.13	115.5	6.6	0.14	1.06
Federal	11,801	Q	Q	15.2	Q	1.29
State	6,949	0.17	219.4	7.1	0.18	1.02
Local	5,442	0.12	100.6	5.7	0.12	1.05
Vacancy Status						
Completely Vacant	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	4,303	0.05	29.1	4.7	0.05	1.08
Not At All Vacant	3,455	0.13	112.2	3.8	0.14	1.11
Number of Establishments						
One	3,537	0.14	127.8	3.9	0.16	1.11
2 to 5	3,039	0.07	67.5	3.4	0.08	1.13
6 to 10	Q	Q	46.0	Q	Q	1.03
11 to 20	Q	0.02	Q	Q	0.02	0.93
More than 20	Q	Q	Q	Q	Q	1.06
Currently Unoccupied	Q	Q	N	Q	Q	Q

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
All Buildings*	3,555	0.11	81.6	3.9	0.12	1.11
Predominant Exterior Wall Material						
Brick, Stone or Stucco	6,580	0.13	111.0	7.2	0.15	1.09
Concrete (Block or Poured)	2,121	0.07	61.5	2.5	0.08	1.17
Concrete Panels	Q	Q	Q	Q	Q	1.15
Siding or Shingles	2,309	0.39	430.0	2.5	0.43	1.09
Metal Panels	948	0.05	38.4	1.2	0.07	1.28
Window Glass	463	0.00	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	3,277	0.05	34.9	3.7	0.05	1.14
Shingles (Not Wood)	2,712	0.25	211.4	3.2	0.29	1.17
Metal Surfacing	1,342	0.12	Q	1.4	0.13	1.08
Synthetic or Rubber	5,154	0.07	47.4	5.6	0.08	1.10
Slate or Tile	6,873	0.18	141.2	7.7	0.21	1.13
Wooden Materials	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation Since 1980	5,073	0.13	96.9	5.4	0.14	1.07
Addition or Annex	8,530	0.14	Q	8.7	0.14	1.02
Reduction In Floorspace	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	5,198	0.13	93.7	5.5	0.14	1.07
Wall or Roof Replacement	5,810	0.13	88.0	6.3	0.14	1.09
Interior Wall Re-Configuration	4,856	0.10	72.3	5.3	0.11	1.10
HVAC Equipment Upgrade	3,777	0.07	41.2	4.3	0.08	1.13
Lighting Upgrade	5,329	0.11	79.4	5.8	0.12	1.08
Window Replacement	5,876	0.16	111.4	6.3	0.17	1.08
Plumbing System Upgrade	6,673	0.12	82.6	7.1	0.12	1.07
Insulation Upgrade	3,116	0.11	71.1	3.5	0.12	1.13
Other Renovation	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	3,930	0.21	241.0	4.5	0.24	1.15
Building Newer than 1980	1,303	0.03	18.7	1.5	0.03	1.14
Energy Sources (more than one may apply)						
Electricity	3,569	0.11	81.6	4.0	0.12	1.11
Natural Gas	5,516	0.07	50.8	6.0	0.07	1.09
Fuel Oil	3,555	0.11	81.6	3.9	0.12	1.11
District Heat	2,198	0.01	3.3	2.3	0.01	1.03
District Chilled Water	3,458	0.01	9.3	3.6	0.01	1.05
Propane	5,037	0.18	193.1	5.3	0.19	1.06
Other	Q	0.06	43.7	0.9	0.07	1.19
Space-Heating Energy Sources						
Fuel Oil	4,241	0.25	283.4	4.7	0.28	1.10
Fuel Oil Main	5,046	0.37	533.0	5.5	0.41	1.09
Fuel Oil Secondary	1,399	0.05	41.2	1.6	0.06	1.17
Other Excluding Fuel Oil	609	0.01	3.6	0.8	0.01	1.34
Buildings without Heating	Q	Q	Q	Q	Q	Q

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
All Buildings*	3,555	0.11	81.6	3.9	0.12	1.11
Primary Space-Heating Energy Source						
Electricity	456	0.01	5.3	0.6	0.01	1.24
Natural Gas	1,411	0.02	11.5	1.7	0.02	1.21
Fuel Oil	5,046	0.37	533.0	5.5	0.41	1.09
District Heat	1,896	0.00	2.8	2.0	0.01	1.07
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	4,218	0.09	66.5	4.6	0.10	1.09
Buildings without Cooling	2,194	0.26	481.2	2.6	0.31	1.16
Water-Heating Energy Sources						
Fuel Oil	8,332	0.42	385.8	9.0	0.45	1.08
Other Excluding Fuel Oil	2,651	0.06	43.5	3.0	0.07	1.11
Buildings without Water Heating	926	0.12	Q	1.3	0.16	1.36
Cooking Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	7,232	0.09	69.9	7.8	0.10	1.08
Buildings without Cooking	2,215	0.12	96.5	2.5	0.14	1.14
Energy End Uses (more than one may apply)						
Buildings with Space Heating	3,560	0.11	81.3	3.9	0.12	1.11
Buildings with Cooling	4,250	0.09	67.0	4.6	0.10	1.09
Buildings with Water Heating	4,075	0.11	79.8	4.5	0.12	1.10
Buildings with Cooking	7,447	0.10	72.0	8.0	0.10	1.08
Buildings with Manufacturing	1,944	0.05	Q	2.2	0.06	1.14
Buildings with Electricity Generation	2,466	0.02	14.6	2.7	0.03	1.11
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	1,508	0.07	106.9	1.8	0.09	1.16
51 to 99	3,305	0.08	52.9	3.7	0.08	1.11
100	3,996	0.12	86.6	4.4	0.13	1.10
Heating Equipment (more than one may apply)						
Heat Pumps	2,093	0.02	11.1	2.4	0.02	1.13
Packaged Heat Pumps	Q	Q	7.0	Q	Q	1.19
Split-System Heat Pumps	Q	Q	Q	0.5	Q	1.28
Individual Room Heat Pumps	Q	Q	Q	Q	Q	1.08
Furnaces	1,708	0.11	122.5	2.0	0.13	1.16
Individual Space Heaters	2,397	0.07	55.9	2.7	0.08	1.12
District Heat	1,935	0.00	3.0	2.0	0.01	1.04
Boilers	6,937	0.14	108.4	7.5	0.15	1.08
Packaged Heating Units	2,277	0.03	21.1	2.6	0.04	1.14
Other	894	0.03	23.9	1.1	0.04	1.28

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
**All Buildings* ..... **	3,555	0.11	81.6	3.9	0.12	1.11
Water Heating Equipment						
Centralized System	4,010	0.14	111.2	4.4	0.15	1.11
Distributed System	3,686	0.10	103.8	4.0	0.11	1.09
Combination of Centralized and Distributed System	5,722	0.04	22.2	5.9	0.04	1.04
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	7,447	0.10	72.0	8.0	0.10	1.08
Activities with Large Amounts of Hot Water	8,391	0.09	71.2	8.9	0.09	1.06
Separate Computer Area	8,742	0.07	43.7	9.2	0.07	1.05
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	4,153	0.03	20.1	4.5	0.03	1.08
Economizer Cycle	4,554	0.04	24.3	5.0	0.04	1.09
HVAC Maintenance	4,342	0.10	74.7	4.8	0.11	1.11
Energy Management and Control System (EMCS)	6,819	0.03	21.4	7.4	0.04	1.09
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]						
Heating	3,555	0.11	82.3	4.0	0.12	1.12
Cooling	4,443	0.09	69.2	4.9	0.10	1.10
Lighting	3,128	0.13	102.2	3.5	0.14	1.12
Office Equipment	4,498	0.20	196.0	4.8	0.22	1.08
Annual Consumption (gallons)						
1,000 or Less	375	0.01	7.5	0.5	0.01	1.32
1,001 to 5,000	2,276	0.12	101.3	2.8	0.15	1.24
5,001 to 10,000	6,744	0.22	200.6	8.0	0.27	1.19
10,001 to 25,000	14,793	0.24	187.1	15.7	0.25	1.06
Over 25,000	55,257	0.36	434.8	56.5	0.37	1.02

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS,total fuel oil consumption in malls was not statistically significant.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use fuel oil.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Building Floorspace (Square Feet)												
1,001 to 10,000	381	Q	Q	Q	757	Q	255	Q	0.50	Q	0.10	Q
10,001 to 100,000	375	63	Q	Q	1,704	643	833	351	0.22	0.10	Q	Q
Over 100,000	509	20	44	Q	3,618	1,983	3,034	1,673	0.14	0.01	0.01	Q
Principal Building Activity												
Education	282	Q	Q	Q	933	Q	Q	Q	0.30	Q	Q	Q
Health Care	Q	Q	17	7	Q	492	786	262	Q	Q	0.02	0.03
Office	105	6	14	1	1,379	714	1,235	748	0.08	0.01	0.01	0.00
All Others	837	Q	44	40	3,426	1,281	1,644	984	0.24	Q	0.03	Q
Year Constructed												
1945 or Before	555	Q	Q	Q	2,126	Q	Q	Q	0.26	Q	Q	Q
1946 to 1959	277	Q	Q	Q	1,233	343	Q	Q	0.22	Q	Q	Q
1960 to 1969	Q	Q	Q	Q	579	398	443	Q	0.34	Q	Q	Q
1970 to 1979	121	Q	25	Q	626	562	693	Q	0.19	Q	0.04	Q
1980 to 1989	45	Q	Q	5	620	Q	1,064	980	0.07	Q	Q	0.01
1990 to 2003	Q	18	Q	6	896	806	1,184	325	0.08	0.02	Q	Q
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	295	Q	N	Q	1,009	1,158	N	331	0.29	0.13	N	Q
5,500-7,000 HDD	398	20	N	Q	2,207	1,461	N	Q	0.18	0.01	N	Q
4,000-5,499 HDD	Q	Q	Q	Q	2,863	Q	1,392	Q	0.20	Q	Q	Q
Fewer than 4,000 HDD	N	N	29	Q	N	N	1,245	1,092	N	N	0.02	Q
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	6	Q	N	N	1,486	Q	N	N	0.00	Q
Number of Floors												
One	230	35	Q	Q	987	420	800	311	0.23	0.08	Q	Q
Two	390	Q	Q	Q	1,249	603	618	Q	0.31	Q	Q	Q
Three	234	Q	Q	Q	916	Q	Q	Q	0.26	Q	Q	Q
Four to Nine	328	Q	41	Q	1,704	1,007	887	503	0.19	Q	0.05	Q
Ten or More	Q	Q	6	1	1,224	Q	1,349	900	Q	Q	0.00	0.00
Number of Workers (main shift)												
Less than 10	436	Q	33	Q	1,221	374	376	Q	0.36	Q	0.09	Q
10 to 99	606	27	Q	Q	2,501	939	988	Q	0.24	0.03	Q	Q
100 or More	222	16	39	Q	2,358	1,520	2,758	1,681	0.09	0.01	0.01	Q
Weekly Operating Hours												
48 or fewer	441	Q	Q	Q	1,426	475	559	Q	0.31	Q	0.05	Q
49 to 84	374	Q	Q	10	1,859	915	1,526	805	0.20	Q	Q	0.01
85 to 168	450	33	45	31	2,795	1,442	2,037	1,209	0.16	0.02	0.02	Q
Ownership and Occupancy												
Nongovernment Owned	865	Q	71	34	4,568	1,938	3,132	1,736	0.19	Q	0.02	0.02
Owner Occupied	517	24	39	7	2,790	1,010	1,641	650	0.19	0.02	0.02	0.01
Nonowner Occupied	348	Q	32	Q	1,711	927	1,491	1,085	0.20	Q	0.02	Q
Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Government Owned	400	33	Q	Q	1,512	894	990	387	0.26	0.04	Q	Q
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	245	Q	Q	Q	1,102	574	Q	Q	0.22	Q	Q	Q

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Vacancy Status												
Completely Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Mostly Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Partially Vacant	179	Q	16	Q	1,704	756	1,203	684	0.11	Q	0.01	Q
Not At All Vacant	1,076	156	88	60	4,283	2,077	2,919	1,439	0.25	0.08	0.03	Q
Number of Establishments												
One	1,041	Q	76	Q	3,679	1,652	2,654	1,227	0.28	0.09	0.03	Q
2 to 5	151	Q	21	Q	1,119	651	615	Q	0.13	Q	0.03	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	487	Q	Q	Q	Q	Q
Currently Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Predominant Exterior Wall Material												
Brick, Stone or Stucco	855	93	74	Q	3,688	1,425	2,035	587	0.23	0.07	0.04	Q
Concrete (Block or Poured)	Q	17	Q	Q	Q	471	814	449	Q	0.04	Q	Q
Concrete Panels	Q	Q	4	Q	Q	Q	843	Q	Q	Q	0.00	Q
Siding or Shingles	230	Q	Q	Q	496	Q	Q	Q	0.46	Q	Q	0.18
Metal Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Predominant Roof Material												
Built-Up	196	17	36	Q	1,936	914	1,727	988	0.10	0.02	0.02	Q
Shingles (Not Wood)	375	Q	Q	Q	892	Q	Q	Q	0.42	Q	Q	Q
Metal Surfacing	74	Q	Q	Q	512	Q	Q	Q	0.14	Q	Q	Q
Synthetic or Rubber	240	38	Q	Q	1,745	1,068	1,172	701	0.14	0.04	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	N	Q	Q	Q	N	Q	0.00	Q	N
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00	0.00
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	598	Q	52	29	2,711	1,013	1,361	567	0.22	Q	0.04	0.05
Addition or Annex	Q	Q	25	Q	Q	540	760	Q	0.30	0.04	0.03	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	432	Q	39	Q	2,089	832	850	430	0.21	Q	0.05	Q
Wall or Roof Replacement	333	11	22	Q	1,581	541	665	Q	0.21	0.02	0.03	Q
Interior Wall Re-Configuration	277	Q	Q	Q	1,305	651	740	392	0.21	Q	0.03	Q
HVAC Equipment Upgrade	197	Q	33	Q	1,482	709	909	405	0.13	Q	0.04	Q
Lighting Upgrade	347	Q	22	Q	1,750	694	653	432	0.20	Q	0.03	Q
Window Replacement	337	6	Q	Q	1,520	360	Q	Q	0.22	0.02	Q	Q
Plumbing System Upgrade	293	Q	20	Q	1,517	449	497	Q	0.19	Q	0.04	Q
Insulation Upgrade	137	Q	Q	Q	758	Q	Q	Q	0.18	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.05	Q
No Renovations Since 1980	553	Q	Q	Q	1,853	598	514	Q	0.30	Q	Q	Q
Building Newer than 1980	114	20	23	12	1,516	1,221	2,248	1,305	0.08	0.02	0.01	0.01

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Energy Sources (more than one may apply)												
Electricity	1,265	169	104	63	6,080	2,817	4,122	2,123	0.21	0.06	0.03	0.03
Natural Gas	629	26	47	Q	3,714	2,123	2,962	1,584	0.17	0.01	0.02	Q
Fuel Oil	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
District Heat	Q	Q	2	Q	731	314	476	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	304	Q	Q	Q	1,014	Q	Q	Q	0.30	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources												
Fuel Oil	1,237	162	79	Q	3,927	916	897	Q	0.31	Q	0.09	Q
Fuel Oil Main	1,195	Q	Q	Q	3,250	Q	Q	Q	0.37	Q	Q	Q
Fuel Oil Secondary	50	31	25	Q	699	687	665	Q	0.07	0.04	0.04	Q
Other Excluding Fuel Oil	Q	8	21	6	2,103	1,916	3,137	1,798	Q	0.00	0.01	0.00
Buildings without Heating	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	8	Q	Q	563	1,688	531	Q	Q	0.00	0.01
Natural Gas	49	22	31	Q	1,730	1,671	1,630	1,226	0.03	0.01	0.02	0.01
Fuel Oil	1,195	Q	Q	Q	3,250	Q	Q	Q	0.37	Q	Q	Q
District Heat	Q	Q	1	Q	Q	Q	433	Q	Q	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Fuel Oil	Q	N	N	N	Q	N	N	N	Q	N	N	N
Other Excluding Fuel Oil	996	127	101	35	5,070	2,670	4,093	2,027	0.20	0.05	0.02	0.02
Buildings without Cooling	259	Q	Q	Q	979	Q	Q	Q	0.26	Q	Q	Q
Water-Heating Energy Sources												
Fuel Oil	721	Q	Q	Q	1,542	Q	Q	Q	0.47	Q	Q	Q
Other Excluding Fuel Oil	508	Q	70	31	4,216	2,607	3,826	2,030	0.12	Q	0.02	0.02
Buildings without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources												
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00
Other Excluding Fuel Oil	682	64	52	Q	3,244	1,699	2,777	1,138	0.21	0.04	0.02	Q
Buildings without Cooking	558	Q	43	Q	2,776	1,111	1,315	968	0.20	Q	0.03	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,253	170	100	Q	6,030	2,832	4,034	2,045	0.21	0.06	0.02	Q
Buildings with Cooling	1,005	127	101	35	5,101	2,670	4,093	2,027	0.20	0.05	0.02	0.02
Buildings with Water Heating	1,228	Q	98	49	5,758	2,699	4,030	2,072	0.21	0.06	0.02	0.02
Buildings with Cooking	707	69	60	Q	3,304	1,721	2,807	1,155	0.21	0.04	0.02	Q
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	160	Q	38	8	2,590	2,129	3,368	1,780	0.06	Q	0.01	0.00

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Percent of Floorspace Heated												
Not Heated	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	150	Q	23	Q	644	Q	830	748	0.23	Q	0.03	Q
100	1,019	Q	75	Q	4,671	2,422	2,987	1,129	0.22	0.06	0.02	Q
Heating Equipment (more than one may apply)												
Heat Pumps	Q	Q	9	Q	Q	Q	1,100	510	Q	Q	0.01	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	300	24	Q	Q	1,352	747	973	Q	0.22	0.03	Q	Q
Individual Space Heaters	174	Q	23	Q	1,245	876	846	Q	0.14	Q	0.03	Q
District Heat	Q	Q	2	Q	624	Q	451	Q	Q	Q	Q	Q
Boilers	981	Q	74	Q	3,833	1,775	1,904	1,418	0.26	Q	0.04	Q
Packaged Heating Units	87	10	Q	Q	945	740	1,563	614	0.09	0.01	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	916	Q	Q	Q	3,627	1,724	2,222	838	0.25	Q	Q	Q
Distributed System	208	Q	Q	Q	1,182	Q	588	Q	0.18	Q	0.02	Q
Combination of Centralized and Distributed System	105	Q	17	8	949	755	1,220	1,041	0.11	Q	0.01	0.01
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	707	69	60	Q	3,304	1,721	2,807	1,155	0.21	0.04	0.02	Q
Activities with Large Amounts of Hot Water	574	40	47	Q	2,577	1,652	2,380	1,081	0.22	0.02	0.02	Q
Separate Computer Area	560	41	59	35	3,623	1,957	2,916	1,756	0.15	0.02	0.02	Q
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	174	27	45	7	2,243	1,823	2,394	1,367	0.08	0.02	0.02	0.01
Economizer Cycle	232	19	48	4	2,238	1,794	2,378	1,454	0.10	0.01	0.02	0.00
HVAC Maintenance	1,156	110	98	49	5,602	2,638	3,898	2,015	0.21	0.04	0.03	Q
Energy Management and Control System (EMCS)	156	13	39	Q	1,798	1,395	1,996	1,173	0.09	0.01	0.02	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	952	91	82	Q	4,569	1,898	2,827	1,568	0.21	0.05	0.03	Q
Cooling	828	44	84	Q	4,138	1,758	2,968	1,625	0.20	0.03	0.03	Q
Lighting	871	Q	Q	Q	3,560	1,683	2,393	1,106	0.24	Q	Q	Q
Office Equipment	564	Q	Q	Q	1,828	617	578	Q	0.31	Q	Q	Q

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
**All Buildings* ..... **	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Annual Consumption (gallons)												
1,000 or Less	56	15	16	7	2,097	1,955	3,017	1,556	0.03	0.01	0.01	0.00
1,001 to 5,000	252	Q	Q	Q	1,310	450	433	Q	0.19	0.07	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 25,000	691	Q	Q	Q	1,763	Q	Q	Q	0.39	Q	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use fuel oil.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Building Floorspace (Square Feet)												
1,001 to 10,000	460	Q	Q	Q	1.21	Q	Q	Q	0.61	Q	Q	Q
10,001 to 100,000	408	70	Q	Q	1.09	1.12	1.29	1.31	0.24	0.11	Q	Q
Over 100,000	524	21	47	Q	1.03	1.05	1.07	1.26	0.14	0.01	0.02	Q
Principal Building Activity												
Education	293	Q	Q	Q	1.04	Q	Q	Q	0.31	Q	Q	Q
Health Care	Q	Q	19	8	Q	1.06	1.08	1.16	Q	Q	0.02	0.03
Office	122	8	18	Q	1.16	1.32	1.26	1.44	0.09	0.01	0.01	0.00
All Others	936	Q	59	50	1.12	1.01	1.34	1.26	0.27	0.11	0.04	Q
Year Constructed												
1945 or Before	612	Q	Q	Q	1.10	Q	Q	Q	0.29	Q	Q	Q
1946 to 1959	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1960 to 1969	Q	Q	Q	Q	1.06	Q	Q	Q	0.36	Q	Q	Q
1970 to 1979	133	Q	31	Q	1.10	1.19	1.23	Q	0.21	Q	0.04	Q
1980 to 1989	53	Q	Q	7	1.18	Q	1.16	1.23	0.08	Q	Q	0.01
1990 to 2003	Q	21	Q	Q	1.09	1.16	1.18	Q	0.08	0.03	Q	Q
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	312	Q	N	Q	1.06	1.00	N	1.23	0.31	0.13	N	Q
5,500-7,000 HDD	459	24	N	Q	1.15	1.23	N	Q	0.21	0.02	N	Q
4,000-5,499 HDD	Q	Q	Q	Q	1.09	Q	1.19	Q	0.22	Q	Q	Q
Fewer than 4,000 HDD	N	N	36	Q	N	N	1.24	1.38	N	N	0.03	Q
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	7	Q	N	N	1.27	Q	N	N	0.00	Q
Number of Floors												
One	267	40	Q	Q	1.16	1.11	1.28	Q	0.27	0.09	Q	Q
Two	442	Q	Q	Q	1.13	0.96	Q	Q	0.35	Q	Q	Q
Three	252	Q	Q	Q	1.08	Q	Q	Q	0.28	Q	Q	Q
Four to Nine	347	Q	47	Q	1.06	0.97	1.14	1.23	0.20	Q	0.05	Q
Ten or More	Q	Q	7	2	1.03	Q	1.16	1.33	Q	Q	0.01	0.00
Number of Workers (main shift)												
Less than 10	525	Q	46	Q	1.20	1.02	1.38	Q	0.43	Q	0.12	Q
10 to 99	635	Q	Q	Q	1.05	1.03	1.17	Q	0.25	Q	Q	Q
100 or More	233	18	43	Q	1.05	1.13	1.10	1.30	0.10	0.01	0.02	Q
Weekly Operating Hours												
48 or fewer	481	Q	34	Q	1.09	Q	1.30	Q	0.34	Q	0.06	Q
49 to 84	422	Q	Q	11	1.13	0.96	1.26	1.13	0.23	Q	Q	0.01
85 to 168	490	36	51	40	1.09	1.09	1.12	1.29	0.18	0.02	0.03	Q
Ownership and Occupancy												
Nongovernment Owned	976	140	90	Q	1.13	1.02	1.27	1.27	0.21	Q	0.03	Q
Owner Occupied	583	27	52	9	1.13	1.13	1.32	1.16	0.21	0.03	0.03	0.01
Nonowner Occupied	392	Q	38	Q	1.13	1.00	1.20	1.30	0.23	Q	0.03	Q
Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Government Owned	417	36	Q	Q	1.04	1.09	1.08	1.31	0.28	Q	Q	Q
Federal	Q	Q	Q	Q	Q	Q	1.09	Q	Q	Q	0.00	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	256	Q	Q	Q	1.04	Q	Q	Q	0.23	Q	Q	Q

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Vacancy Status												
Completely Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Mostly Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Partially Vacant	191	Q	19	Q	1.06	1.18	1.19	1.30	0.11	Q	0.02	Q
Not At All Vacant	1,194	159	106	Q	1.11	1.02	1.21	1.28	0.28	0.08	0.04	Q
Number of Establishments												
One	1,152	160	96	Q	1.11	1.03	1.25	1.30	0.31	0.10	0.04	Q
2 to 5	169	Q	23	Q	1.12	1.07	1.08	Q	0.15	Q	0.04	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	1.28	Q	Q	Q	Q	Q
Currently Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Predominant Exterior Wall Material												
Brick, Stone or Stucco	921	103	86	Q	1.08	1.12	1.17	1.25	0.25	0.07	0.04	Q
Concrete (Block or Poured)	Q	20	Q	Q	Q	1.13	1.30	1.33	Q	Q	Q	Q
Concrete Panels	Q	Q	4	Q	Q	Q	1.25	Q	Q	Q	Q	Q
Siding or Shingles	264	Q	Q	Q	1.14	Q	Q	Q	0.53	Q	Q	0.21
Metal Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Predominant Roof Material												
Built-Up	222	19	42	Q	1.13	1.10	1.16	1.32	0.11	0.02	0.02	Q
Shingles (Not Wood)	437	Q	Q	Q	1.16	Q	Q	Q	0.49	Q	Q	Q
Metal Surfacing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Synthetic or Rubber	253	43	Q	Q	1.05	1.12	1.16	1.32	0.14	0.04	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	N	Q	Q	Q	N	Q	0.00	Q	N
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00	0.00
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation Since 1980	638	Q	62	Q	1.07	0.90	1.18	1.26	0.24	Q	0.05	Q
Addition or Annex	Q	Q	30	Q	1.01	1.06	1.20	Q	0.30	0.04	0.04	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	468	Q	45	Q	1.08	0.87	1.14	1.22	0.22	Q	0.05	Q
Wall or Roof Replacement	358	13	25	Q	1.07	1.11	1.16	Q	0.23	0.02	0.04	Q
Interior Wall Re-Configuration	302	Q	Q	Q	1.09	1.12	1.16	1.03	0.23	Q	0.04	Q
HVAC Equipment Upgrade	223	13	37	Q	1.14	1.10	1.13	1.04	0.15	Q	0.04	0.01
Lighting Upgrade	372	Q	26	Q	1.07	1.11	1.17	1.06	0.21	Q	Q	0.01
Window Replacement	362	8	Q	Q	1.08	1.23	Q	Q	0.24	0.02	Q	Q
Plumbing System Upgrade	311	Q	23	Q	1.06	1.03	1.13	Q	0.21	Q	0.05	Q
Insulation Upgrade	154	Q	Q	Q	1.12	Q	Q	Q	0.20	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.07	Q
No Renovations Since 1980	627	Q	Q	Q	1.13	1.15	1.29	Q	0.34	Q	Q	Q
Building Newer than 1980	128	23	27	14	1.13	1.15	1.17	1.21	0.08	0.02	0.01	0.01

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Energy Sources (more than one may apply)												
Electricity	1,393	174	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	0.04
Natural Gas	681	29	53	Q	1.08	1.11	1.13	1.18	0.18	0.01	0.02	Q
Fuel Oil	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
District Heat	Q	Q	2	Q	Q	Q	1.23	Q	Q	Q	0.01	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	313	Q	Q	Q	1.03	Q	Q	Q	0.31	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources												
Fuel Oil	1,353	167	95	Q	1.09	1.03	1.20	Q	0.34	0.18	0.11	Q
Fuel Oil Main	1,304	Q	Q	Q	1.09	Q	Q	Q	0.40	Q	Q	Q
Fuel Oil Secondary	59	35	29	Q	1.19	1.15	1.16	Q	0.08	0.05	0.04	Q
Other Excluding Fuel Oil	Q	9	26	8	1.56	1.16	1.25	1.30	Q	0.00	0.01	0.00
Buildings without Heating	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	11	Q	Q	1.19	1.32	Q	Q	Q	0.01	Q
Natural Gas	63	24	36	Q	1.29	1.13	1.14	1.20	0.04	0.01	0.02	0.01
Fuel Oil	1,304	Q	Q	Q	1.09	Q	Q	Q	0.40	Q	Q	Q
District Heat	Q	Q	2	Q	Q	Q	1.25	Q	Q	Q	0.00	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Fuel Oil	Q	N	N	N	Q	N	N	N	Q	N	N	N
Other Excluding Fuel Oil	1,086	125	122	43	1.09	0.99	1.21	1.23	0.21	0.05	0.03	0.02
Buildings without Cooling	296	Q	Q	Q	1.14	Q	Q	Q	0.30	Q	Q	Q
Water-Heating Energy Sources												
Fuel Oil	773	Q	Q	Q	1.07	Q	Q	Q	0.50	Q	Q	Q
Other Excluding Fuel Oil	572	Q	85	36	1.13	1.01	1.20	1.18	0.14	0.05	0.02	0.02
Buildings without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources												
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00
Other Excluding Fuel Oil	729	70	59	Q	1.07	1.10	1.14	1.26	0.22	0.04	0.02	Q
Buildings without Cooking	639	Q	57	Q	1.14	0.99	1.31	1.30	0.23	Q	0.04	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,378	176	121	Q	1.10	1.03	1.21	1.27	0.23	0.06	0.03	Q
Buildings with Cooling	1,097	125	122	43	1.09	0.99	1.21	1.23	0.21	0.05	0.03	0.02
Buildings with Water Heating	1,344	162	115	61	1.09	1.02	1.18	1.25	0.23	0.06	0.03	0.03
Buildings with Cooking	754	76	68	Q	1.07	1.10	1.14	1.26	0.23	0.04	0.02	Q
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	174	Q	45	10	1.09	1.12	1.19	1.20	0.07	0.01	0.01	0.01
Percent of Floorspace Heated												
Not Heated	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	167	Q	25	Q	1.11	Q	1.09	1.06	0.26	Q	0.03	Q
100	1,116	160	93	Q	1.09	1.02	1.24	1.30	0.24	0.07	0.03	Q

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Heating Equipment (more than one may apply)												
Heat Pumps	Q	Q	11	Q	Q	Q	1.26	1.04	Q	Q	Q	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	345	28	Q	Q	1.15	1.16	1.25	Q	0.26	0.04	Q	Q
Individual Space Heaters	192	Q	29	Q	1.10	1.15	1.25	Q	0.15	0.02	0.03	Q
District Heat	Q	Q	2	Q	Q	Q	1.24	Q	Q	Q	0.00	Q
Boilers	1,060	Q	86	Q	1.08	1.01	1.15	1.28	0.28	Q	0.04	Q
Packaged Heating Units	Q	10	25	Q	Q	1.00	1.23	1.20	Q	0.01	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	1,014	Q	Q	Q	1.11	1.01	1.18	1.31	0.28	0.08	Q	Q
Distributed System	Q	Q	Q	Q	Q	Q	1.26	Q	Q	Q	0.02	Q
Combination of Centralized and Distributed System	106	Q	19	9	1.01	1.08	1.14	1.08	0.11	Q	0.02	0.01
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	754	76	68	Q	1.07	1.10	1.14	1.26	0.23	0.04	0.02	Q
Activities with Large Amounts of Hot Water	595	42	Q	Q	1.04	1.07	1.15	1.30	0.23	0.03	0.02	Q
Separate Computer Area	576	45	66	Q	1.03	1.08	1.11	1.30	0.16	0.02	0.02	Q
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	184	30	50	9	1.05	1.11	1.12	1.25	0.08	0.02	0.02	0.01
Economizer Cycle	253	21	51	5	1.09	1.08	1.08	1.26	0.11	0.01	0.02	0.00
HVAC Maintenance	1,261	123	117	Q	1.09	1.12	1.20	1.30	0.23	0.05	0.03	Q
Energy Management and Control System (EMCS)	166	14	42	Q	1.06	1.12	1.08	1.31	0.09	0.01	0.02	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]												
Heating	1,051	103	100	Q	1.10	1.13	1.22	1.27	0.23	0.05	0.04	Q
Cooling	897	51	102	Q	1.08	1.15	1.22	1.29	0.22	0.03	0.03	Q
Lighting	969	142	88	Q	1.11	1.02	1.24	1.28	0.27	0.08	0.04	Q
Office Equipment	613	Q	Q	Q	1.09	0.90	1.23	Q	0.34	Q	Q	Q

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Annual Consumption (gallons)												
1,000 or Less	73	19	23	10	1.29	1.28	1.46	1.31	0.03	0.01	0.01	0.01
1,001 to 5,000	313	Q	Q	Q	1.24	1.18	1.23	Q	0.24	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 25,000	699	Q	Q	Q	1.01	Q	Q	Q	0.40	Q	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample that use fuel oil.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245
Building Floorspace (Square Feet)					
1,001 to 5,000	Q	Q	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q
10,001 to 25,000	18	289	16	Q	Q
25,001 to 50,000	10	369	35	Q	Q
50,001 to 100,000	8	574	70	Q	Q
100,001 to 200,000	9	1,399	148	165	Q
200,001 to 500,000	4	1,018	286	123	Q
Over 500,000	2	1,693	852	169	1,810
Principal Building Activity					
Education	26	1,145	45	134	Q
Food Sales	N	N	N	N	N
Food Service	Q	Q	Q	Q	Q
Health Care	2	493	Q	Q	Q
Inpatient	1	436	563	Q	Q
Outpatient	Q	Q	Q	Q	Q
Lodging	6	345	Q	Q	Q
Retail (Other Than Mall)	Q	Q	Q	Q	Q
Office	16	1,569	97	128	1,441
Public Assembly	6	547	89	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q
Service	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q
Year Constructed					
Before 1920	6	294	46	Q	Q
1920 to 1945	12	1,207	99	129	1,423
1946 to 1959	15	705	49	Q	Q
1960 to 1969	13	853	64	117	Q
1970 to 1979	6	588	101	77	Q
1980 to 1989	5	888	192	Q	Q
1990 to 1999	8	705	87	Q	Q
2000 to 2003	Q	Q	Q	Q	Q
Census Region and Division					
Northeast	17	1,363	78	165	2,136
New England	Q	Q	Q	Q	Q
Middle Atlantic	12	1,082	90	Q	Q
Midwest	13	1,648	126	225	2,329
East North Central	8	1,420	189	192	Q
West North Central	Q	Q	Q	Q	Q
South	21	1,766	83	182	Q
South Atlantic	15	1,243	86	117	Q
East South Central	Q	Q	Q	Q	Q
West South Central	Q	Q	Q	Q	Q
West	15	667	44	Q	Q
Mountain	7	253	35	Q	Q
Pacific	8	413	53	Q	Q

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245
Climate Zone: 30-Year Average					
Under 2,000 CDD and --					
More than 7,000 HDD	6	825	131	88	Q
5,500-7,000 HDD	27	1,784	66	255	Q
4,000-5,499 HDD	13	1,349	100	140	Q
Fewer than 4,000 HDD	13	1,025	78	101	Q
2,000 CDD or More and --					
Fewer than 4,000 HDD	7	460	65	Q	Q
Number of Floors					
One	14	Q	44	Q	Q
Two	19	515	27	Q	Q
Three	11	458	41	Q	Q
Four to Nine	20	2,473	125	308	3,462
Ten or More	3	1,366	496	123	1,454
Number of Workers (main shift)					
Fewer than 5	20	853	42	Q	Q
5 to 9	Q	Q	Q	Q	Q
10 to 19	Q	Q	Q	Q	Q
20 to 49	16	667	41	96	Q
50 to 99	7	474	67	Q	Q
100 to 249	9	1,050	117	124	Q
250 or More	5	2,191	406	232	2,502
Weekly Operating Hours					
Fewer than 40	Q	Q	Q	Q	Q
40 to 48	12	493	41	Q	Q
49 to 60	18	1,590	87	176	2,041
61 to 84	11	785	69	73	Q
85 to 167	9	790	91	91	Q
Open Continuously	11	1,605	144	210	2,486
Ownership and Occupancy					
Nongovernment Owned	25	2,148	87	247	2,746
Owner Occupied	16	1,421	87	185	2,078
Nonowner Occupied	8	698	86	Q	Q
Unoccupied	Q	Q	Q	Q	Q
Government Owned	42	3,295	78	387	4,499
Federal	4	Q	219	Q	Q
State	27	1,694	63	188	Q
Local	11	653	59	Q	Q
Vacancy Status					
Completely Vacant	Q	Q	Q	Q	Q
Mostly Vacant	N	N	N	N	N
Partially Vacant	12	1,483	119	164	1,708
Not At All Vacant	54	3,834	71	461	5,427
Number of Establishments					
One	45	3,063	68	384	4,361
2 to 5	15	1,301	85	156	Q
6 to 10	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q
More than 20	1	436	699	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245
Predominant Exterior Wall Material					
Brick, Stone or Stucco	53	3,380	64	408	4,728
Concrete (Block or Poured)	6	702	110	Q	Q
Concrete Panels	4	787	176	Q	Q
Siding or Shingles	Q	Q	Q	Q	Q
Metal Panels	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q
Predominant Roof Material					
Built-Up	23	2,607	112	263	3,144
Shingles (Not Wood)	14	215	16	Q	Q
Metal Surfacing	Q	Q	Q	Q	Q
Synthetic or Rubber	17	1,339	77	171	Q
Slate or Tile	4	270	72	Q	Q
Wooden Materials	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)					
Any Type of Renovation Since 1980	19	1,774	92	197	2,170
Addition or Annex	3	481	186	Q	Q
Reduction In Floorspace	Q	Q	Q	Q	Q
Cosmetic Improvements	12	1,298	109	143	1,595
Wall or Roof Replacement	9	897	99	99	Q
Interior Wall Re-Configuration	7	1,088	158	124	1,315
HVAC Equipment Upgrade	10	1,381	137	128	1,520
Lighting Upgrade	16	1,413	88	157	1,706
Window Replacement	6	725	Q	Q	Q
Plumbing System Upgrade	8	963	Q	103	1,211
Insulation Upgrade	3	401	144	Q	Q
Other Renovation	Q	Q	Q	Q	Q
No Renovations Since 1980	33	1,873	57	229	Q
Building Newer than 1980	15	1,796	122	208	Q
Energy Sources (more than one may apply)					
Electricity	67	5,443	81	634	7,245
Natural Gas	25	2,444	100	305	3,578
Fuel Oil	4	1,731	393	177	1,960
District Heat	67	5,443	81	634	7,245
District Chilled Water	25	2,311	93	309	Q
Propane	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245
Space-Heating Energy Sources					
District Heat	65	5,198	80	633	7,238
District Heat Main	63	4,907	77	618	7,089
District Heat Secondary	2	340	167	Q	Q
Other Excluding District Heat	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source					
Electricity	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q
Fuel Oil	N	N	N	N	N
District Heat	63	4,907	77	618	7,089
Propane	N	N	N	N	N
Other	N	N	N	N	N
Cooling Energy Sources					
District Heat	Q	Q	Q	Q	Q
Other Excluding District Heat	54	4,204	78	493	5,743
Buildings without Cooling	Q	Q	Q	Q	Q
Water-Heating Energy Sources					
District Heat	27	3,088	113	329	3,690
Other Excluding District Heat	34	1,543	46	194	Q
Buildings without Water Heating	Q	Q	Q	Q	Q
Cooking Energy Sources					
District Heat	2	588	361	77	Q
Other Excluding District Heat	7	1,338	Q	142	1,547
Buildings without Cooking	58	3,517	61	415	4,849
Energy End Uses (more than one may apply)					
Buildings with Space Heating	67	5,378	81	634	7,242
Buildings with Cooling	55	4,653	85	535	6,079
Buildings with Water Heating	61	4,631	76	523	5,984
Buildings with Cooking	9	1,926	214	219	2,396
Buildings with Manufacturing	Q	Q	Q	Q	Q
Buildings with Electricity Generation	7	2,121	309	237	2,772
Percent of Floorspace Heated					
Not Heated	Q	Q	Q	Q	Q
1 to 50	Q	Q	Q	Q	Q
51 to 99	5	636	116	57	Q
100	60	4,716	78	575	6,635

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245
Heating Equipment (more than one may apply)					
Heat Pumps	2	413	208	Q	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q
Furnaces	Q	Q	Q	Q	Q
Individual Space Heaters	5	605	124	50	Q
District Heat	65	5,166	80	628	7,177
Boilers	Q	Q	Q	Q	Q
Packaged Heating Units	3	589	191	Q	Q
Other	Q	Q	Q	Q	Q
Water Heating Equipment					
Centralized System	43	2,671	62	286	3,266
Distributed System	5	483	89	Q	Q
Combination of Centralized and Distributed System	12	1,477	119	170	1,811
Energy-Related Space Functions (more than one may apply)					
Commercial Food Preparation	9	1,926	214	219	2,396
Activities with Large Amounts of Hot Water	19	2,259	121	273	3,003
Separate Computer Area	19	3,268	172	374	4,282
HVAC Conservation Features (more than one may apply)					
Variable Air-Volume System	26	3,017	117	368	4,184
Economizer Cycle	22	3,045	140	334	3,896
HVAC Maintenance	60	5,154	86	612	6,987
Energy Management and Control System (EMCS)	18	2,782	158	320	3,636
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]					
Heating	30	3,140	105	356	4,048
Cooling	29	3,378	117	390	4,461
Lighting	49	3,624	73	406	4,534
Office Equipment	23	1,325	58	Q	Q

Table C37. Total District Heat Consumption and Expenditures for Non-Mall Buildings, 2003

	All Buildings* Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings*	67	5,443	81	634	7,245

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, there were no responding malls in the sample using district heat.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use district heat.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43
Building Floorspace (Square Feet)						
1,001 to 5,000	Q	Q	Q	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q
25,001 to 50,000	Q	Q	Q	Q	Q	Q
50,001 to 100,000	Q	Q	Q	Q	Q	Q
100,001 to 200,000	17,452	118.10	Q	Q	Q	Q
200,001 to 500,000	34,658	121.16	143.2	Q	Q	Q
Over 500,000	85,182	99.92	52.4	911.2	1.07	10.70
Principal Building Activity						
Education	5,223	116.63	Q	Q	Q	Q
Food Sales	N	N	N	N	N	N
Food Service	Q	Q	Q	Q	Q	Q
Health Care	Q	Q	Q	Q	Q	Q
Inpatient	Q	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	Q	Q	Q	Q
Retail (Other Than Mall)	Q	Q	Q	Q	Q	Q
Office	7,933	81.53	35.7	89.4	0.92	11.27
Public Assembly	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q	Q
Service	Q	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
Before 1920	Q	Q	Q	Q	Q	Q
1920 to 1945	10,610	107.03	130.0	116.9	1.18	11.02
1946 to 1959	Q	Q	Q	Q	Q	Q
1960 to 1969	8,787	137.56	108.5	Q	Q	Q
1970 to 1979	13,255	131.66	80.8	Q	Q	Q
1980 to 1989	Q	Q	Q	Q	Q	Q
1990 to 1999	Q	Q	Q	Q	Q	Q
2000 to 2003	Q	Q	Q	Q	Q	Q
Census Region and Division						
Northeast	9,423	120.80	67.0	Q	1.57	12.97
New England	Q	Q	Q	Q	Q	Q
Middle Atlantic	Q	Q	Q	Q	Q	Q
Midwest	17,217	136.50	158.8	Q	1.41	10.35
East North Central	25,607	135.33	166.7	Q	Q	Q
West North Central	Q	Q	Q	Q	Q	Q
South	8,547	102.81	33.5	Q	1.17	11.36
South Atlantic	8,059	94.14	Q	Q	Q	Q
East South Central	Q	Q	Q	Q	Q	Q
West South Central	Q	Q	Q	Q	Q	Q
West	Q	Q	Q	Q	Q	Q
Mountain	Q	Q	Q	Q	Q	Q
Pacific	Q	Q	Q	Q	Q	Q

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	Q	106.35	123.8	Q	Q	Q
5,500-7,000 HDD	9,453	142.89	132.6	Q	Q	Q
4,000-5,499 HDD	10,354	103.48	54.8	128.9	1.29	12.45
Fewer than 4,000 HDD	7,681	98.14	84.1	Q	Q	Q
2,000 CDD or More and --						
Fewer than 4,000 HDD	Q	Q	Q	Q	Q	Q
Number of Floors						
One	Q	Q	Q	Q	Q	Q
Two	Q	Q	Q	Q	Q	Q
Three	Q	Q	Q	Q	Q	Q
Four to Nine	15,573	124.37	50.3	175.3	1.40	11.26
Ten or More	44,811	90.27	43.9	528.5	1.06	11.79
Number of Workers (main shift)						
Fewer than 5	Q	Q	Q	Q	Q	Q
5 to 9	Q	Q	Q	Q	Q	Q
10 to 19	Q	Q	Q	Q	Q	Q
20 to 49	5,854	143.70	191.2	Q	Q	Q
50 to 99	Q	Q	Q	Q	Q	Q
100 to 249	13,794	118.34	91.9	Q	Q	Q
250 or More	42,936	105.81	30.2	463.4	1.14	10.79
Weekly Operating Hours						
Fewer than 40	Q	Q	Q	Q	Q	Q
40 to 48	Q	Q	Q	Q	Q	Q
49 to 60	9,574	110.41	75.1	111.3	1.28	11.62
61 to 84	6,414	92.92	92.0	Q	Q	Q
85 to 167	10,530	115.52	Q	Q	Q	Q
Open Continuously	18,825	130.78	86.8	Q	1.55	11.84
Ownership and Occupancy						
Nongovernment Owned	10,055	114.95	70.9	111.8	1.28	11.12
Owner Occupied	11,348	129.95	76.9	127.7	1.46	11.26
Nonowner Occupied	Q	Q	Q	Q	Q	Q
Unoccupied	Q	Q	.	Q	Q	Q
Government Owned	9,139	117.42	57.7	106.3	1.37	11.63
Federal	Q	Q	Q	Q	Q	11.62
State	6,986	110.99	36.7	Q	Q	Q
Local	Q	Q	Q	Q	Q	Q
Vacancy Status						
Completely Vacant	Q	Q	Q	Q	Q	Q
Mostly Vacant	N	N	N	N	N	N
Partially Vacant	13,117	110.42	53.8	136.8	1.15	10.43
Not At All Vacant	8,535	120.21	64.5	100.5	1.42	11.77
Number of Establishments						
One	8,549	125.34	116.3	97.1	1.42	11.36
2 to 5	10,135	119.61	92.8	Q	Q	Q
6 to 10	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43
Predominant Exterior Wall Material						
Brick, Stone or Stucco	7,715	120.66	105.9	89.4	1.40	11.59
Concrete (Block or Poured)	Q	Q	Q	Q	Q	Q
Concrete Panels	Q	Q	Q	Q	Q	Q
Siding or Shingles	Q	Q	Q	Q	Q	Q
Metal Panels	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	11,269	100.88	66.0	134.7	1.21	11.95
Shingles (Not Wood)	Q	Q	Q	Q	Q	Q
Metal Surfacing	Q	Q	Q	Q	Q	Q
Synthetic or Rubber	9,814	127.60	Q	Q	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation Since 1980	10,177	111.11	70.6	112.1	1.22	11.01
Addition or Annex	Q	Q	Q	Q	Q	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	12,076	110.29	66.5	134.5	1.23	11.14
Wall or Roof Replacement	Q	110.32	60.4	Q	1.27	Q
Interior Wall Re-Configuration	17,959	113.58	71.2	191.0	1.21	10.64
HVAC Equipment Upgrade	12,723	93.03	58.0	150.5	1.10	11.83
Lighting Upgrade	9,807	110.92	75.6	106.8	1.21	10.89
Window Replacement	Q	Q	Q	Q	Q	Q
Plumbing System Upgrade	Q	107.28	59.6	Q	1.26	11.72
Insulation Upgrade	Q	Q	Q	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	6,959	122.02	137.9	Q	Q	12.17
Building Newer than 1980	14,178	115.89	Q	Q	Q	Q
Energy Sources (more than one may apply)						
Electricity	9,475	116.44	62.2	108.3	1.33	11.43
Natural Gas	Q	124.63	43.8	Q	1.46	11.74
Fuel Oil	40,191	102.33	61.1	444.6	1.13	11.06
District Heat	9,475	116.44	62.2	108.3	1.33	11.43
District Chilled Water	12,509	133.95	47.5	Q	Q	12.03
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43
Space-Heating Energy Sources						
District Heat	9,709	121.82	63.7	111.0	1.39	11.43
District Heat Main	9,746	125.84	63.5	111.9	1.44	11.48
District Heat Secondary	Q	Q	Q	Q	Q	Q
Other Excluding District Heat	Q	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	Q	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q	Q
Fuel Oil	N	N	N	N	N	N
District Heat	9,746	125.84	63.5	111.9	1.44	11.48
Propane	N	N	N	N	N	N
Other	N	N	N	N	N	N
Cooling Energy Sources						
District Heat	Q	Q	Q	Q	Q	Q
Other Excluding District Heat	9,102	117.19	53.8	106.1	1.37	11.66
Buildings without Cooling	Q	Q	Q	Q	Q	Q
Water-Heating Energy Sources						
District Heat	12,041	106.49	78.4	135.1	1.19	11.22
Other Excluding District Heat	5,786	125.93	Q	Q	Q	11.81
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q
Cooking Energy Sources						
District Heat	47,088	130.34	99.8	Q	Q	Q
Other Excluding District Heat	Q	106.36	55.2	Q	1.16	10.87
Buildings without Cooking	7,166	117.96	60.6	83.7	1.38	11.69
Energy End Uses (more than one may apply)						
Buildings with Space Heating	9,502	117.81	62.3	108.6	1.35	11.43
Buildings with Cooling	9,726	114.90	52.8	110.6	1.31	11.37
Buildings with Water Heating	8,591	112.97	52.6	98.3	1.29	11.44
Buildings with Cooking	Q	113.68	65.4	Q	1.24	10.95
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	34,643	111.97	63.7	404.4	1.31	11.67
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q
51 to 99	Q	90.46	57.2	Q	Q	Q
100	9,543	121.88	62.8	110.2	1.41	11.54

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43
Heating Equipment (more than one may apply)						
Heat Pumps	Q	Q	Q	Q	Q	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q
Furnaces	Q	Q	Q	Q	Q	Q
Individual Space Heaters	10,195	82.45	58.3	Q	Q	Q
District Heat	9,685	121.56	63.8	110.7	1.39	11.43
Boilers	Q	Q	Q	Q	Q	Q
Packaged Heating Units	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Water Heating Equipment						
Centralized System	6,647	107.14	86.4	75.9	1.22	11.41
Distributed System	Q	Q	Q	Q	Q	Q
Combination of Centralized and Distributed System	13,682	115.22	Q	145.6	1.23	10.64
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	Q	113.68	65.4	Q	1.24	10.95
Activities with Large Amounts of Hot Water	14,656	120.84	86.8	161.3	1.33	11.00
Separate Computer Area	19,658	114.53	68.8	224.9	1.31	11.44
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	14,271	121.86	47.8	162.4	1.39	11.38
Economizer Cycle	15,337	109.59	43.7	179.1	1.28	11.68
HVAC Maintenance	10,171	118.71	60.9	116.2	1.36	11.42
Energy Management and Control System (EMCS)	18,226	115.02	76.7	207.1	1.31	11.36
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)[a]						
Heating	11,880	113.38	72.8	135.1	1.29	11.37
Cooling	13,500	115.39	46.4	154.5	1.32	11.44
Lighting	8,207	111.90	52.5	91.8	1.25	11.18
Office Equipment	Q	Q	Q	Q	Q	Q

Table C38. District Heat Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings*	9,475	116.44	62.2	108.3	1.33	11.43

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* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, In the 1999 CBECS, there were no responding malls in the sample using district heat.

[a] The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample that use district heat.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.