

Table 3.12. Consumption and Gross Energy Intensity for Sum of Major Fuels in Older Buildings by Year Constructed, 1992

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.2	1.1	0.8	1.0	0.9	0.9	1.0	
All Buildings	1,798	1,125	1,261	24,462	12,612	14,014	73.5	89.2	90.0	7.45
Building Floorspace (square feet)										
1,001 to 5,000	264	113	166	3,089	1,167	1,536	85.6	96.6	107.9	8.69
5,001 to 10,000	270	77	113	3,281	986	1,505	82.2	77.9	75.4	12.70
10,001 to 25,000	303	197	208	4,082	1,892	1,902	74.3	103.9	109.3	15.16
25,001 to 50,000	298	117	167	4,012	1,856	2,216	74.2	62.8	75.2	16.66
50,001 to 100,000	169	144	150	2,676	1,625	1,776	63.2	88.8	84.7	14.68
100,001 to 200,000	216	149	115	3,360	2,306	1,673	64.3	64.4	68.6	17.22
200,001 to 500,000	131	176	225	2,260	1,444	1,988	58.1	122.2	113.0	21.10
Over 500,000	147	153	117	1,702	1,335	1,418	86.1	Q	82.7	29.12
Principal Building Activity										
Education	242	180	152	3,431	2,405	1,728	70.6	74.7	87.9	12.28
Food Sales	35	Q	33	246	Q	155	140.5	Q	213.3	28.15
Food Service	126	38	83	734	187	365	171.8	203.1	227.7	21.66
Health Care	109	110	124	397	492	544	273.3	224.0	228.6	22.50
Lodging	152	69	76	934	482	579	162.2	144.2	131.1	20.36
Mercantile and Service	254	220	218	3,925	2,680	2,607	64.8	82.0	83.7	15.39
Office	426	224	258	3,941	2,187	2,283	108.2	102.2	113.1	17.38
Parking Garage	Q	Q	Q	Q	Q	674	Q	Q	Q	46.65
Public Assembly	69	44	103	1,148	552	1,096	60.5	80.2	94.0	18.11
Public Order and Safety	21	Q	14	248	Q	168	86.0	Q	85.3	32.51
Religious Worship	64	17	16	2,143	628	505	29.9	27.6	31.6	18.08
Warehouse and Storage	140	119	99	4,051	1,815	2,397	34.4	65.4	41.1	18.86
Other	86	33	Q	497	184	210	173.7	180.0	145.0	34.26
Vacant	69	Q	28	2,545	431	702	27.2	17.6	39.6	28.73
Census Region and Division										
Northeast	448	243	198	6,453	2,485	2,123	69.5	97.9	93.5	15.10
New England	120	44	78	1,433	436	634	83.8	100.0	123.4	22.11
Middle Atlantic	328	200	120	5,020	2,048	1,490	65.4	97.4	80.7	20.11
Midwest	572	305	348	6,890	2,652	4,086	82.9	115.0	85.2	11.76
East North Central	396	203	203	4,690	1,861	2,350	84.5	109.2	86.3	12.83
West North Central	175	102	145	2,201	790	1,736	79.7	128.8	83.6	22.59
South	520	381	450	7,500	4,914	4,940	69.3	77.5	91.2	14.86
South Atlantic	238	204	178	2,576	2,667	2,267	92.4	76.4	78.4	21.20
East South Central	112	62	106	1,740	907	1,195	64.4	68.4	88.6	19.25
West South Central	170	115	167	3,185	1,340	1,478	53.4	86.0	112.9	27.22
West	258	196	264	3,619	2,562	2,865	71.4	76.3	92.2	14.57
Mountain	108	56	72	1,106	670	699	97.6	83.3	103.0	22.23
Pacific	150	140	192	2,513	1,892	2,166	59.8	73.9	88.7	18.65
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	154	107	137	2,228	842	1,531	69.1	126.5	89.2	19.19
5,500-7,000 HDD	644	307	339	7,981	2,815	3,619	80.7	109.0	93.5	12.76
4,000-5,499 HDD	525	278	220	6,680	3,363	2,825	78.6	82.6	77.9	15.44
Fewer than 4,000 HDD	230	306	336	4,236	2,990	3,656	54.3	102.3	91.9	19.22
More than 2,000 CDD and --										
Fewer than 4,000 HDD	245	128	229	3,337	2,602	2,382	73.4	49.1	96.3	21.47
Energy Sources (more than one may apply)										
Electricity	1,798	1,125	1,261	23,642	12,473	13,779	76.1	90.2	91.5	7.22
Natural Gas	1,444	877	1,007	17,059	8,871	9,217	84.7	98.8	109.2	9.19
Fuel Oil	461	288	340	4,503	2,363	2,735	102.3	121.7	124.3	15.44
District Heat	295	232	131	1,967	1,419	976	150.0	163.2	134.6	21.07
District Chilled Water	77	75	62	652	375	480	117.5	200.5	128.3	27.43
Propane	71	36	63	943	642	786	75.0	56.2	79.7	26.17
Any Other	23	11	14	733	Q	268	31.5	Q	53.5	25.08

See footnotes at end of table.

Table 3.12. Consumption and Gross Energy Intensity for Sum of Major Fuels in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	1.1	1.2	1.1	0.8	1.0	0.9	0.9	1.0	1.0	
RSE Column Factor:	1.1	1.2	1.1	0.8	1.0	0.9	0.9	1.0	1.0	RSE Row Factor
Energy End Uses (more than one may apply)										
Heated Buildings	1,762	1,084	1,240	22,055	11,548	12,814	79.9	93.9	96.7	7.46
Buildings with A/C	1,552	1,015	1,210	18,912	10,601	12,286	82.0	95.7	98.5	7.87
Buildings with Water Heating	1,699	1,091	1,214	20,372	11,006	12,369	83.4	99.2	98.1	7.66
Buildings with Cooking	657	539	611	6,903	4,920	5,071	95.2	109.5	120.4	11.04
Buildings with Manufacturing	144	53	78	1,478	394	652	97.4	134.9	120.0	24.03
Workers (main shift)										
Less than 5	305	126	162	7,661	2,807	3,165	39.9	44.8	51.1	10.41
5 to 9	233	83	173	3,343	1,227	1,577	69.7	67.3	109.7	15.42
10 to 19	232	102	165	3,323	1,211	1,812	69.9	84.6	91.3	17.00
20 to 49	420	204	183	3,815	2,180	2,088	110.1	93.7	87.5	14.91
50 to 99	223	184	129	2,890	1,685	1,424	77.1	109.2	90.4	18.87
100 or More	385	426	449	3,430	3,502	3,949	112.2	121.6	113.8	15.44
Weekly Operating Hours										
39 or Fewer	140	48	58	4,446	1,320	1,455	31.5	36.4	40.1	16.42
40 to 48	409	181	186	6,289	2,617	2,614	65.0	69.1	71.0	11.20
49 to 60	351	169	193	5,819	2,371	2,476	60.2	71.4	78.1	15.79
61 to 84	245	208	278	2,967	2,692	2,778	82.7	77.2	99.9	16.34
85 to 167	235	205	227	2,572	1,910	2,248	91.2	107.5	100.8	16.50
Open Continuously	418	314	320	2,369	1,701	2,444	176.6	184.4	130.8	17.10
Ownership and Occupancy										
Nongovernment Owned	1,353	730	940	19,001	8,571	10,776	71.2	85.1	87.2	8.69
Owner Occupied	1,092	618	747	14,222	6,737	8,024	76.8	91.8	93.0	8.72
Single Establishment	885	554	631	11,250	5,843	6,323	78.7	94.8	99.8	9.73
Multiple Establishment	207	64	116	2,971	894	1,701	69.6	71.9	67.9	17.71
Nonowner Occupied	244	106	188	3,698	1,491	2,435	66.0	71.3	77.1	18.39
Single Establishment	161	49	74	1,919	563	1,023	83.7	87.5	72.0	22.52
Multiple Establishment	83	57	114	1,779	928	1,411	46.9	61.5	80.8	20.47
Vacant	17	Q	Q	1,082	344	317	15.7	Q	Q	31.47
Government Owned	445	395	321	5,461	4,041	3,237	81.5	97.8	99.1	13.96
Predominant Exterior Wall Material										
Masonry	1,565	787	858	20,950	8,536	9,277	74.7	92.3	92.4	8.56
Siding or Shingles	97	32	55	1,597	560	717	60.5	56.7	76.0	15.95
Metal Panels	99	73	153	1,385	1,395	1,881	71.2	52.2	81.2	28.34
Concrete Panels	15	155	122	288	1,502	1,510	52.2	103.2	81.1	27.28
Window Glass	20	Q	52	194	463	408	103.5	141.2	126.4	28.55
Other	Q	Q	22	Q	Q	220	Q	Q	100.5	26.11
Predominant Roof Material										
Built-Up	913	637	567	11,707	6,568	5,907	78.0	96.9	96.0	10.49
Shingles (Not Wood)	309	137	135	5,059	1,570	2,142	61.2	87.0	63.3	13.11
Metal Surfacing	87	65	184	1,784	1,520	2,224	48.8	42.5	82.6	25.02
Synthetic or Rubber	312	232	296	3,646	2,139	2,545	85.6	108.4	116.4	15.84
Other	177	55	79	2,265	816	1,196	78.1	67.5	65.9	19.13
Floors										
One	392	394	456	6,789	5,146	5,763	57.8	76.5	79.2	11.29
Two	394	277	310	6,339	3,872	3,661	62.2	71.4	84.7	11.56
Three	385	149	200	5,262	1,365	1,963	73.1	109.1	101.9	15.36
Four to Nine	522	173	200	5,093	1,310	1,812	102.5	131.7	110.4	19.43
Ten or More	105	133	94	979	918	815	107.1	145.0	115.9	25.43
Percent Window Glass										
25 or Less	1,366	740	909	18,874	9,341	11,287	72.4	79.2	80.6	8.48
26 to 50	326	261	264	4,404	2,390	1,817	74.1	109.3	145.4	15.01
51 to 75	86	67	65	1,006	468	661	85.4	143.0	99.1	21.13
76 to 100	Q	Q	22	178	Q	249	112.9	137.3	88.0	28.67

See footnotes at end of table.

Table 3.12. Consumption and Gross Energy Intensity for Sum of Major Fuels in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.2	1.1	0.8	1.0	0.9	0.9	1.0	
Building Shape										
Square	75	54	87	1,207	736	837	62.3	73.0	104.0	22.63
Rectangle	1,056	616	736	14,523	7,086	8,367	72.7	86.9	87.9	9.83
Right Angle	154	75	77	2,465	1,132	1,191	62.6	66.7	64.7	18.71
Other	512	380	361	6,266	3,658	3,619	81.7	103.8	99.8	13.03
Space-Heating Energy Sources (more than one may apply)										
Electricity	427	305	523	6,578	3,880	6,191	65.0	78.5	84.4	11.69
Natural Gas	1,197	736	826	14,964	7,858	7,649	80.0	93.7	108.0	9.41
Fuel Oil	333	185	184	3,549	1,505	1,484	93.8	123.2	123.8	17.37
District Heat	286	219	131	1,927	1,363	972	148.3	161.0	134.4	19.49
Propane	16	13	15	431	273	351	36.7	48.0	41.4	28.32
Wood	8	Q	Q	276	Q	Q	29.2	Q	Q	26.82
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Energy Sources (more than one may apply)										
Electricity	1,483	961	1,089	18,222	10,231	11,375	81.4	93.9	95.7	8.08
Natural Gas	146	48	54	593	428	423	246.8	111.1	127.9	30.18
District Chilled Water	77	75	62	652	375	480	117.5	200.5	128.3	27.43
Water-Heating Energy Sources (more than one may apply)										
Electricity	431	259	507	7,259	3,423	5,946	59.4	75.7	85.3	11.42
Natural Gas	1,064	658	659	11,756	6,536	5,733	90.5	100.7	115.0	10.38
Fuel Oil	120	48	53	1,281	416	458	93.4	116.1	114.9	29.42
District Heat	177	190	92	1,154	1,139	664	153.2	166.9	137.9	21.75
Propane	Q	Q	Q	249	Q	Q	55.2	Q	Q	45.28
Cooking Energy Sources (more than one may apply)										
Electricity	279	295	269	2,726	2,734	2,427	102.4	107.7	111.0	13.96
Natural Gas	489	387	454	5,097	3,455	3,502	95.9	112.0	129.6	14.04
Propane	17	18	24	242	298	253	71.2	60.6	95.5	33.63
Percent of Floorspace Heated										
Not Heated	Q	41	21	2,408	1,064	1,200	Q	38.4	17.9	30.92
1 to 50	187	99	95	4,797	2,060	2,059	39.0	48.2	46.1	22.30
51 to 99	249	158	277	3,692	2,061	2,039	67.4	76.6	135.7	14.77
100	1,326	827	868	13,565	7,427	8,716	97.8	111.3	99.6	8.28
Percent of Floorspace Cooled										
Not Cooled	246	110	51	5,550	2,011	1,728	44.4	54.9	29.4	15.47
1 to 50	606	249	241	9,565	3,604	3,881	63.4	69.0	62.1	11.33
51 to 99	382	331	377	4,035	3,167	3,035	94.7	104.4	124.3	14.30
100	563	435	592	5,312	3,830	5,370	106.0	113.7	110.2	11.82
Heating Equipment (more than one may apply)										
Heat Pumps	167	90	166	1,934	1,055	1,783	86.5	85.6	93.1	18.26
Furnaces	494	278	273	7,344	3,367	2,982	67.2	82.7	91.7	15.34
Individual Space Heaters	494	337	434	7,334	3,862	5,434	67.3	87.4	79.9	11.94
District Heat	320	219	131	2,015	1,363	972	158.9	161.0	134.4	21.38
Boilers	763	460	422	8,964	4,027	3,734	85.1	114.3	113.0	10.78
Packaged Heating Units	330	257	371	3,664	3,226	3,911	89.9	79.7	94.8	14.90
Other	Q	Q	45	285	Q	231	Q	Q	196.4	31.45
Heating Distribution Equipment (more than one may apply)										
Radiators or Baseboards	702	276	223	7,635	2,296	1,994	92.0	120.1	111.7	13.18
Ducts for Heating	1,165	884	974	14,078	8,893	9,566	82.7	99.4	101.8	8.75
VAV System Used	235	306	285	2,047	2,273	2,108	114.8	134.7	135.4	18.38
Individual Space Heaters	494	337	434	7,334	3,862	5,434	67.3	87.4	79.9	11.94
Fan Coil Units or Other	416	195	237	3,438	1,779	1,654	121.0	109.7	143.5	15.65

See footnotes at end of table.

Table 3.12. Consumption and Gross Energy Intensity for Sum of Major Fuels in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.2	1.1	0.8	1.0	0.9	0.9	1.0	
Cooling Equipment (more than one may apply)										
Residential-Type Central A/C	371	170	205	4,144	1,528	1,800	89.6	111.1	113.8	19.27
Heat Pumps	166	115	173	1,946	1,170	1,807	85.4	98.0	95.7	17.76
Individual A/C	646	342	222	8,783	3,603	2,586	73.5	94.8	85.9	12.86
District Chilled Water	77	75	79	652	376	632	117.5	200.4	124.5	29.40
Central Chillers	407	386	385	2,854	3,032	3,306	142.6	127.4	116.5	15.31
Packaged A/C Units	741	497	654	8,357	5,411	6,494	88.7	91.8	100.8	10.49
Swamp Coolers	71	Q	35	544	510	386	130.3	Q	90.6	30.44
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Distribution Equipment (more than one may apply)										
Ducts for Cooling	1,232	844	1,087	14,554	8,567	10,517	84.7	98.5	103.4	8.36
VAV System Used	253	278	341	2,168	1,853	2,715	116.8	149.9	125.6	15.61
Individual A/C	646	342	222	8,783	3,603	2,586	73.5	94.8	85.9	12.86
Fan Coil Units or Other	258	209	244	1,728	1,607	2,211	149.5	129.9	110.2	20.94
Water-Heating Equipment (more than one may apply)										
Centralized System	1,128	634	764	12,074	5,523	6,893	93.4	114.8	110.8	9.59
Distributed System	625	482	522	8,885	5,627	6,046	70.4	85.7	86.4	11.44
Energy Conservation Features (more than one may apply)										
Any Conservation Features	1,740	1,119	1,253	22,581	12,053	13,464	77.1	92.8	93.0	7.45
Building Shell	1,695	1,092	1,216	21,904	11,695	12,754	77.4	93.4	95.3	7.53
HVAC	1,442	985	1,094	15,930	9,812	10,636	90.5	100.3	102.9	8.13
Lighting	796	580	667	8,355	5,219	6,680	95.3	111.2	99.9	11.12
Other	156	127	141	1,816	1,247	1,430	85.8	101.6	98.6	17.83
Energy Management Practices (more than one may apply)										
Energy Management and Control System	330	324	451	2,892	2,538	3,313	114.1	127.7	136.0	14.81
Demand-Side Management ¹ Participation	385	337	369	3,212	2,793	2,741	120.0	120.8	134.7	16.57
Energy Audit	493	353	365	5,283	3,060	3,331	93.3	115.2	109.6	13.63
Building Energy Manager	105	52	99	771	376	790	136.0	139.4	125.3	27.50

¹ These Demand-Side Management (DSM) data, which include utility-sponsored programs, in-house programs, and third-party sponsored programs, were reported by the building respondent on the Building Questionnaire (Form EIA-871A). The electric utility-sponsored DSM data reported by the electricity suppliers (Form EIA-871E-1b) are presented in the "At a Glance" section and Table 3.49 of this section. See Appendix B, "Nonsampling and Sampling Errors," for a discussion of the differences between the energy supplier-reported data and building respondent-reported data.

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • HVAC = Heating, Ventilation, and Air Conditioning. • VAV = Variable Air Volume. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.

Table 3.13. Consumption and Gross Energy Intensity for Sum of Major Fuels in Newer Buildings by Year Constructed, 1992

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.1	1.0	0.8	1.1	1.0	
All Buildings	839	294	173	10,149	4,138	2,502	82.7	71.0	69.3	13.57
Building Floorspace (square feet)										
1,001 to 5,000	118	30	12	1,064	275	197	111.0	109.5	58.6	20.39
5,001 to 10,000	56	31	8	896	355	176	62.8	86.9	46.4	22.52
10,001 to 25,000	95	42	20	1,613	576	309	58.7	72.8	64.9	19.78
25,001 to 50,000	149	40	24	1,176	482	327	126.6	83.4	73.2	25.86
50,001 to 100,000	114	39	25	1,330	387	268	86.0	99.6	94.9	24.89
100,001 to 200,000	116	25	20	1,626	444	269	71.5	57.0	72.6	25.48
200,001 to 500,000	108	26	44	1,207	320	670	89.5	80.1	66.1	27.13
Over 500,000	83	61	20	1,237	Q	285	66.8	Q	71.1	22.59
Principal Building Activity										
Education	34	14	Q	480	173	253	71.8	81.2	57.1	24.05
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Food Service	34	Q	Q	103	Q	Q	330.0	Q	Q	31.17
Health Care	50	Q	Q	240	Q	Q	209.1	Q	Q	28.28
Lodging	104	Q	12	550	Q	97	188.3	Q	122.8	33.70
Mercantile and Service	137	33	30	2,109	535	545	65.0	62.1	54.6	20.34
Office	219	68	52	2,419	899	590	90.7	75.6	87.4	18.24
Parking Garage	Q	Q	Q	Q	Q	124	Q	Q	24.5	32.28
Public Assembly	25	Q	19	461	Q	197	55.3	Q	97.0	28.67
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Religious Worship	9	Q	Q	358	Q	Q	24.3	Q	Q	25.00
Warehouse and Storage	136	22	12	2,233	610	377	61.0	36.3	30.8	24.25
Other	19	Q	Q	126	Q	Q	153.9	Q	Q	38.15
Vacant	Q	Q	Q	571	Q	77	Q	Q	Q	45.42
Census Region and Division										
Northeast	132	40	28	1,547	506	286	85.2	79.7	96.7	25.35
New England	28	Q	Q	497	Q	Q	56.0	Q	Q	44.77
Middle Atlantic	104	20	19	1,049	334	194	99.0	59.6	99.6	29.04
Midwest	251	53	49	2,482	500	670	101.1	105.9	73.7	20.59
East North Central	136	32	39	1,171	271	369	115.9	119.6	105.2	28.22
West North Central	115	21	11	1,311	229	301	87.8	89.6	35.0	25.60
South	273	145	55	3,950	2,367	906	69.1	Q	61.0	17.80
South Atlantic	89	42	24	1,806	783	487	49.2	54.0	49.6	22.70
East South Central	80	30	19	915	350	268	87.3	85.4	70.9	19.96
West South Central	104	73	12	1,229	Q	151	84.9	Q	80.3	28.83
West	184	55	41	2,170	765	639	84.7	72.5	64.0	20.69
Mountain	87	15	Q	793	229	148	109.3	66.2	66.7	37.19
Pacific	97	40	31	1,376	536	491	70.5	75.2	63.2	25.47
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	59	Q	Q	757	Q	Q	78.1	Q	Q	36.53
5,500-7,000 HDD	235	58	59	2,328	598	681	101.0	97.8	86.1	21.92
4,000-5,499 HDD	165	46	40	1,998	727	569	82.5	63.7	70.9	19.92
Fewer than 4,000 HDD	176	81	48	2,509	1,125	736	70.2	72.4	65.6	18.60
More than 2,000 CDD and --										
Fewer than 4,000 HDD	204	91	21	2,557	Q	415	79.9	Q	51.6	25.55
Energy Sources (more than one may apply)										
Electricity	839	294	173	10,042	4,106	2,482	83.6	71.5	69.7	10.91
Natural Gas	608	192	136	6,265	1,957	1,625	97.1	98.3	83.6	13.15
Fuel Oil	202	70	81	2,122	748	743	95.1	93.2	108.7	19.83
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
District Chilled Water	52	Q	19	184	Q	164	281.6	Q	113.8	35.03
Propane	35	8	Q	609	201	212	57.6	40.2	35.3	34.54
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.13. Consumption and Gross Energy Intensity for Sum of Major Fuels in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	RSE Column Factor:	1.0	1.2	1.3	0.7	1.1	1.0	0.8	1.1	
Energy End Uses (more than one may apply)										
Heated Buildings	819	289	170	9,398	3,878	2,303	87.2	74.6	73.9	13.90
Buildings with A/C	811	277	168	9,225	3,760	2,258	87.9	73.8	74.6	14.12
Buildings with Water Heating	807	286	161	8,869	3,696	2,167	91.0	77.4	74.3	14.50
Buildings with Cooking	334	163	78	3,197	2,117	859	104.4	Q	91.1	19.00
Buildings with Manufacturing	66	Q	Q	504	Q	Q	Q	Q	Q	38.41
Workers (main shift)										
Less than 5	108	78	19	2,177	Q	516	49.6	Q	37.7	22.82
5 to 9	107	19	7	882	343	152	121.6	56.5	46.7	24.77
10 to 19	81	37	17	1,142	389	201	70.7	94.9	83.2	24.57
20 to 49	136	52	22	1,560	514	399	86.8	100.4	54.7	23.02
50 to 99	96	32	24	1,117	347	301	86.3	92.3	78.8	25.09
100 or More	311	75	84	3,271	926	933	95.2	81.2	90.5	16.97
Weekly Operating Hours										
39 or Fewer	17	Q	8	686	163	176	25.4	Q	46.6	27.97
40 to 48	159	35	41	2,278	646	554	69.6	54.8	74.6	21.75
49 to 60	149	36	37	2,104	616	661	70.6	58.5	55.4	18.59
61 to 84	164	45	22	2,500	709	415	65.4	63.4	53.9	20.43
85 to 167	91	54	28	920	544	273	98.4	99.2	101.6	21.32
Open Continuously	261	117	37	1,661	Q	423	156.9	Q	87.6	25.34
Ownership and Occupancy										
Nongovernment Owned	744	255	122	9,056	3,550	1,798	82.1	71.9	67.7	15.72
Owner Occupied	607	151	98	6,328	1,785	1,307	95.8	84.6	75.1	13.68
Single Establishment	481	128	72	4,179	1,420	976	115.0	90.2	73.2	14.73
Multiple Establishment	126	23	Q	2,149	366	330	58.6	62.6	80.7	24.51
Nonowner Occupied	130	103	23	2,442	Q	472	53.4	Q	49.6	20.51
Single Establishment	41	71	12	663	Q	197	62.0	Q	61.6	27.94
Multiple Establishment	89	32	11	1,779	537	275	50.2	59.6	41.1	22.64
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Government Owned	96	39	52	1,093	588	704	87.5	65.8	73.3	22.01
Predominant Exterior Wall Material										
Masonry	494	207	105	5,635	2,662	1,526	87.7	Q	68.7	15.98
Siding or Shingles	53	17	Q	716	178	105	74.3	96.2	Q	24.86
Metal Panels	150	17	13	1,929	559	244	77.9	31.2	53.4	24.76
Concrete Panels	46	33	37	745	452	464	61.2	73.0	78.7	23.57
Window Glass	42	12	4	685	202	76	61.6	57.3	53.6	22.15
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Predominant Roof Material										
Built-Up	301	119	57	3,563	Q	699	84.5	Q	81.3	17.92
Shingles (Not Wood)	118	23	12	1,310	283	206	90.2	80.3	55.8	24.19
Metal Surfacing	148	45	22	2,206	821	464	66.9	54.9	46.7	19.31
Synthetic or Rubber	179	76	70	1,688	817	868	106.2	92.8	81.0	17.47
Other	93	31	13	1,382	404	265	67.5	76.1	48.8	31.37
Floors										
One	313	150	46	4,359	2,373	994	71.8	Q	45.8	17.43
Two	226	49	46	2,789	710	654	81.1	69.2	70.0	19.40
Three	107	25	21	822	243	223	130.5	105.0	92.0	30.44
Four to Nine	116	54	47	1,085	620	457	107.2	86.8	102.9	26.14
Ten or More	77	15	14	1,094	192	174	70.1	79.9	83.3	25.56
Percent Window Glass										
25 or Less	591	183	115	6,989	3,164	1,701	84.6	Q	67.3	15.06
26 to 50	155	76	31	2,119	597	488	73.2	127.5	63.8	19.03
51 to 75	59	21	15	625	231	215	93.7	88.8	67.4	24.52
76 to 100	34	Q	Q	417	Q	Q	82.6	Q	Q	25.16

See footnotes at end of table.

Table 3.13. Consumption and Gross Energy Intensity for Sum of Major Fuels in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.1	1.0	0.8	1.1	1.0	
RSE Column Factor:	1.0	1.2	1.3	0.7	1.1	1.0	0.8	1.1	1.0	RSE Row Factor
Building Shape										
Square	46	13	5	533	195	Q	87.0	67.5	Q	29.91
Rectangle	444	144	90	5,943	1,989	1,324	74.7	72.6	68.3	13.11
Right Angle	60	16	16	816	248	220	73.7	65.1	73.0	24.30
Other	289	120	62	2,857	Q	812	101.0	Q	76.5	21.79
Space-Heating Energy Sources (more than one may apply)										
Electricity	467	142	72	5,657	2,301	1,030	82.6	Q	69.5	17.22
Natural Gas	446	141	107	5,117	1,555	1,325	87.2	90.6	80.6	14.37
Fuel Oil	58	Q	16	496	Q	124	116.5	Q	129.1	31.34
District Heat	109	22	27	524	149	195	Q	145.8	136.3	29.78
Propane	11	Q	Q	316	Q	Q	35.6	Q	Q	35.12
Wood	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Energy Sources (more than one may apply)										
Electricity	766	270	154	9,002	3,690	2,108	85.0	73.2	73.1	14.20
Natural Gas	33	Q	Q	Q	Q	Q	Q	Q	Q	40.22
District Chilled Water	52	Q	19	184	Q	164	281.6	Q	113.8	35.03
Water-Heating Energy Sources (more than one may apply)										
Electricity	390	156	56	5,278	2,596	980	73.8	Q	57.0	18.63
Natural Gas	396	131	98	3,634	1,175	1,117	109.0	111.5	87.9	14.70
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
District Heat	67	Q	11	215	Q	67	308.8	Q	158.4	35.94
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooking Energy Sources (more than one may apply)										
Electricity	196	105	56	2,091	Q	590	93.7	Q	95.8	21.23
Natural Gas	231	92	44	1,950	748	452	118.5	122.3	98.3	18.95
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Percent of Floorspace Heated										
Not Heated	20	4	Q	751	260	199	27.0	17.0	Q	34.46
1 to 50	54	23	9	1,690	640	279	32.1	35.2	32.3	25.81
51 to 99	132	42	27	1,636	438	345	80.9	96.5	77.2	22.37
100	633	225	135	6,073	2,799	1,679	104.2	Q	80.1	14.02
Percent of Floorspace Cooled										
Not Cooled	29	16	5	925	377	244	31.1	43.1	20.2	29.81
1 to 50	195	29	28	3,242	891	534	60.1	32.8	53.2	22.02
51 to 99	208	84	49	2,339	706	590	89.0	119.1	83.2	19.86
100	407	164	91	3,643	2,164	1,134	111.8	Q	80.1	16.82
Heating Equipment (more than one may apply)										
Heat Pumps	211	42	27	2,290	672	534	92.1	62.4	50.8	21.70
Furnaces	202	50	22	2,308	586	323	87.7	84.9	67.8	21.45
Individual Space Heaters	331	65	63	4,022	961	768	82.3	67.2	81.6	15.81
District Heat	109	22	28	524	149	202	Q	145.8	137.6	29.40
Boilers	188	90	56	1,972	Q	544	95.5	Q	102.5	21.08
Packaged Heating Units	235	110	54	3,154	1,152	893	74.7	95.4	60.6	15.60
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Heating Distribution Equipment (more than one may apply)										
Radiators or Baseboards	119	27	32	839	246	252	141.5	108.1	128.1	22.90
Ducts for Heating	649	256	145	7,458	3,423	2,004	87.1	74.8	72.6	14.97
VAV System Used	238	132	82	2,388	Q	856	99.5	Q	95.9	19.11
Individual Space Heaters	331	65	63	4,022	961	768	82.3	67.2	81.6	15.81
Fan Coil Units or Other	127	30	27	1,042	291	252	122.3	103.4	107.9	34.96

See footnotes at end of table.

Table 3.13. Consumption and Gross Energy Intensity for Sum of Major Fuels in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.1	1.0	0.8	1.1	1.0	
Cooling Equipment (more than one may apply)										
Residential-Type Central A/C	110	27	15	992	365	190	110.6	74.3	78.3	29.17
Heat Pumps	227	44	28	2,224	697	562	102.1	63.0	49.3	21.59
Individual A/C	159	73	12	1,630	Q	108	97.3	Q	114.1	29.36
District Chilled Water	52	Q	19	184	Q	164	281.6	Q	113.8	35.03
Central Chillers	164	85	54	1,839	Q	571	89.4	Q	94.7	20.41
Packaged A/C Units	377	148	97	4,788	1,550	1,230	78.8	95.3	78.9	13.70
Swamp Coolers	39	Q	Q	428	Q	Q	92.3	Q	Q	39.19
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Distribution Equipment (more than one may apply)										
Ducts for Cooling	739	273	162	8,288	3,651	2,177	89.2	74.8	74.3	14.40
VAV System Used	283	140	97	2,739	1,981	973	103.2	Q	99.2	18.63
Individual A/C	159	73	12	1,630	Q	108	97.3	Q	114.1	29.36
Fan Coil Units or Other	82	Q	11	730	Q	115	111.8	Q	91.8	36.57
Water-Heating Equipment (more than one may apply)										
Centralized System	389	177	93	3,795	2,220	1,095	102.6	Q	85.3	17.37
Distributed System	446	160	70	5,341	2,492	1,110	83.5	Q	63.1	18.23
Energy Conservation Features (more than one may apply)										
Any Conservation Features	833	293	172	9,842	4,044	2,419	84.6	72.5	71.2	13.73
Building Shell	821	290	170	9,463	3,902	2,338	86.8	74.2	72.5	14.12
HVAC	742	275	162	8,199	3,602	2,103	90.5	76.3	76.8	14.57
Lighting	464	163	130	5,052	2,519	1,627	91.8	Q	79.6	15.41
Other	76	29	24	860	325	275	87.9	89.6	87.8	21.80
Energy Management Practices (more than one may apply)										
Energy Management and Control System	221	140	106	2,324	2,018	1,236	95.2	Q	85.4	18.48
Demand-Side Management ¹ Participation	159	44	32	1,539	521	504	103.0	84.7	63.9	20.91
Energy Audit	188	58	22	2,144	631	330	87.5	92.0	68.0	21.05
Building Energy Manager	24	8	Q	181	137	56	130.1	58.9	155.5	34.24

¹ These Demand-Side Management (DSM) data, which include utility-sponsored programs, in-house programs, and third-party sponsored programs, were reported by the building respondent on the Building Questionnaire (Form EIA-871A). The electric utility-sponsored DSM data reported by the electricity suppliers (Form EIA-871E-1b) are presented in the "At a Glance" section and Table 3.49 of this section. See Appendix B, "Nonsampling and Sampling Errors," for a discussion of the differences between the energy supplier-reported data and building respondent-reported data.

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • HVAC = Heating, Ventilation, and Air Conditioning. • VAV = Variable Air Volume. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.

Table 3.21. Electricity Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	
All Buildings	192	155	184	23,642	12,473	13,779	8.1	12.4	13.4	6.82
Building Floorspace (square feet)										
1,001 to 5,000	29	16	27	2,937	1,117	1,479	9.9	14.1	18.4	9.15
5,001 to 10,000	29	10	17	3,198	964	1,484	9.2	10.3	11.3	13.48
10,001 to 25,000	30	21	19	3,932	1,883	1,814	7.6	11.2	10.5	11.22
25,001 to 50,000	29	15	27	3,881	1,829	2,173	7.3	8.4	12.7	15.90
50,001 to 100,000	16	19	23	2,582	1,595	1,774	6.3	12.1	13.1	15.10
100,001 to 200,000	25	23	19	3,360	2,305	1,654	7.5	9.8	11.5	19.21
200,001 to 500,000	19	24	34	2,057	1,444	1,984	9.0	16.4	17.3	20.19
Over 500,000	15	27	17	1,696	1,335	1,418	8.7	20.2	12.3	26.11
Principal Building Activity										
Education	18	22	20	3,431	2,405	1,728	5.4	9.1	11.5	10.80
Food Sales	7	Q	8	246	Q	155	29.5	Q	54.5	22.64
Food Service	15	4	13	734	187	365	20.3	20.5	36.7	18.82
Health Care	10	12	13	397	492	544	24.2	23.4	23.4	17.84
Lodging	15	7	10	934	482	579	15.6	15.1	16.4	23.17
Mercantile and Service	26	32	31	3,925	2,678	2,607	6.6	12.1	12.0	11.70
Office	53	37	45	3,941	2,187	2,283	13.4	17.1	19.6	13.61
Parking Garage	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Public Assembly	7	6	16	1,148	552	1,095	6.4	10.6	14.5	17.41
Public Order and Safety	Q	Q	2	Q	Q	168	Q	Q	9.6	30.38
Religious Worship	4	2	1	2,143	628	505	2.1	2.8	2.9	19.95
Warehouse and Storage	19	18	14	3,928	1,800	2,308	4.9	9.9	6.0	19.58
Other	9	4	Q	497	181	Q	17.6	20.5	Q	31.78
Vacant	6	1	1	1,849	313	558	3.4	1.7	2.6	30.03
Census Region and Division										
Northeast	42	28	24	6,321	2,476	2,120	6.7	11.4	11.6	13.50
New England	9	4	9	1,433	436	634	6.3	10.1	13.8	20.60
Middle Atlantic	33	24	16	4,888	2,039	1,486	6.8	11.7	10.6	18.33
Midwest	48	39	45	6,651	2,632	3,985	7.2	14.9	11.3	12.27
East North Central	31	24	26	4,635	1,846	2,288	6.8	13.1	11.3	14.05
West North Central	16	15	19	2,016	785	1,697	8.1	19.1	11.3	22.86
South	65	55	74	7,173	4,820	4,824	9.0	11.4	15.3	11.20
South Atlantic	31	30	36	2,519	2,644	2,208	12.2	11.4	16.4	16.49
East South Central	14	10	20	1,630	903	1,187	8.9	11.5	16.6	23.70
West South Central	20	14	18	3,024	1,273	1,429	6.5	11.2	12.5	15.56
West	37	32	41	3,497	2,545	2,850	10.6	12.8	14.4	14.27
Mountain	12	9	11	1,056	664	690	11.7	13.5	15.7	23.17
Pacific	25	24	30	2,440	1,881	2,160	10.1	12.5	14.0	17.22
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	13	15	18	2,131	842	1,491	6.3	17.8	12.1	19.27
5,500-7,000 HDD	52	36	43	7,783	2,797	3,557	6.7	12.7	12.1	14.01
4,000-5,499 HDD	61	37	32	6,547	3,348	2,813	9.3	11.1	11.2	13.03
Fewer than 4,000 HDD	33	44	59	3,963	2,961	3,624	8.4	14.9	16.2	15.24
More than 2,000 CDD and --										
Fewer than 4,000 HDD	32	23	33	3,219	2,524	2,295	10.0	9.0	14.4	16.16
Energy Sources (more than one may apply)										
Electricity	192	155	184	23,642	12,473	13,779	8.1	12.4	13.4	6.82
Natural Gas	136	113	127	17,059	8,871	9,215	8.0	12.8	13.7	8.08
Fuel Oil	46	36	48	4,503	2,363	2,735	10.2	15.2	17.6	15.50
District Heat	25	27	13	1,967	1,419	976	12.7	19.0	13.8	25.93
District Chilled Water	8	8	9	652	375	480	12.5	22.1	17.7	26.72
Propane	12	5	12	943	642	786	12.3	7.8	14.8	22.85
Any Other	3	Q	2	729	Q	268	4.4	Q	7.5	24.08

See footnotes at end of table.

Table 3.21. Electricity Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	
Energy End Uses (more than one may apply)										
Heated Buildings	182	146	179	22,036	11,548	12,813	8.3	12.6	14.0	6.64
Buildings with A/C	171	142	178	18,912	10,601	12,286	9.1	13.4	14.5	6.90
Buildings with Water Heating	176	148	176	20,372	11,006	12,368	8.7	13.5	14.3	6.87
Buildings with Cooking	69	72	93	6,903	4,920	5,071	10.1	14.6	18.4	9.18
Buildings with Manufacturing	12	6	7	1,478	394	652	7.9	16.1	10.9	22.25
Workers (main shift)										
Less than 5	30	17	23	6,841	2,668	2,954	4.4	6.2	7.8	11.65
5 to 9	24	10	19	3,343	1,227	1,577	7.3	8.4	12.0	13.12
10 to 19	26	13	23	3,323	1,211	1,789	7.9	10.7	13.1	15.42
20 to 49	43	26	24	3,815	2,180	2,088	11.2	11.8	11.3	12.69
50 to 99	22	25	21	2,890	1,685	1,424	7.6	14.9	14.8	19.52
100 or More	46	64	74	3,430	3,502	3,949	13.4	18.3	18.8	13.09
Weekly Operating Hours										
39 or Fewer	10	3	4	3,673	1,198	1,273	2.8	2.9	3.3	15.57
40 to 48	45	24	32	6,255	2,617	2,609	7.2	9.1	12.3	13.25
49 to 60	38	21	25	5,816	2,363	2,466	6.5	8.9	10.2	12.85
61 to 84	27	32	36	2,956	2,687	2,762	9.0	11.9	13.2	14.66
85 to 167	30	31	39	2,572	1,910	2,238	11.6	16.4	17.5	13.52
Open Continuously	42	43	48	2,369	1,697	2,431	17.8	25.4	19.5	14.85
Ownership and Occupancy										
Nongovernment Owned	152	103	142	18,314	8,441	10,557	8.3	12.2	13.4	8.27
Owner Occupied	124	86	113	14,110	6,718	7,958	8.8	12.8	14.1	8.92
Single Establishment	102	75	91	11,138	5,824	6,260	9.1	12.9	14.5	10.06
Multiple Establishment	22	11	22	2,971	894	1,698	7.4	12.4	12.8	15.76
Nonowner Occupied	26	17	28	3,684	1,485	2,380	7.2	11.4	11.9	14.79
Single Establishment	16	7	12	1,906	557	999	8.2	13.4	12.5	20.01
Multiple Establishment	11	9	16	1,779	928	1,381	6.1	10.2	11.5	18.28
Vacant	Q	Q	Q	520	Q	Q	Q	Q	Q	28.65
Government Owned	40	51	43	5,329	4,032	3,222	7.5	12.7	13.3	11.67
Predominant Exterior Wall Material										
Masonry	163	102	125	20,376	8,486	9,161	8.0	12.1	13.6	7.32
Siding or Shingles	11	5	9	1,490	525	662	7.4	9.9	13.8	16.72
Metal Panels	Q	10	17	1,277	1,349	1,834	9.7	7.1	9.1	20.47
Concrete Panels	Q	24	18	Q	1,495	1,497	Q	16.1	11.9	19.64
Window Glass	Q	Q	12	Q	463	405	Q	25.3	28.9	28.46
Other	Q	Q	4	Q	Q	220	Q	Q	19.3	32.28
Predominant Roof Material										
Built-Up	103	89	90	11,350	6,520	5,822	9.0	13.7	15.4	8.95
Shingles (Not Wood)	28	21	22	4,911	1,557	2,064	5.8	13.7	10.5	15.05
Metal Surfacing	8	8	20	1,640	1,459	2,156	5.1	5.4	9.1	19.25
Synthetic or Rubber	36	30	38	3,552	2,139	2,542	10.0	14.0	15.0	13.38
Other	17	6	15	2,189	798	1,196	7.7	8.0	12.7	18.68
Space-Heating Energy Source										
Electricity	65	52	95	6,578	3,880	6,191	9.9	13.4	15.4	10.01
Electricity Main	32	25	64	2,779	1,893	3,800	11.7	13.4	16.8	11.76
Electricity Secondary	33	27	31	3,799	1,987	2,391	8.6	13.4	13.1	15.82
Other Excluding Electricity	117	94	84	15,458	7,668	6,622	7.5	12.2	12.6	8.36
Building Not Heated	Q	Q	5	1,606	925	967	6.1	Q	5.5	31.28

See footnotes at end of table.

Table 3.21. Electricity Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	
Main Space-Heating Energy Source										
Electricity	32	25	64	2,779	1,893	3,800	11.7	13.4	16.8	11.76
Natural Gas	101	88	94	13,989	7,223	7,024	7.2	12.2	13.3	8.73
Fuel Oil	18	5	5	2,551	739	700	7.1	7.1	7.3	17.32
District Heat	23	25	12	1,839	1,339	759	12.7	18.7	16.2	20.56
Propane	3	Q	2	370	Q	273	8.2	Q	9.2	35.31
Wood	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Replacement Energy Source for Main Heating										
Electricity Only	7	4	5	1,009	422	506	7.3	8.6	10.3	18.70
Natural Gas Only	8	5	5	909	528	482	9.1	Q	10.1	25.72
Fuel Oil Only	21	19	23	2,065	1,339	1,354	10.0	14.1	16.7	22.39
Propane Only	5	3	7	631	399	554	8.0	8.4	12.9	24.59
Any Other Single Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
More than One Energy Source	2	Q	Q	394	Q	Q	5.9	Q	Q	21.08
No Replacement Energy Source	136	112	137	16,785	8,647	9,652	8.1	12.9	14.2	7.63
Building Not Heated	Q	Q	5	1,606	925	967	6.1	Q	5.5	31.28
Cooling Energy Source										
Electricity	164	135	166	18,222	10,231	11,375	9.0	13.2	14.6	6.99
Other Excluding Electricity	8	7	12	690	370	911	11.1	18.6	12.9	27.53
A/C Not Performed	20	13	7	4,730	1,872	1,494	4.3	7.0	4.4	20.51
Water-Heating Energy Source										
Electricity	60	44	90	7,259	3,423	5,946	8.3	12.7	15.1	10.73
Other Excluding Electricity	116	105	87	13,112	7,584	6,422	8.9	13.8	13.5	8.40
Water Heating Not Performed	15	7	8	3,271	1,466	1,411	4.7	4.5	5.6	20.03
Cooking Energy Source										
Electricity	31	42	48	2,726	2,734	2,427	11.4	15.4	19.6	12.66
Other Excluding Electricity	38	30	46	4,177	2,186	2,643	9.2	13.6	17.2	13.88
Cooking Not Performed	122	83	91	16,740	7,553	8,709	7.3	11.0	10.5	9.13
Percent of Floorspace Heated										
Not Heated	Q	Q	5	1,606	925	967	6.1	Q	5.5	31.28
1 to 50	21	17	17	4,779	2,060	2,059	4.4	8.5	8.4	19.57
51 to 99	29	25	33	3,692	2,061	2,039	7.9	12.3	16.3	12.38
100	131	103	129	13,565	7,427	8,715	9.7	13.8	14.7	7.62
Percent of Floorspace Cooled										
Not Cooled	20	13	7	4,730	1,872	1,494	4.3	7.0	4.4	20.51
1 to 50	49	25	30	9,565	3,604	3,881	5.2	7.1	7.8	10.49
51 to 99	47	55	54	4,035	3,167	3,035	11.7	17.5	17.7	11.13
100	75	61	94	5,312	3,830	5,370	14.1	15.8	17.5	9.39
Percent Lit when Open										
Not Lit	2	Q	(*)	789	Q	Q	2.0	Q	0.9	31.12
1 to 50	24	6	6	5,274	1,523	1,414	4.6	3.7	4.4	16.57
51 to 99	41	25	39	5,026	2,264	2,980	8.1	11.1	13.2	10.54
100	125	124	138	12,554	8,369	8,988	10.0	14.8	15.4	8.35
Percent Lit when Closed										
Not Lit	96	71	83	11,585	5,863	6,562	8.3	12.1	12.7	9.17
1 to 50	88	77	97	11,493	6,118	6,851	7.7	12.6	14.1	8.89
51 to 99	5	Q	Q	284	Q	Q	16.6	Q	Q	30.01
100	2	Q	Q	279	Q	Q	8.8	Q	Q	30.13

See footnotes at end of table.

Table 3.21. Electricity Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	
Heating Equipment (more than one may apply)										
Heat Pumps	29	16	30	1,934	1,055	1,783	14.7	14.7	16.7	17.31
Furnaces	49	36	32	7,344	3,367	2,980	6.6	10.6	10.8	12.07
Individual Space Heaters	52	47	69	7,329	3,862	5,434	7.1	12.1	12.8	10.96
District Heat	26	26	13	2,015	1,363	972	13.0	19.1	13.9	21.41
Boilers	73	53	58	8,964	4,027	3,734	8.1	13.1	15.6	9.60
Packaged Heating Units	39	43	58	3,664	3,226	3,911	10.7	13.4	14.8	12.36
Other	Q	Q	8	Q	Q	231	Q	Q	33.6	22.04
Cooling Equipment (more than one may apply)										
Residential-Type Central A/C	36	18	24	4,144	1,528	1,800	8.7	11.8	13.3	14.39
Heat Pumps	27	17	31	1,946	1,170	1,807	13.7	14.8	17.2	16.53
Individual A/C	57	45	30	8,783	3,603	2,586	6.5	12.5	11.5	11.47
District Chilled Water	8	8	9	652	376	632	12.5	22.1	13.5	28.76
Central Chillers	47	56	60	2,854	3,032	3,306	16.4	18.4	18.0	13.45
Packaged A/C Units	86	72	100	8,357	5,411	6,494	10.3	13.3	15.4	9.24
Swamp Coolers	8	7	5	544	510	386	14.6	14.5	12.2	25.92
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Lighting Equipment (more than one may apply)										
Incandescent	137	96	118	16,118	7,220	7,853	8.5	13.4	15.0	8.11
Standard Fluorescent	179	147	179	21,605	11,720	13,069	8.3	12.5	13.7	6.66
Compact Fluorescent	23	28	37	1,961	1,764	1,958	11.8	15.9	18.8	16.39
High-Intensity Discharge	40	49	55	4,554	3,382	3,734	8.8	14.4	14.7	14.50
Other	Q	Q	Q	537	Q	Q	12.8	Q	Q	46.56
Commercial Refrigeration Equipment (more than one may apply)										
Any Equipment	84	85	103	7,689	5,346	5,627	10.9	15.9	18.3	8.92
Walk-in Units	65	70	88	4,761	4,015	4,707	13.5	17.4	18.8	9.82
Cases and Cabinets	72	72	87	6,431	4,280	4,507	11.2	16.7	19.4	9.64
None	108	70	81	15,953	7,127	8,153	6.8	9.8	10.0	9.73
Personal Computers and/or Computer Terminals										
1 to 4	34	23	32	5,282	1,975	3,168	6.4	11.7	10.3	11.97
5 to 9	14	12	16	1,712	1,001	1,444	8.3	12.1	11.3	15.90
10 to 19	17	16	15	1,933	1,390	1,182	8.7	11.6	12.6	16.38
20 to 49	19	18	21	2,554	1,552	1,419	7.5	11.8	14.5	17.18
50 or More	56	64	69	3,793	3,456	3,405	14.7	18.4	20.1	12.94
Annual Consumption (kilowatthours)										
10,000 or Less	3	1	1	2,775	713	611	0.9	1.2	1.5	12.38
10,001 to 50,000	20	7	8	5,497	2,041	2,044	3.7	3.4	4.1	9.48
50,001 to 100,000	17	8	12	2,880	1,091	1,458	5.8	7.6	8.2	10.99
100,001 to 500,000	53	31	43	6,310	2,993	3,413	8.5	10.4	12.5	10.20
500,001 to 1,000,000	19	16	21	1,577	1,443	1,593	12.1	11.1	13.1	14.83
1,000,001 to 5,000,000	54	42	48	3,568	2,416	2,369	15.1	17.5	20.1	13.18
Over 5,000,000	26	49	52	1,034	1,775	2,291	24.8	27.7	22.7	19.15
Peak Electricity Demand (kilowatts)										
10 or Less	2	1	1	1,028	486	507	2.3	2.6	2.7	22.16
11 to 25	9	3	4	1,978	840	808	4.6	4.1	5.5	16.95
26 to 50	15	8	11	2,126	755	957	7.2	11.1	11.1	15.01
51 to 100	22	10	24	2,723	1,219	1,614	8.1	7.9	15.1	14.78
101 to 250	27	22	25	2,610	1,836	1,811	10.5	11.9	13.6	14.55
251 to 1,000	44	36	44	3,605	2,345	2,187	12.2	15.3	20.3	15.58
Over 1,000	29	44	44	1,160	1,494	2,407	25.0	29.4	18.2	20.71

See footnotes at end of table.

Table 3.21. Electricity Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	0.8	
RSE Column Factor:	1.1	1.3	1.1	0.9	1.1	1.0	0.9	1.0	0.8	
Season of Peak Electricity Demand										
Summer	101	80	103	8,715	5,354	6,925	11.6	14.9	14.8	11.17
Winter	36	37	47	5,392	3,095	2,986	6.8	11.9	15.6	13.81
Summer and Winter	11	7	4	1,122	526	379	10.2	14.1	11.3	25.05
Building Generates Electricity										
Yes	35	32	51	1,950	1,881	2,849	17.8	17.0	18.0	14.81
No	157	123	133	21,692	10,592	10,931	7.2	11.6	12.2	7.52

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.

Table 3.22. Electricity Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	1.0	
RSE Column Factor:	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	1.0	
All Buildings	144	58	32	10,042	4,106	2,482	14.3	14.2	12.9	9.79
Building Floorspace (square feet)										
1,001 to 5,000	18	5	2	1,002	260	189	18.1	20.4	13.0	18.59
5,001 to 10,000	11	5	1	891	342	176	12.4	15.4	8.1	23.86
10,001 to 25,000	17	8	3	1,595	576	298	10.8	14.4	9.2	19.04
25,001 to 50,000	20	6	5	1,164	482	327	17.2	11.8	14.6	21.91
50,001 to 100,000	20	7	5	1,320	387	268	14.9	18.4	17.6	20.49
100,001 to 200,000	26	5	4	1,626	444	269	15.8	12.2	13.3	25.73
200,001 to 500,000	16	5	9	1,207	315	670	13.2	15.0	12.7	25.39
Over 500,000	16	16	4	1,237	1,299	285	12.9	12.6	13.3	24.24
Principal Building Activity										
Education	5	2	2	480	173	253	9.7	10.4	8.7	23.23
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Food Service	5	Q	Q	103	Q	Q	46.2	Q	Q	35.54
Health Care	5	Q	Q	240	Q	Q	22.5	Q	Q	28.38
Lodging	14	Q	2	550	Q	97	25.8	Q	15.9	28.55
Mercantile and Service	28	7	6	2,104	535	538	13.1	12.9	11.2	21.07
Office	46	14	11	2,419	899	590	19.1	15.9	18.3	15.69
Parking Garage	Q	Q	Q	Q	Q	124	Q	Q	5.7	29.16
Public Assembly	5	Q	3	461	Q	197	10.8	Q	17.1	27.39
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Religious Worship	1	Q	Q	358	Q	Q	3.4	Q	Q	31.02
Warehouse and Storage	16	4	3	2,183	587	374	7.5	7.0	7.0	20.46
Other	4	Q	Q	124	Q	Q	30.4	Q	Q	43.10
Vacant	Q	Q	Q	520	Q	68	8.5	Q	6.5	44.33
Census Region and Division										
Northeast	19	5	4	1,534	499	286	12.5	9.2	14.5	21.49
New England	5	Q	Q	497	Q	Q	9.7	Q	Q	43.89
Middle Atlantic	14	3	3	1,036	327	194	13.9	8.9	15.3	25.37
Midwest	34	9	8	2,473	498	663	13.6	17.1	12.1	20.40
East North Central	17	6	Q	1,171	271	362	14.4	20.9	17.2	26.71
West North Central	17	3	2	1,302	227	301	12.8	12.7	6.1	25.15
South	55	34	11	3,886	2,367	903	14.1	14.5	12.4	14.59
South Atlantic	21	11	5	1,791	783	487	11.8	14.3	11.0	22.26
East South Central	16	5	3	903	350	264	18.0	14.1	11.8	22.29
West South Central	18	18	3	1,192	1,234	151	14.8	14.6	17.8	22.90
West	36	11	9	2,151	742	630	16.7	14.6	13.7	17.11
Mountain	16	4	2	774	229	148	20.8	16.3	15.5	30.11
Pacific	20	7	6	1,376	513	482	14.4	13.9	13.1	21.23
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	8	Q	Q	749	Q	Q	10.4	Q	Q	25.75
5,500-7,000 HDD	33	8	10	2,310	591	681	14.3	13.5	15.4	20.29
4,000-5,499 HDD	28	10	7	1,971	727	559	14.2	13.5	12.8	18.77
Fewer than 4,000 HDD	35	15	9	2,483	1,106	727	13.9	13.2	11.9	17.47
More than 2,000 CDD and --										
Fewer than 4,000 HDD	40	24	5	2,529	1,518	415	16.0	15.7	12.1	21.79
Energy Sources (more than one may apply)										
Electricity	144	58	32	10,042	4,106	2,482	14.3	14.2	12.9	9.79
Natural Gas	87	32	23	6,260	1,957	1,624	14.0	16.4	14.3	12.76
Fuel Oil	37	11	14	2,122	748	737	17.5	14.5	19.1	20.98
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
District Chilled Water	Q	Q	3	184	Q	164	34.0	Q	15.7	31.33
Propane	8	1	1	609	201	205	12.5	7.4	6.2	32.45
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.22. Electricity Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	RSE Column Factor:	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	
Energy End Uses (more than one may apply)										
Heated Buildings	138	57	31	9,393	3,878	2,297	14.7	14.7	13.6	9.94
Buildings with A/C	140	55	31	9,225	3,760	2,258	15.1	14.7	13.9	10.09
Buildings with Water Heating	136	57	30	8,869	3,696	2,167	15.4	15.4	13.6	10.24
Buildings with Cooking	59	34	14	3,197	2,117	859	18.3	16.1	15.8	16.28
Buildings with Manufacturing	7	Q	Q	504	Q	Q	14.2	Q	Q	38.07
Workers (main shift)										
Less than 5	20	19	4	2,071	1,586	497	9.7	11.8	8.0	23.23
5 to 9	10	4	1	882	343	152	11.5	10.8	8.3	21.60
10 to 19	15	6	2	1,142	389	201	13.3	15.4	10.5	25.31
20 to 49	18	9	4	1,560	514	399	11.6	18.1	11.3	20.28
50 to 99	20	6	4	1,117	347	301	17.5	15.9	12.5	24.38
100 or More	61	15	16	3,271	926	933	18.5	16.1	17.6	15.80
Weekly Operating Hours										
39 or Fewer	4	1	2	613	141	167	5.9	4.7	9.2	31.11
40 to 48	27	7	8	2,264	646	554	11.8	10.1	14.0	20.54
49 to 60	26	8	8	2,104	616	654	12.3	12.5	11.8	15.61
61 to 84	33	8	5	2,498	709	415	13.1	11.8	12.2	21.59
85 to 167	17	9	5	920	542	273	18.6	17.3	18.4	20.58
Open Continuously	38	26	5	1,643	1,451	420	23.0	17.6	11.7	22.86
Ownership and Occupancy										
Nongovernment Owned	130	52	24	8,962	3,518	1,788	14.5	14.8	13.2	10.92
Owner Occupied	100	27	18	6,290	1,781	1,300	16.0	15.2	13.5	12.38
Single Establishment	71	23	12	4,143	1,417	970	17.2	16.1	12.3	12.30
Multiple Establishment	29	4	Q	2,147	364	330	13.6	11.7	16.9	23.19
Nonowner Occupied	28	25	6	2,423	1,716	468	11.6	14.3	12.8	19.51
Single Establishment	9	18	3	663	1,200	197	13.6	14.8	15.7	25.46
Multiple Establishment	19	7	3	1,760	517	271	10.9	13.3	10.8	24.13
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Government Owned	14	6	8	1,081	588	695	12.5	10.5	12.2	21.47
Predominant Exterior Wall Material										
Masonry	83	42	20	5,608	2,658	1,525	14.9	15.9	13.0	12.65
Siding or Shingles	9	2	1	707	178	85	13.3	11.6	13.7	24.20
Metal Panels	24	3	3	1,871	550	244	13.1	5.3	10.8	23.63
Concrete Panels	8	7	6	732	445	464	11.2	15.0	13.7	19.76
Window Glass	11	3	1	685	202	76	16.2	14.5	11.6	20.36
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Predominant Roof Material										
Built-Up	58	29	10	3,556	1,809	699	16.4	15.9	14.4	17.79
Shingles (Not Wood)	15	3	2	1,310	278	200	11.7	12.2	12.0	20.57
Metal Surfacing	23	8	4	2,121	798	460	10.7	9.4	9.4	18.41
Synthetic or Rubber	28	14	12	1,688	817	858	16.3	16.8	14.3	15.01
Other	20	5	3	1,367	404	265	14.4	12.1	11.1	28.81
Space-Heating Energy Source										
Electricity	90	35	16	5,657	2,301	1,030	15.9	15.0	15.3	13.96
Electricity Main	70	31	11	4,254	1,976	800	16.4	15.9	14.3	16.29
Electricity Secondary	20	3	4	1,403	324	230	14.2	10.0	18.8	21.90
Other Excluding Electricity	48	23	15	3,736	1,577	1,267	12.9	14.3	12.2	14.34
Building Not Heated	6	1	Q	649	228	186	9.1	4.5	4.8	34.34

See footnotes at end of table.

Table 3.22. Electricity Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	RSE Column Factor:	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	
Main Space-Heating Energy Source										
Electricity	70	31	11	4,254	1,976	800	16.4	15.9	14.3	16.29
Natural Gas	53	22	17	4,175	1,485	1,225	12.8	15.1	13.7	14.02
Fuel Oil	2	Q	Q	211	Q	Q	8.7	Q	Q	35.25
District Heat	11	Q	2	516	Q	157	21.1	Q	14.6	27.43
Propane	2	Q	Q	177	Q	Q	8.8	Q	Q	44.59
Wood	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Replacement Energy Source for Main Heating										
Electricity Only	3	2	Q	366	201	Q	9.5	9.6	Q	31.70
Natural Gas Only	3	Q	Q	203	Q	Q	14.0	Q	Q	41.48
Fuel Oil Only	11	Q	3	509	Q	107	20.7	Q	23.9	22.51
Propane Only	3	Q	Q	334	Q	Q	9.5	Q	Q	50.96
Any Other Single Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
More than One Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
No Replacement Energy Source	115	50	26	7,791	3,265	2,014	14.8	15.2	13.1	11.05
Building Not Heated	6	1	Q	649	228	186	9.1	4.5	4.8	34.34
Cooling Energy Source										
Electricity	133	54	29	9,002	3,690	2,108	14.8	14.7	14.0	10.24
Other Excluding Electricity	Q	Q	2	222	Q	149	27.5	Q	12.3	33.01
A/C Not Performed	4	Q	1	818	345	225	5.1	Q	3.1	25.31
Water-Heating Energy Source										
Electricity	80	37	12	5,278	2,596	980	15.2	14.3	11.8	13.33
Other Excluding Electricity	56	20	18	3,591	1,100	1,187	15.6	17.9	15.2	13.94
Water Heating Not Performed	7	1	2	1,174	410	316	6.4	3.4	7.8	24.06
Cooking Energy Source										
Electricity	40	24	10	2,091	1,615	590	19.2	15.1	16.3	21.92
Other Excluding Electricity	19	10	4	1,105	502	269	16.8	19.6	14.8	19.07
Cooking Not Performed	85	24	18	6,846	1,989	1,623	12.4	12.1	11.4	11.08
Percent of Floorspace Heated										
Not Heated	6	1	Q	649	228	186	9.1	4.5	4.8	34.34
1 to 50	12	5	2	1,690	640	279	7.1	7.5	7.4	26.14
51 to 99	27	6	5	1,631	438	338	16.7	14.8	15.8	20.15
100	99	46	24	6,073	2,799	1,679	16.2	16.4	14.1	10.97
Percent of Floorspace Cooled										
Not Cooled	4	Q	1	818	345	225	5.1	Q	3.1	25.31
1 to 50	25	4	5	3,242	891	534	7.8	5.0	9.5	19.31
51 to 99	41	13	9	2,339	706	590	17.5	18.4	15.4	17.54
100	73	38	17	3,643	2,164	1,134	20.1	17.5	15.2	12.98
Percent Lit when Open										
Not Lit	Q	Q	Q	321	Q	Q	5.2	Q	Q	45.43
1 to 50	8	Q	2	1,253	231	280	6.3	Q	5.7	25.06
51 to 99	28	20	6	1,950	1,590	413	14.3	12.9	15.7	19.97
100	106	34	23	6,519	2,226	1,737	16.3	15.4	13.4	10.68
Percent Lit when Closed										
Not Lit	72	36	12	5,395	2,594	1,135	13.4	13.8	10.2	13.44
1 to 50	66	21	20	4,313	1,434	1,273	15.2	14.4	15.4	13.00
51 to 99	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
100	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.22. Electricity Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	1.0	
Heating Equipment (more than one may apply)										
Heat Pumps	39	9	6	2,290	672	534	17.0	13.0	10.8	21.95
Furnaces	27	9	4	2,308	586	323	11.6	14.6	11.0	18.97
Individual Space Heaters	55	13	12	4,017	961	761	13.6	13.7	15.5	14.51
District Heat	11	2	3	524	149	202	20.9	14.0	15.4	24.06
Boilers	30	20	10	1,972	1,424	543	15.1	13.9	18.2	20.16
Packaged Heating Units	42	20	11	3,154	1,152	892	13.4	17.2	12.5	14.74
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Equipment (more than one may apply)										
Residential-Type Central A/C	11	4	2	992	365	190	10.7	11.6	11.5	21.57
Heat Pumps	38	9	6	2,224	697	562	17.0	13.1	10.5	21.69
Individual A/C	19	17	2	1,630	1,269	108	11.5	13.3	20.1	25.15
District Chilled Water	Q	Q	3	184	Q	164	34.0	Q	15.7	31.33
Central Chillers	33	20	10	1,839	1,390	571	17.7	14.4	16.8	17.51
Packaged A/C Units	71	27	18	4,788	1,550	1,230	14.8	17.2	14.7	13.28
Swamp Coolers	9	Q	Q	428	Q	Q	20.9	Q	Q	37.28
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Lighting Equipment (more than one may apply)										
Incandescent	82	29	17	5,131	1,592	1,305	16.0	18.2	13.4	12.70
Standard Fluorescent	140	58	30	9,470	3,959	2,244	14.7	14.6	13.2	10.06
Compact Fluorescent	26	8	13	1,425	509	719	18.2	14.9	17.8	19.93
High-Intensity Discharge	43	14	15	3,503	1,180	1,217	12.4	12.3	12.5	15.21
Other	5	Q	1	469	Q	110	11.0	Q	12.4	29.62
Commercial Refrigeration Equipment (more than one may apply)										
Any Equipment	67	40	17	3,551	2,186	1,006	18.8	18.1	16.5	13.67
Walk-in Units	51	35	13	2,555	1,886	755	19.9	18.3	17.3	16.49
Cases and Cabinets	54	36	15	2,870	2,019	879	18.9	18.0	16.7	15.01
None	77	19	15	6,491	1,919	1,476	11.8	9.7	10.5	13.02
Personal Computers and/or Computer Terminals										
1 to 4	22	8	4	1,941	569	419	11.3	14.1	10.7	19.30
5 to 9	17	5	3	1,171	381	261	14.5	12.7	12.7	25.70
10 to 19	16	6	4	1,150	340	242	13.7	16.6	Q	30.92
20 to 49	16	7	4	1,138	430	345	14.1	16.3	11.6	21.20
50 or More	49	12	14	2,510	769	758	19.5	15.9	18.1	16.60
Annual Consumption (kilowatthours)										
10,000 or Less	1	(*)	(*)	444	96	110	1.6	1.6	1.0	22.09
10,001 to 50,000	6	2	1	1,466	442	208	4.2	4.3	4.3	15.34
50,001 to 100,000	7	3	1	954	484	217	7.4	6.0	6.9	22.93
100,001 to 500,000	30	12	5	2,035	780	510	14.8	15.4	9.6	16.56
500,001 to 1,000,000	15	3	4	1,036	307	402	14.7	9.1	10.5	24.09
1,000,001 to 5,000,000	53	20	10	2,887	806	570	18.4	24.4	18.3	16.74
Over 5,000,000	31	19	10	1,221	1,191	465	25.6	15.8	21.4	18.33
Peak Electricity Demand (kilowatts)										
10 or Less	(*)	Q	Q	171	Q	Q	2.2	Q	Q	48.49
11 to 25	4	Q	Q	609	Q	Q	6.8	Q	Q	25.58
26 to 50	8	3	Q	712	314	Q	10.7	8.1	Q	22.80
51 to 100	11	5	1	854	267	252	13.4	18.8	5.0	25.64
101 to 250	18	6	6	1,250	518	384	14.0	12.2	14.5	24.17
251 to 1,000	49	16	9	2,620	802	596	18.5	20.6	14.9	22.73
Over 1,000	34	19	10	1,398	1,233	492	24.5	15.6	21.2	19.68

See footnotes at end of table.

Table 3.22. Electricity Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	RSE Column Factor:	0.9	1.3	1.4	0.8	1.1	1.3	0.6	0.8	
Season of Peak Electricity Demand										
Summer	78	34	18	4,599	2,292	1,404	17.0	14.9	12.9	15.01
Winter	42	15	9	2,712	956	538	15.7	15.7	16.8	18.55
Summer and Winter	3	Q	Q	305	Q	Q	10.0	Q	Q	40.20
Building Generates Electricity										
Yes	42	13	13	2,249	731	713	18.6	17.5	18.6	17.03
No	102	45	19	7,793	3,375	1,769	13.1	13.5	10.6	10.91

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.

Table 3.37. Natural Gas Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	1.1	
RSE Column Factor:	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	1.1	
All Buildings	804	414	513	17,059	8,871	9,217	47.1	46.6	55.7	10.78
Building Floorspace (square feet)										
1,001 to 5,000	132	48	66	1,798	636	761	73.3	75.6	87.2	10.97
5,001 to 10,000	128	39	47	2,010	720	858	63.6	54.1	54.8	14.02
10,001 to 25,000	145	99	131	2,916	1,302	1,118	49.8	76.1	117.4	20.45
25,001 to 50,000	147	45	51	3,079	1,064	1,203	47.8	41.8	42.3	20.32
50,001 to 100,000	79	53	56	1,929	1,255	1,258	41.1	41.9	44.6	18.16
100,001 to 200,000	80	46	38	2,359	1,769	1,280	33.8	26.1	29.9	20.63
200,001 to 500,000	31	Q	83	1,374	1,138	1,486	22.2	42.8	55.7	29.24
Over 500,000	Q	36	40	1,594	987	1,253	39.2	36.0	32.3	31.99
Principal Building Activity										
Education	131	66	66	3,114	1,724	1,426	42.0	38.1	46.6	16.43
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Food Service	64	21	36	593	128	223	107.2	165.6	162.2	21.54
Health Care	40	55	66	350	429	500	113.7	129.2	131.5	29.48
Lodging	51	31	31	641	343	473	80.3	91.7	66.3	23.47
Mercantile and Service	130	97	91	3,042	2,205	1,937	42.6	44.2	46.8	22.88
Office	165	42	Q	2,763	1,406	1,359	59.9	29.8	Q	21.12
Parking Garage	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Public Assembly	34	14	33	853	423	726	40.0	33.6	45.1	22.75
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Religious Worship	39	10	9	1,715	558	323	22.9	18.0	28.3	22.07
Warehouse and Storage	57	42	46	2,112	982	1,324	26.9	42.4	34.6	21.56
Other	Q	16	Q	348	165	Q	135.6	95.7	Q	37.98
Vacant	26	Q	Q	1,154	Q	Q	22.6	Q	Q	32.45
Census Region and Division										
Northeast	131	80	65	4,061	1,715	1,260	32.3	46.7	51.5	18.56
New England	23	Q	26	745	Q	360	31.2	Q	71.9	31.63
Middle Atlantic	108	71	39	3,316	1,562	900	32.5	45.6	43.3	20.91
Midwest	308	131	162	5,629	2,035	3,149	54.8	64.5	51.6	12.90
East North Central	236	96	93	4,001	1,425	1,734	59.1	67.3	53.6	14.20
West North Central	72	35	70	1,628	610	1,415	44.2	58.0	49.1	25.29
South	254	137	171	4,523	3,141	2,613	56.1	43.7	65.6	23.58
South Atlantic	Q	Q	36	1,320	1,479	870	81.5	45.8	41.0	29.74
East South Central	57	25	33	991	610	719	57.3	40.3	45.8	21.82
West South Central	89	Q	Q	2,212	1,052	1,024	40.3	Q	100.4	32.67
West	111	65	114	2,846	1,980	2,195	39.1	32.8	52.0	19.85
Mountain	57	15	34	910	385	557	63.1	38.8	60.6	22.79
Pacific	54	50	Q	1,936	1,596	1,638	27.8	31.4	49.1	24.40
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	58	36	55	1,342	541	1,161	43.4	67.4	47.3	22.94
5,500-7,000 HDD	324	125	154	6,232	1,886	2,747	52.0	66.4	55.9	13.25
4,000-5,499 HDD	207	88	77	4,333	2,692	1,532	47.7	32.8	50.1	20.27
Fewer than 4,000 HDD	101	137	121	2,983	2,531	2,617	34.0	54.3	46.3	24.48
More than 2,000 CDD and --										
Fewer than 4,000 HDD	113	26	Q	2,168	1,220	1,158	52.3	21.6	Q	24.92
Energy Sources (more than one may apply)										
Electricity	804	414	513	17,059	8,871	9,215	47.1	46.6	55.7	10.48
Natural Gas	804	414	513	17,059	8,871	9,217	47.1	46.6	55.7	10.78
Fuel Oil	114	88	106	2,537	1,618	1,811	45.0	54.6	58.4	25.48
District Heat	38	16	Q	1,061	547	Q	35.4	29.7	Q	36.86
District Chilled Water	Q	14	Q	Q	250	Q	Q	55.9	Q	29.84
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	8	Q	Q	387	Q	Q	20.6	Q	Q	30.49

See footnotes at end of table.

Table 3.37. Natural Gas Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	1.1	
RSE Column Factor:	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	1.1	
Energy End Uses (more than one may apply)										
Heated Buildings	802	404	510	16,963	8,822	8,938	47.3	45.8	57.1	10.79
Buildings with A/C	696	370	496	14,844	8,162	8,775	46.9	45.3	56.5	11.42
Buildings with Water Heating	781	407	497	16,147	8,500	8,840	48.3	47.8	56.2	11.04
Buildings with Cooking	297	200	247	6,128	4,163	4,115	48.5	48.0	59.9	13.77
Buildings with Manufacturing	74	16	40	1,206	283	533	61.5	58.1	74.8	31.83
Workers (main shift)										
Less than 5	153	51	73	3,857	1,604	1,502	39.8	31.8	48.8	12.34
5 to 9	106	40	Q	2,422	661	709	43.9	61.0	Q	15.34
10 to 19	99	48	77	2,351	922	1,136	42.3	52.1	67.6	21.92
20 to 49	208	87	80	3,149	1,728	1,616	66.0	50.3	49.6	19.76
50 to 99	111	73	45	2,469	1,299	1,018	44.9	56.3	44.3	24.33
100 or More	126	114	147	2,810	2,658	3,236	45.0	43.0	45.4	19.20
Weekly Operating Hours										
39 or Fewer	75	29	35	2,233	805	612	33.6	36.6	56.9	20.43
40 to 48	178	63	57	4,436	1,668	1,551	40.2	38.0	36.6	12.61
49 to 60	181	72	94	4,412	1,600	1,473	41.0	45.2	63.5	23.34
61 to 84	120	72	133	2,456	2,052	2,177	49.0	35.2	61.3	21.08
85 to 167	98	68	78	1,960	1,548	1,730	50.0	43.8	44.9	19.86
Open Continuously	151	109	117	1,562	1,198	1,674	97.0	90.7	69.7	23.38
Ownership and Occupancy										
Nongovernment Owned	633	282	390	12,773	5,925	6,938	49.6	47.5	56.2	12.51
Owner Occupied	492	238	307	9,932	4,805	5,357	49.5	49.6	57.2	12.60
Single Establishment	408	218	272	7,415	4,052	4,039	55.0	53.8	67.3	13.48
Multiple Establishment	84	21	35	2,517	753	1,318	33.4	27.2	26.5	22.35
Nonowner Occupied	131	39	80	2,628	1,002	1,482	49.8	39.4	53.8	26.00
Single Establishment	99	18	28	1,305	337	560	Q	54.4	50.1	26.27
Multiple Establishment	32	21	Q	1,323	665	921	24.3	31.7	Q	22.56
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Government Owned	171	132	123	4,286	2,946	2,279	39.9	44.9	54.0	17.40
Predominant Exterior Wall Material										
Masonry	705	317	349	15,360	6,409	6,554	45.9	49.5	53.3	11.68
Siding or Shingles	42	9	18	900	242	299	46.6	39.0	60.3	22.94
Metal Panels	Q	35	Q	460	791	853	Q	44.1	Q	29.77
Concrete Panels	Q	38	48	Q	1,121	1,104	Q	34.2	43.1	30.35
Window Glass	Q	11	7	Q	188	291	Q	56.9	25.1	31.50
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Predominant Roof Material										
Built-Up	416	229	202	8,535	5,107	4,126	48.8	44.8	49.0	15.13
Shingles (Not Wood)	156	42	52	3,449	879	1,175	45.2	47.9	44.5	14.54
Metal Surfacing	Q	33	106	689	785	1,146	Q	Q	92.5	29.70
Synthetic or Rubber	119	83	130	2,903	1,663	2,132	41.2	50.2	61.1	16.57
Other	65	27	22	1,483	436	637	44.2	61.6	Q	24.84
Space-Heating Energy Source										
Natural Gas	747	376	446	14,964	7,858	7,649	49.9	47.8	58.3	11.47
Natural Gas Main	696	361	422	13,989	7,223	7,026	49.7	50.0	60.1	11.72
Natural Gas Secondary	Q	14	23	975	634	623	Q	22.5	37.4	27.77
Other Excluding Natural Gas	55	29	64	1,999	965	1,289	27.5	29.9	49.9	20.42
Building Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.37. Natural Gas Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	1.1	
Primary Space-Heating Energy Source										
Electricity	40	22	60	905	725	1,275	44.8	31.0	47.0	20.68
Natural Gas	696	361	422	13,989	7,223	7,026	49.7	50.0	60.1	11.72
Fuel Oil	7	Q	Q	885	Q	Q	7.8	Q	Q	31.31
District Heat	34	13	Q	933	504	276	36.8	25.4	Q	30.82
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Wood	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Replacement Energy Source for Primary Heating										
Electricity Only	31	11	Q	845	385	387	36.8	29.4	Q	20.75
Natural Gas Only	14	Q	Q	418	Q	Q	33.0	Q	Q	31.86
Fuel Oil Only	119	77	110	1,867	1,248	1,295	64.0	62.0	85.1	26.91
Propane Only	18	Q	16	447	Q	407	40.1	Q	39.7	23.03
Any Other Single Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
More than One Energy Source	12	Q	Q	324	Q	Q	38.2	Q	Q	26.87
No Replacement Energy Source	603	280	299	12,863	6,351	6,519	46.9	44.1	45.8	11.98
Building Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Energy Source										
Natural Gas	112	20	33	593	428	423	188.9	45.7	77.1	31.43
Other Excluding Natural Gas	584	350	463	14,250	7,734	8,351	41.0	45.3	55.5	11.30
A/C Not Performed	108	44	17	2,215	709	442	48.7	61.6	39.0	21.44
Water-Heating Energy Source										
Natural Gas	633	346	353	11,756	6,536	5,733	53.9	53.0	61.6	12.20
Other Excluding Natural Gas	147	60	144	4,391	1,964	3,107	33.6	30.7	46.4	20.30
Water Heating Not Performed	24	7	16	912	371	377	25.9	19.0	42.1	19.70
Cooking Energy Source										
Natural Gas	251	170	224	5,097	3,455	3,502	49.2	49.3	63.9	15.16
Other Excluding Natural Gas	47	30	23	1,030	709	613	45.2	41.9	37.6	25.60
Cooking Not Performed	507	214	266	10,931	4,708	5,102	46.4	45.4	52.2	14.34
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
1 to 50	92	34	27	3,322	1,491	1,080	27.7	22.5	25.2	30.62
51 to 99	99	50	149	3,075	1,527	1,431	32.3	32.7	104.3	20.96
100	611	321	334	10,566	5,804	6,427	57.8	55.3	51.9	10.84
Heating Equipment (more than one may apply)										
Heat Pumps	46	26	55	1,191	730	1,019	38.9	35.1	54.2	26.27
Furnaces	279	145	148	6,303	3,091	2,321	44.3	46.8	63.6	20.79
Individual Space Heaters	250	137	156	5,454	3,024	3,836	45.8	45.2	40.8	16.44
District Heat	Q	13	28	1,109	506	488	53.8	25.5	58.4	35.00
Boilers	387	228	181	7,587	3,541	3,218	51.0	64.5	56.3	13.20
Packaged Heating Units	172	101	159	3,097	2,726	3,003	55.7	36.9	52.8	17.17
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Annual Consumption (hundred cubic feet)										
1,000 or Less	22	7	8	2,358	1,143	943	9.2	6.1	8.3	14.65
1,001 to 5,000	122	44	53	4,769	2,021	2,184	25.7	21.6	24.2	10.79
5,001 to 10,000	103	37	55	2,537	907	1,207	40.7	41.3	45.5	13.26
10,001 to 25,000	149	70	78	2,981	1,658	1,575	50.1	42.1	49.2	15.29
25,001 to 50,000	109	65	45	1,870	1,031	982	58.2	63.1	45.7	18.56
50,001 to 100,000	94	45	34	1,032	666	732	91.2	67.7	46.7	24.24
Over 100,000	205	146	241	1,512	1,446	1,593	135.4	100.8	151.3	28.60

See footnotes at end of table.

Table 3.37. Natural Gas Consumption and Conditional Energy Intensity in Older Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	1959 or Before	1960-1969	1970-1979	
	RSE Column Factor:	1.0	1.2	1.2	0.8	0.9	0.9	0.8	1.0	
Gas Transported for the Account of Others										
Used in Building	158	59	101	1,246	710	986	126.5	83.7	102.6	34.49
Not Used in Building	647	354	412	15,813	8,162	8,231	40.9	43.4	50.0	10.45

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.

Table 3.38. Natural Gas Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.0	1.1	0.8	0.9	1.1	
RSE Column Factor:	1.0	1.2	1.3	0.7	1.0	1.1	0.8	0.9	1.1	RSE Row Factor
All Buildings	261	75	47	6,265	1,957	1,625	41.6	38.2	28.7	14.79
Building Floorspace (square feet)										
1,001 to 5,000	Q	11	3	373	127	56	Q	85.0	46.6	26.95
5,001 to 10,000	17	10	3	420	163	91	40.2	62.6	34.8	27.34
10,001 to 25,000	30	12	Q	884	400	214	33.4	31.0	39.2	23.61
25,001 to 50,000	50	16	7	656	260	259	75.5	61.6	25.2	28.94
50,001 to 100,000	40	Q	Q	857	270	167	46.8	41.0	50.4	30.11
100,001 to 200,000	27	5	4	1,283	256	185	20.8	20.6	21.7	32.81
200,001 to 500,000	29	Q	11	890	Q	471	32.6	27.9	23.6	33.44
Over 500,000	17	2	2	902	238	181	18.8	9.5	12.9	29.32
Principal Building Activity										
Education	13	3	Q	371	90	Q	36.2	34.0	26.3	25.23
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Food Service	17	Q	Q	100	Q	Q	172.8	Q	Q	35.08
Health Care	21	Q	Q	186	Q	Q	110.5	Q	Q	34.77
Lodging	48	Q	6	458	Q	96	104.4	Q	Q	32.35
Mercantile and Service	37	8	Q	1,474	362	336	24.8	21.5	Q	24.73
Office	Q	14	11	1,270	617	431	Q	23.0	26.2	22.66
Parking Garage	Q	Q	Q	Q	Q	29	Q	Q	Q	36.20
Public Assembly	8	Q	Q	314	Q	156	25.4	Q	Q	38.25
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Religious Worship	3	Q	Q	220	Q	Q	14.8	Q	Q	37.28
Warehouse and Storage	36	8	3	1,379	306	230	25.8	25.3	11.3	29.77
Other	Q	Q	Q	75	Q	Q	84.0	Q	Q	62.26
Vacant	6	Q	Q	Q	Q	Q	Q	Q	66.2	17.54
Census Region and Division										
Northeast	48	13	7	1,048	311	164	45.8	42.4	42.5	34.62
New England	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Middle Atlantic	Q	6	Q	634	243	142	65.2	24.7	44.1	32.37
Midwest	87	20	17	2,003	433	527	43.4	46.5	32.8	21.06
East North Central	51	12	13	938	240	308	53.9	51.9	43.6	25.86
West North Central	36	8	4	1,064	192	219	34.2	39.9	17.7	31.69
South	77	24	14	1,863	746	476	41.2	32.9	29.1	28.88
South Atlantic	14	3	5	612	258	Q	23.3	13.2	Q	31.74
East South Central	20	Q	Q	525	214	190	38.9	54.7	40.4	24.35
West South Central	Q	9	Q	726	273	82	Q	34.4	18.5	31.65
West	49	17	8	1,352	468	458	36.2	36.3	18.4	26.38
Mountain	22	Q	Q	436	129	Q	51.4	18.2	Q	32.51
Pacific	27	15	7	916	339	314	29.0	43.3	20.7	32.37
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	27	Q	Q	499	Q	Q	55.1	Q	Q	35.61
5,500-7,000 HDD	82	23	17	1,858	452	541	44.0	50.8	31.7	24.82
4,000-5,499 HDD	43	10	9	1,250	366	323	34.4	27.0	28.9	28.18
Fewer than 4,000 HDD	51	29	16	1,580	745	552	32.4	39.1	28.3	23.61
More than 2,000 CDD and --										
Fewer than 4,000 HDD	Q	8	3	1,078	321	138	Q	25.1	19.6	32.59
Energy Sources (more than one may apply)										
Electricity	260	75	47	6,260	1,957	1,624	41.6	38.2	28.7	15.44
Natural Gas	261	75	47	6,265	1,957	1,625	41.6	38.2	28.7	14.79
Fuel Oil	51	18	21	1,432	460	568	35.8	38.9	37.2	31.84
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
District Chilled Water	Q	Q	Q	145	Q	62	85.9	Q	Q	47.25
Propane	Q	Q	Q	Q	Q	Q	33.6	Q	Q	31.98
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.38. Natural Gas Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.0	1.1	0.8	0.9	1.1	
Energy End Uses (more than one may apply)										
Heated Buildings	261	74	47	6,249	1,954	1,600	41.7	37.8	29.1	14.79
Buildings with A/C	251	72	46	6,070	1,904	1,569	41.4	37.7	29.0	15.02
Buildings with Water Heating	256	73	45	6,064	1,922	1,574	42.2	38.0	28.4	15.29
Buildings with Cooking	114	36	21	2,564	877	612	44.4	41.2	34.8	22.84
Buildings with Manufacturing	18	Q	Q	412	Q	Q	44.5	Q	Q	39.19
Workers (main shift)										
Less than 5	30	9	5	755	164	170	39.5	55.5	29.8	29.05
5 to 9	Q	6	3	432	160	115	Q	35.3	23.5	24.67
10 to 19	24	14	Q	682	233	149	35.5	60.1	49.8	25.43
20 to 49	61	19	6	1,133	417	315	53.9	44.5	18.1	30.15
50 to 99	27	9	7	692	281	215	39.1	32.0	31.2	26.75
100 or More	73	19	19	2,571	702	661	28.5	26.4	28.7	25.92
Weekly Operating Hours										
39 or Fewer	3	Q	2	213	Q	104	13.3	Q	21.2	32.45
40 to 48	60	10	9	1,153	386	336	51.9	25.4	27.8	27.36
49 to 60	32	9	7	1,190	412	465	26.9	21.1	15.6	21.14
61 to 84	45	10	5	1,853	376	218	24.3	25.4	21.3	22.38
85 to 167	31	19	Q	730	343	199	42.5	54.7	48.1	31.93
Open Continuously	90	25	14	1,127	387	303	79.9	65.5	Q	28.57
Ownership and Occupancy										
Nongovernment Owned	222	66	34	5,565	1,708	1,174	39.9	38.7	29.1	16.49
Owner Occupied	189	49	32	4,014	1,118	901	47.0	43.8	35.1	18.24
Single Establishment	166	44	27	2,523	899	692	65.9	48.6	38.5	19.78
Multiple Establishment	23	5	Q	1,491	220	208	15.1	24.0	23.9	32.62
Nonowner Occupied	32	17	3	1,505	575	274	21.1	29.4	9.4	23.70
Single Establishment	10	10	Q	299	224	Q	31.8	42.7	8.9	35.59
Multiple Establishment	22	7	1	1,206	351	130	18.5	20.9	9.8	28.53
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Government Owned	39	9	12	700	249	450	55.4	35.0	27.6	27.22
Predominant Exterior Wall Material										
Masonry	156	51	30	3,649	1,247	1,068	42.7	40.5	27.7	17.58
Siding or Shingles	19	8	Q	399	83	Q	47.6	94.6	Q	33.64
Metal Panels	61	5	3	1,073	180	92	57.3	28.2	34.8	32.07
Concrete Panels	15	Q	7	547	Q	307	27.0	31.7	23.4	33.30
Window Glass	3	Q	1	287	105	41	11.6	7.9	13.5	31.07
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Predominant Roof Material										
Built-Up	87	20	15	2,344	689	486	37.0	29.3	30.6	23.97
Shingles (Not Wood)	60	7	3	787	98	123	75.7	74.2	22.7	34.43
Metal Surfacing	40	15	5	1,067	394	204	37.7	38.0	25.1	21.10
Synthetic or Rubber	55	23	21	1,355	603	670	40.9	37.4	31.3	25.82
Other	19	10	Q	712	174	141	26.3	56.7	19.9	37.65
Space-Heating Energy Source										
Natural Gas	217	58	41	5,117	1,555	1,325	42.3	37.1	30.8	16.39
Natural Gas Main	195	57	39	4,180	1,485	1,225	46.6	38.4	31.7	16.75
Natural Gas Secondary	22	Q	Q	936	Q	Q	23.0	Q	Q	38.33
Other Excluding Natural Gas	44	16	6	1,133	399	276	38.9	40.8	20.8	23.49
Building Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF

See footnotes at end of table.

Table 3.38. Natural Gas Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
	1.0	1.2	1.3	0.7	1.0	1.1	0.8	0.9	1.1	
Primary Space-Heating Energy Source										
Electricity	44	Q	6	1,648	397	296	26.5	33.1	21.8	26.91
Natural Gas	195	57	39	4,180	1,485	1,225	46.6	38.4	31.7	16.75
Fuel Oil	Q	Q	Q	Q	Q	Q	1.5	Q	Q	16.55
District Heat	22	Q	Q	398	Q	72	55.0	Q	Q	36.58
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Wood	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Replacement Energy Source for Primary Heating										
Electricity Only	Q	Q	Q	318	113	Q	Q	Q	Q	39.08
Natural Gas Only	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Fuel Oil Only	31	Q	Q	416	Q	81	75.0	Q	75.0	29.85
Propane Only	Q	Q	Q	240	Q	Q	Q	Q	Q	55.72
Any Other Single Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
More than One Energy Source	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
No Replacement Energy Source	163	60	38	5,071	1,546	1,396	32.1	38.6	27.2	13.82
Building Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Cooling Energy Source										
Natural Gas	Q	Q	Q	368	Q	Q	35.5	Q	Q	32.34
Other Excluding Natural Gas	238	70	44	5,703	1,855	1,525	41.8	37.7	29.0	15.43
A/C Not Performed	9	Q	Q	195	53	Q	47.6	Q	18.3	32.59
Water-Heating Energy Source										
Natural Gas	174	57	34	3,634	1,175	1,117	47.9	48.7	30.0	15.87
Other Excluding Natural Gas	82	16	11	2,430	747	457	33.6	21.2	24.4	26.25
Water Heating Not Performed	5	Q	Q	201	Q	50	23.3	Q	37.2	41.45
Cooking Energy Source										
Natural Gas	102	33	13	1,950	748	452	52.2	44.8	28.9	24.85
Other Excluding Natural Gas	12	3	Q	614	129	Q	19.6	20.3	Q	32.81
Cooking Not Performed	147	39	25	3,701	1,080	1,013	39.7	35.9	25.0	16.28
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
1 to 50	10	Q	1	875	240	Q	12.0	21.6	Q	34.10
51 to 99	32	15	7	1,101	305	247	29.0	49.5	27.2	28.82
100	218	54	38	4,274	1,410	1,176	51.0	38.1	32.7	15.85
Heating Equipment (more than one may apply)										
Heat Pumps	65	Q	6	1,316	179	222	49.5	47.7	27.8	39.26
Furnaces	105	18	9	1,893	415	307	55.4	42.6	30.9	26.99
Individual Space Heaters	109	18	18	2,709	631	567	40.2	28.4	31.3	22.83
District Heat	22	Q	Q	406	81	89	54.0	Q	Q	36.57
Boilers	78	17	19	1,806	436	434	43.1	38.4	43.0	25.54
Packaged Heating Units	81	40	14	2,367	960	752	34.2	41.3	19.1	20.64
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Annual Consumption (hundred cubic feet)										
1,000 or Less	4	1	1	542	182	143	8.2	7.9	5.5	23.60
1,001 to 5,000	31	12	7	1,567	488	425	19.8	23.6	15.8	17.83
5,001 to 10,000	21	8	Q	549	256	Q	38.0	29.5	Q	27.98
10,001 to 25,000	40	17	6	1,076	388	369	37.2	43.1	17.4	24.99
25,001 to 50,000	36	18	6	1,110	345	183	32.8	51.7	31.2	33.22
50,001 to 100,000	38	Q	5	668	Q	94	56.3	Q	48.8	25.61
Over 100,000	90	Q	18	751	Q	205	119.9	Q	86.8	38.83

See footnotes at end of table.

Table 3.38. Natural Gas Consumption and Conditional Energy Intensity in Newer Buildings by Year Constructed, 1992 (Continued)

Building Characteristics	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/sq. ft.)			RSE Row Factor
	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	1980-1986	1987-1989	1990-1992	
RSE Column Factor:	1.0	1.2	1.3	0.7	1.0	1.1	0.8	0.9	1.1	
Gas Transported for the Account of Others										
Used in Building	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Not Used in Building	246	73	38	6,100	1,905	1,502	40.3	38.4	25.2	14.91

NF = No applicable RSE row factor.

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

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.