Release date: May 2016

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n		Total floors _! of buildings (million squ			Energy inter sum of maj (thousand B	•	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Principal building activity									
Education	43	408	391	744	6,067	5,427	58.0	67.2	72.0
Food sales	119	128	Q	557	562	Q	213.7	228.8	Q
Food service	429	85	N	1,429	390	N	300.2	218.7	N
Health care	35	147	535	510	1,209	2,437	68.8	121.9	219.6
Inpatient	N	57	492	N	282	2,092	N	200.7	235.2
Outpatient	35	91	43	510	927	345	68.8	97.9	124.8
Lodging	23	264	277	299	2,739	2,788	78.4	96.4	99.4
Mercantile	151	476	380	1,782	5,379	4,168	84.8	88.5	91.3
Retail (other than mall)	79	139	146	1,346	2,435	1,659	58.5	56.9	88.3
Enclosed and strip malls	72	337	234	436	2,944	2,510	166.0	114.6	93.2
Office	187	483	572	3,183	6,547	6,221	58.6	73.7	91.9
Public assembly	60	195	226	1,034	2,596	1,929	57.7	75.0	117.0
Public order and safety	22	50	61	331	557	552	65.9	89.3	110.8
Religious worship	55	106	Q	1,362	2,953	Q	40.4	35.9	Q
Service	142	116	Q	2,082	2,268	Q	68.2	51.4	Q
Warehouse and storage	63	159	206	2,456	5,777	4,845	25.8	27.6	42.6
Other	33	126	127	393	942	667	83.4	133.9	190.7
Vacant	7	22	13	779	1,954	523	8.4	11.3	24.7
Year constructed									
Before 1920	70	90	78	1,159	1,769	1,054	60.7	50.6	74.2
1920 to 1945	108	153	157	1,412	2,602	2,012	76.6	59.0	77.9
1946 to 1959	116	220	200	1,711	3,471	2,199	68.1	63.4	91.1
1960 to 1969	171	379	352	1,955	4,977	3,430	87.3	76.2	102.6
1970 to 1979	198	380	433	2,043	4,982	3,820	96.8	76.4	113.4
1980 to 1989	219	463	481	2,893	6,637	5,701	75.8	69.8	84.4
1990 to 1999	221	435	446	2,741	6,232	4,830	80.4	69.9	92.3
2000 to 2003	89	231	259	1,039	3,116	3,060	85.3	74.2	84.6
2004 to 2007	83	209	236	1,038	3,363	2,124	79.6	62.3	111.0
2008 to 2012	94	204	185	950	2,791	1,982	99.3	73.1	93.5

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n		Total floors of buildings (million squ	•		Energy inter sum of maj (thousand B	-	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Census region and division									
Northeast	195	534	730.0	2,305.0	6,728.0	6,501.0	84.6	79.4	112.3
New England	60	166	141.0	946.0	2,141.0	1,215.0	63.7	77.6	116.4
Middle Atlantic	135	368	589.0	1,359.0	4,587.0	5,287.0	99.3	80.2	111.3
Midwest	301	668	597.0	3,729.0	8,646.0	6,544.0	80.7	77.3	91.2
East North Central	209	463	459.0	2,128.0	5,672.0	4,942.0	98.0	81.7	92.9
West North Central	92	205	138.0	1,602.0	2,974.0	1,602.0	57.7	68.8	86.0
South	571	1,048	947.0	6,918.0	15,877.0	11,485.0	82.5	66.0	82.5
South Atlantic	295	533	530.0	3,328.0	8,031.0	6,621.0	88.7	66.4	80.0
East South Central	84	166	119.0	1,219.0	2,272.0	1,414.0	69.2	73.1	84.0
West South Central	191	349	299.0	2,371.0	5,574.0	3,450.0	80.5	62.7	86.6
West	302	516	554.0	3,989.0	8,689.0	5,682.0	75.7	59.4	97.5
Mountain	94	134	189.0	1,032.0	2,182.0	1,766.0	90.9	61.6	107.1
Pacific	208	381	365.0	2,957.0	6,507.0	3,916.0	70.4	58.6	93.1
Climate region ¹									
Very cold/Cold	483	1,163	1,100	6,106	14,795	10,997	79.1	78.6	100.0
Mixed-humid	472	827	971	5,378	11,851	10,644	87.8	69.8	91.2
Mixed-dry/Hot-dry	184	294	326	2,664	5,842	3,531	69.0	50.3	92.4
Hot-humid	197	390	360	2,370	6,232	4,229	83.3	62.5	85.1
Marine	32	93	71	423	1,220	811	75.8	76.5	88.0
Number of floors									
One	1,010	1,305	516	12,287	19,533	7,989	82.2	66.8	64.6
Two	271	755	435	3,496	11,628	5,083	77.4	64.9	85.6
Three	73	355	240	952	4,512	2,675	76.6	78.6	89.9
Four to nine	15	343	1,073	206	4,195	9,134	75.1	81.8	117.5
Ten or more	N	Q	563	N	Q	5,331	N	Q	105.6
Elevators and escalators (more than one may apply)									
Any elevators	30	914	2,239	361	10,827	20,932	84.4	84.4	107.0
Number of elevators									
One	26	536	322	337	6,828	3,992	78.2	78.5	80.6
Two to five	Q	375	863	Q	3,977	8,817	Q	94.2	97.9
Six or more	N	Q	1,054	N	Q	8,123	N	Q	129.8
Any escalators	N	10	367	N	98	3,556	N	100.6	103.2
Number of workers (main shift)									
Fewer than 5	509	229	18	9,205	7,457	1,089	55.3	30.7	17.0
5 to 9	357	228	13	4,158	4,337	478	85.9	52.6	26.3
10 to 19	354	388	31	2,586	6,203	834	136.8	62.5	37.0
20 to 49	147	848	193	986	10,964	2,564	149.1	77.3	75.2
50 to 99	Q	680	468	Q	7,445	6,024	Q	91.3	77.6
100 to 249	N	355	703	N	3,157	7,784	N	112.4	90.4
250 or more	N	39	1,402	N	376	11,439	N	103.0	122.6

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n		Total floorspof buildings (million squ			Energy inter sum of maj (thousand B	•	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	square	10,001 to 100,000 square feet	Over 100,000 feet	square	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Weekly operating hours									
Fewer than 40	104	103	22	3,487	4,007	727	29.7	25.8	30.1
40 to 48	238	397	197	4,355	7,975	3,498	54.6	49.8	56.4
49 to 60	274	577	407	3,985	10,618	5,927	68.8	54.4	68.6
61 to 84	288	610	472	2,125	7,725	6,017	135.4	78.9	78.5
85 to 167	293	461	344	1,328	3,882	4,185	220.9	118.8	82.1
Open continuously	172	618	1,387	1,662	5,733	9,859	103.6	107.8	140.6
Ownership and occupancy									
Nongovernment owned	1,243	2,058	2,075	15,030	30,573	21,947	82.7	67.3	94.6
Owner occupied	660	960	996	7,989	13,824	8,824	82.6	69.4	112.8
Leased to tenant(s)	512	870	659	5,459	11,856	8,800		73.4	74.9
Owner occupied and leased	68	222	419		3,765	4,091		58.9	102.5
Unoccupied	3	6	Q		1,128	Q		5.4	Q
Government owned	126	709	753		9,367	8,266	66.0	75.7	91.1
Federal	Q	Q	100		Q	1,074		Q	93.4
State	24	241	289		2,595	2,612		93.0	110.7
Local	95	437	363		6,373	4,580		68.6	79.3
Party responsible for operation									
and maintenance of energy									
systems									
Building owner	1,085	2,236	2,486		33,416	25,915	75.5	66.9	95.9
Business owner or tenant	249	451	283	2,222	5,538	3,548	112.2	81.5	79.7
Property management	13	36	48	123	529	598	101.7	67.9	79.9
Other	21	43	Q	225	456	Q	95.3	93.8	Q
Provider of direct input on energy-									
related equipment purchases									
Building owner	1,117	2,341	2,526		35,032	26,448		66.8	95.5
Business owner or tenant	199	345	222		3,791	2,735		91.1	81.3
Property management	11	16	33		315	483		51.3	68.3
Other	42	64	47	339	801	546	124.4	79.8	85.4
Number of establishments									
One	1,121	1,810	1,554		25,684	16,202		70.5	95.9
2 to 5	219	531	649		7,655	7,312		69.4	88.8
6 to 10	23	196	144	323	2,666	1,437	72.2	73.7	100.1
11 to 20	Q	169	185	Q	1,847	1,815	Q	91.3	101.7
More than 20	N	52	294		659	3,136		79.4	93.9
Currently unoccupied	3	8	Q	655	1,428	Q	5.0	5.5	Q

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumption (trillion Btu)	n	(Total floors; of buildings million squ		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 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6	
Predominant exterior wall material										
Brick, stone, or stucco	700	1,479	1,278	6,785	20,210	13,467	103.1	73.2	94.9	
Concrete (block or poured)	288	699	732	3,254	9,355	8,117	88.5	74.7	90.2	
Concrete panels	29	209	427	499	3,204	4,990	57.3	65.2	85.5	
Siding or shingles	194	145	Q	2,916	2,298	536	66.4	63.0	115.1	
Metal panels	135	181	112	3,302	4,095	1,275	41.0	44.1	87.8	
Window glass	Q	23	136	Q	250	1,062	Q	90.7	127.7	
Other	Q	Q	52	Q	Q	407	Q	Q	126.9	
No one major type	Q	Q	30	Q	Q	358	Q	Q	85.2	
Predominant roof material										
Metal surfacing	333	356	175	5,733	7,597	2,587	58.1	46.9	67.8	
Synthetic or rubber	283	939	1,220	2,341	11,360	12,115	121.0	82.6	100.7	
Built-up	198	673	991	2,127	9,804	9,904	93.1	68.7	100.1	
Slate or tile shingles	129	138	104	1,333	1,874	1,100	97.1	73.6	94.3	
Wooden materials (including										
shingles)	54	29	Q	544	448	Q	98.6	65.1	Q	
Asphalt, fiberglass, or										
other shingles	352	553	200	4,643	7,735	2,726	75.8	71.5	73.5	
Concrete	Q	47	74	Q	595	914	Q	79.4	81.0	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
No one major type	Q	Q	27	Q	Q	449	Q	Q	59.4	
Roof characteristics										
Roof tilt										
Flat	569	1,731	2,176	5,142	22,453	22,028	110.7	77.1	98.8	
Shallow pitch	485	603	509	6,912	10,624	6,316	70.2	56.8	80.5	
Steeper pitch	314	432	144	4,887	6,863	1,868	64.3	63.0	76.9	
Cool roof	228	593	1,016	1,980	7,359	10,292	115.4	80.6	98.7	

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n	C	Total floors of buildings million squ			energy inter sum of majon thousand B	•	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Renovations in buildings constructed before 2008 (more than one may apply)									
Any type of renovation	571	1,385	1,806	6,198	18,031	17,986	92.1	76.8	100.4
Addition or annex	117	418	757	1,248	5,269	6,505	93.8	79.3	116.4
Reduction in floorspace	32	31	162	273	437	1,042	118.0	70.9	155.8
Roof replacement	251	680	1,055	2,926	8,359	9,631	85.8	81.4	109.5
Exterior wall replacement	52	116	231	567	1,546	2,117	91.0	75.2	109.0
Interior wall reconfiguration	240	673	1,143	2,554	8,641	10,145	93.9	77.9	112.7
Window replacement	153	378	559	1,603	5,399	5,264	95.4	70.1	106.2
HVAC equipment upgrade	305	838	1,402	3,103	10,851	12,825	98.2	77.2	109.3
Lighting upgrade	298	834	1,308	2,805	9,786	12,912	106.4	85.2	101.3
Electrical upgrade	225	466	917	2,187	6,198	7,776	102.9	75.2	117.9
Plumbing system upgrade	211	447	739	1,919	5,556	6,354	109.9	80.4	116.3
Insulation upgrade	112	245	414	1,122	3,289	3,196	100.2	74.5	129.4
Fire, safety, or security upgrade	186	525	974	1,772	6,452	8,972	104.7	81.4	108.6
Structural upgrade	50	121	253				116.1	77.0	132.5
Other				431	1,574	1,909 442			
	Q 704	Q 1 177	36	Q 0.703	Q 10 117		Q 71.0	Q 61.6	80.8
No renovations	704	1,177	837	9,793	19,117	10,244	71.9	61.6	81.7
Buildings constructed 2008 or later	94	204	185	950	2,791	1,982	99.3	73.1	93.5
Energy sources									
(more than one may apply)	4.250	2.766	2.020	45.004	20.044	20.046	05.6	74.0	
Electricity	1,369	2,766	2,828	15,981	38,841	30,046	85.6	71.2	94.1
Natural gas	1,015	2,206	2,324	8,575	26,906	23,244	118.4	82.0	100.0
Fuel oil	94	578	1,559	1,163	5,435	13,602	81.2	106.3	114.6
District heat	Q	138	660	Q	1,048	4,878	Q	131.6	135.3
District chilled water	Q	89	563	Q	901	3,643	Q	98.6	154.5
Propane	82	250	252	1,721	3,086	2,899	47.5	80.8	86.9
Other	28	114	159	496	1,572	1,758	56.4	72.7	90.4
Space-heating energy sources									
(more than one may apply)									
Electricity	744	1,672	1,482	8,569	23,280	17,181	86.9	71.8	86.2
Natural gas	839	1,906	1,701	7,665	23,741	18,104	109.5	80.3	93.9
Fuel oil	55	134	172	778	1,999	1,574	70.3	66.9	109.0
District heat	Q	138	656	Q	1,048	4,839	Q	131.6	135.5
Propane	44	68	39	1,220	1,308	539	36.1	52.3	72.0
Other	14	25	Q	342	587	Q	39.7	43.1	Q
Primary space-heating energy source									
Electricity	476	801	568	5,631	13,195	7,378	84.5	60.7	77.0
Natural gas	731	1,638	1,502	6,851	19,975	16,161	106.7	82.0	93.0
Fuel oil	47	88	52	609	1,257	676	77.9	70.0	76.6
District heat	Q	138	646	Q	1,048	4,711	Q	131.6	137.2
2.5060640									
Propane	27	30	Q	937	933	Q	29.3	32.5	Q

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumption (trillion Btu)	n	О	otal floorsp f buildings million squa		:	nergy inten sum of majo thousand B	•	ot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Cooling energy sources (more than one may apply)									
Electricity	1,265	2,599	2,457	13,359	35,444	27,231	94.7	73.3	90.2
Natural gas	Q	Q	85	Q	Q	564	Q	Q	150.7
District chilled water	Q	89	563	Q	901	3,643	Q	98.6	154.5
Water-heating energy sources									
(more than one may apply)	500	1 200	4.404	0.220	10.572	44.052	72.0	66.0	70.2
Electricity	608	1,309	1,184	8,230	19,572	14,953	73.9	66.9	79.2
Natural gas	711	1,666	1,652	4,890	18,829	15,804	145.3	88.5	104.5
Fuel oil	17	67	90	223	866	822	76.3	77.5	109.4
District heat	Q	86	566	Q	612	3,934	Q	140.3	143.8
Propane	24	41	Q	492	721	Q	48.6	56.4	Q
Cooking energy sources									
(more than one may apply)	200	007	4 202	2.076	0.460	42.745	424.2	00.5	400.0
Electricity	390	837	1,283	2,976	9,460	12,715	131.2	88.5	100.9
Natural gas	499	947	1,569	2,070	8,921	13,779	241.0	106.1	113.8
Propane	35	62	70	524	757	721	66.5	82.4	96.8
Energy end uses									
(more than one may apply)	1 200	2.700	2 775	14 200	26.770	20.010	00.0	72.7	95.6
Buildings with space heating	1,298	2,709	2,775	14,289	36,770	29,019	90.9	73.7	
Buildings with cooling	1,274	2,681	2,819	13,428	36,239	29,627	94.9	74.0	95.2
Buildings with water heating	1,275	2,716	2,807	13,338	36,472	29,205	95.6	74.5	96.1
Buildings with cooking	718	1,354	2,007	4,806	14,862	18,878	149.4	91.1	106.3
Buildings with manufacturing	65	173	122	826	2,638	1,614	79.2	65.5	75.7
Buildings with electricity generation	93	801	1,909	917	7,180	17,545	101.8	111.5	108.8
Percent of floorspace heated									
Not heated	70	58	53	2,652	3,170	1,193	26.5	18.1	44.7
1 to 50	118	189	161	2,338	5,016	2,776	50.6	37.6	57.9
51 to 99	224	509	565	2,252	6,174	6,224	99.5	82.5	90.8
100	956	2,011	2,049	9,699	25,580	20,019	98.6	78.6	102.4
Percent of floorspace cooled									
Not cooled	95	85	9	3,513	3,701	585	27.1	23.0	15.4
1 to 50	233	443	314	3,679	9,554	5,657	63.2	46.3	55.4
51 to 99	273	865	1,006	2,673	9,522	10,532	102.1	90.8	95.5
100	768	1,374	1,500	7,076	17,162	13,438	108.6	80.0	111.6
Percent lit when open									
Zero	2	Q	Q	240	Q	Q	9.7	Q	Q
1 to 50	197	303	143	3,559	6,665	2,405	55.2	45.5	59.4
51 to 99	468	1,301	1,280	4,984	16,289	13,541	93.9	79.8	94.6
100	690	1,153	1,400	6,625	15,184	13,917	104.2	75.9	100.6
Building never open/electricity not used	12	8	Q	1,534	1,737	333	7.7	4.9	Q

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	Sum of majo consumptio (trillion Btu)	n		Total floors of buildings (million squ			Energy inter sum of maj (thousand B	-	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	square	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Percent lit during off hours									
Zero	489	543	261	8,255	11,757	4,734	59.2	46.2	55.2
1 to 50	747	1,875	1,724		24,296	19,591	108.7	77.2	88.0
51 to 100	91	261	666		2,041	4,285	151.4	127.7	155.5
Building always open with									
no "off hours"	42	88	176	260	748	1,435	163.1	117.0	122.9
Electricity not used	N	N	N	960	1,098	Q	N	N	N
Heating equipment (more than one may apply)									
Heat pumps	154	368	377	1,906	5,784	4,155	81.0	63.6	90.7
Furnaces	191	302	122		4,714	1,433	76.2	64.1	85.4
Individual space heaters	258	618	696		8,898	8,096	68.5	69.4	85.9
District heat	Q	138	656		1,048	4,839	Q	131.6	135.5
Boilers	135	850	1,277		9,652	11,657	119.2	88.1	109.5
Packaged heating units	882	1,773	1,428		23,972	16,785	104.6	73.9	85.1
Other	15	113	64		886	525	91.9	127.1	121.4
Cooling equipment (more than one may apply)									
Residential-type central air									
conditioners	431	504	152	5,318	7,804	1,643	81.0	64.6	92.2
Heat pumps	185	392	363	2,177	6,148	4,214	84.8	63.7	86.0
Individual air conditioners	134	394	485	1,999	5,416	5,005	67.1	72.8	96.8
District chilled water	Q	89	563	Q	901	3,643	Q	98.6	154.5
Central chillers	Q	479	1,361	Q	4,449	12,484	Q	107.7	109.0
Packaged air conditioning units	661	1,694	1,617	5,236	21,729	18,188	126.3	78.0	88.9
Swamp coolers	40	63	72	292	864	763	137.3	72.9	95.0
Other	Q	Q	35	Q	Q	265	Q	Q	131.9
Main equipment replaced since 1990 (more than one may apply)									
Heating	534	961	669	5,739	13,465	8,353	93.0	71.4	80.1
Cooling	576	1,028	917		14,166	10,493	95.4	72.5	87.4
Water-heating equipment									
Centralized system	1,026	1,716	1,468	10,637	22,855	14,043	96.5	75.1	104.5
Distributed system	132	380	319		6,205	4,581	69.6	61.3	69.7
Combination of centralized and									
distributed system	116	620	1,020	800	7,412	10,581	145.0	83.7	96.4

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n		Total floors of buildings (million squ	•		Energy inter sum of maje (thousand B	•	oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	square	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Lighting equipment types									
(more than one may apply)									
Incandescent	515	1,261	1,764	5,370	15,993	17,044	96.0	78.8	103.5
Standard fluorescent	1,259	2,674	2,781		36,814	29,212	89.6	72.6	95.2
Compact fluorescent	700	1,882	2,513		23,389	23,873	106.8	80.5	105.2
High-intensity discharge (HID)	104	734	1,348		8,653	13,635	94.2	84.9	98.9
Halogen	268	946	1,481		11,448	14,179	110.1	82.6	104.5
LED	163	701	1,500		7,613	13,397	153.1	92.0	111.9
Other	Q	Q	35	Q	Q	293	Q	Q	120.4
Refrigeration equipment (more than one may apply)									
Any refrigeration	1,181	2,538	2,753	12,013	33,246	28,386	98.3	76.3	97.0
Walk-in units	578	1,066	1,880	2,142	9,277	16,942	270.0	115.0	111.0
Cases or cabinets	508	1,017	1,791	2,483	9,809	16,427	204.5	103.7	109.0
Large cold storage areas	42	158	329	156	1,248	2,767	269.1	127.0	119.0
Commercial ice makers	483	1,190	2,058	2,100	11,717	18,918	230.2	101.6	108.8
Residential-type or compact units	786	2,079	2,317	10,311	28,259	23,811	76.2	73.6	97.3
Vending machines	178	1,583	2,417	1,784	17,672	24,480	99.8	89.6	98.7
No refrigeration	188	228	76	4,928	6,694	1,826	38.2	34.1	41.4
Office equipment (more than one may apply)									
Desktop computers	1,123	2,667	2,796	11,924	35,779	29,360	94.2	74.6	95.2
With flat screen monitors	1,091	2,638	2,794		35,422	29,303	95.4	74.5	95.4
With multiple monitors	228	967	1,747		12,296	16,226	94.2	78.6	107.6
Laptop computers	676	2,163	2,627		28,847	26,734	85.6	75.0	98.2
Dedicated servers	468	1,854	2,462		23,333	25,395	100.8	79.5	97.0
Laser printers	621	1,940	2,235		24,644	22,934	93.0	78.7	97.4
Inkjet printers	664	1,143	1,097		16,716	12,540	95.1	68.3	87.5
FAX machines	856	2,336	2,515	9,355	30,661	26,667	91.5	76.2	94.3
Photocopiers	425	2,078	2,607		27,050	26,539	74.6	76.8	98.2
Number of desktop computers									
None	246	99	Q		4,161	852	48.9	23.8	Q
1 to 4	709	437	38		7,402	1,324	102.1	59.0	29.0
5 to 9	268	400	70		5,430	1,026	90.2	73.7	68.4
10 to 19	88	452	136		6,179	1,863	65.3	73.2	73.1
20 to 49	50	684	386		7,902	4,556	79.0	86.6	84.8
50 to 99	Q	337	304		4,563	3,694	Q	73.9	82.4
100 to 249	Q	289	667		3,571	6,152	Q	80.9	108.5
250 or more	N	68	1,193	N	732	10,745	N	92.8	111.0

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n	o	otal floorsp of buildings million squa			Energy inter sum of majo thousand B		oot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Number of laptop computers									
None	692	603	202	9,036	11,093	3,478	76.6	54.4	58.0
1 to 4	566	742	208	6,543	11,397	3,221	86.6	65.1	64.5
5 to 9	77	387	233	994	5,079	2,273	78.0	76.3	102.4
10 to 19	28	368	323	297	4,518	3,528	93.2	81.4	91.6
20 to 49	Q	377	525	Q	4,587	4,985	Q	82.2	105.4
50 to 99	N	185	321	N	1,937	3,297	N	95.7	97.2
100 to 249	N	65	460	N	982	4,235	N	65.9	108.7
250 or more	N	Q	557	N	Q	5,197	N	Q	107.2
Number of dedicated servers									
None	901	913	366	12,300	16,607	4,817	73.3	54.9	75.9
1 to 4	449	1,440	829	4,525	18,595	10,976	99.2	77.5	75.5
5 to 9	Q	206	349	Q	2,446	3,712	Q	84.1	94.1
10 to 19	Q	102	487	Q	1,266	4,425	Q	80.5	110.1
20 to 49	Q	91	305	Q	822	2,928	Q	110.6	104.2
50 or more	Q	Q	492	Q	Q	3,354	Q	Q	146.7
Number of photocopiers									
None	944	688	221	11,253	12,890	3,674	83.9	53.4	60.3
One	304	678	221	4,197	9,634	3,250	72.3	70.3	67.9
2 to 4	111	948	537	1,380	12,031	6,902	80.6	78.8	77.8
5 to 9	Q	287	493	Q	3,485	5,312	Q	82.3	92.7
10 or more	Q	166	1,356	Q	1,900	11,075	Q	87.3	122.5
Number of TVs or video displays									
None	488	541	185	8,683	11,772	3,885	56.2	46.0	47.7
One	332	302	63	3,854	4,899	1,237	86.1	61.6	51.3
2 to 4	353	698	260	3,217	9,910	3,338	109.7	70.4	77.8
5 to 9	144	365	267	908	4,218	3,021	159.0	86.6	88.4
10 to 19	34	352	424	180	3,919	4,069	187.8	89.7	104.3
20 to 49	Q	262	441	Q	2,983	5,010	Q	87.9	88.0
50 to 99	Q	123	305	Q	1,169	3,177	Q	105.3	95.9
100 or more	N	123	883	N	1,070	6,477	N	115.4	136.3
Food preparation or serving areas									
in non-food service buildings									
(more than one may apply)									
Snack bar or concession stand	61	203	848	378	1,958	7,549	160.4	103.8	112.4
Fast food or small restaurant	94	355	757	438	2,666	6,684	215.4	133.1	113.3
Cafeteria or large restaurant	Q	356	1,260	Q	4,268	10,913	Q	83.4	115.5
Commercial kitchen/									
food preparation area	43	587	1,168	536	5,763	9,850	80.6	101.9	118.6
Small kitchen area	146	420	621	2,297	5,931	5,826	63.7	70.8	106.6

Table C11. Consumption and gross energy intensity by building size for sum of major fuels, 2012

	Sum of majo consumptio (trillion Btu)	n	c	Total floorsp of buildings million squa			Energy inten sum of majo (thousand B	•	ot)
	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet	1,001 to 10,000 square feet	10,001 to 100,000 square feet	Over 100,000 feet
All buildings	1,369	2,766	2,828	16,941	39,940	30,212	80.8	69.3	93.6
Separate computer areas (more than one may apply)									
Data center or server farm	Q	210	1,132	Q	1,941	9,058	Q	108.4	125.0
Computer-based training room	31	479	1,187	325	5,568	11,831	94.5	86.0	100.3
Student or public computer center	21	441	813	356	5,710	8,276	58.7	77.3	98.2
HVAC conservation features (more than one may apply)									
Economizer cycle	170	1,005	1,967	1,118	11,110	18,521	152.5	90.5	106.2
Regular HVAC maintenance	977	2,453	2,773	9,050	31,653	28,541	108.0	77.5	97.2
Building automation system (BAS) ²	175	1,202	2,332	1,601	13,348	22,101	109.3	90.1	105.5
features (more than one may apply) Multipaned windows	865	2,089	2,296	9,016	27,885	23,461	95.9	74.9	97.9
Tinted window glass	530	1,512	1,931	5,223	20,337	19,465	101.4	74.9	99.2
Reflective window glass	140	570	942		6,613	7,753	90.7		33.2
External overhangs or awnings		370	542			1./33		96.3	121 E
	623	1 102	1 267	1,542 5.805				86.3	121.5
	623	1,198 610	1,267 1 291	5,805	14,678	11,705	107.4	81.6	108.2
Skylights or atriums	109	610	1,291	5,805 1,539	14,678 8,361	11,705 12,360	107.4 71.1	81.6 73.0	108.2 104.4
Skylights or atriums Light scheduling	109 298	610 1,054	1,291 1,578	5,805 1,539 2,401	14,678 8,361 12,227	11,705 12,360 15,635	107.4 71.1 124.2	81.6 73.0 86.2	108.2 104.4 100.9
Skylights or atriums	109	610	1,291	5,805 1,539	14,678 8,361	11,705 12,360	107.4 71.1	81.6 73.0	108.2 104.4
Skylights or atriums Light scheduling Occupancy sensors	109 298 188	610 1,054 1,263	1,291 1,578 1,983	5,805 1,539 2,401 1,699	14,678 8,361 12,227 14,108	11,705 12,360 15,635 20,064	107.4 71.1 124.2 110.8	81.6 73.0 86.2 89.6	108.2 104.4 100.9 98.8
Skylights or atriums Light scheduling Occupancy sensors Multi-level lighting or dimming	109 298 188 126 22 45	610 1,054 1,263 577	1,291 1,578 1,983 916	5,805 1,539 2,401 1,699 813	14,678 8,361 12,227 14,108 5,480	11,705 12,360 15,635 20,064 8,240	107.4 71.1 124.2 110.8 154.3	81.6 73.0 86.2 89.6 105.2	108.2 104.4 100.9 98.8 111.2
Skylights or atriums Light scheduling Occupancy sensors Multi-level lighting or dimming Daylight harvesting Demand responsive lighting	109 298 188 126 22 45	610 1,054 1,263 577 184	1,291 1,578 1,983 916 413	5,805 1,539 2,401 1,699 813 225	14,678 8,361 12,227 14,108 5,480 1,963	11,705 12,360 15,635 20,064 8,240 3,927	107.4 71.1 124.2 110.8 154.3 97.4	81.6 73.0 86.2 89.6 105.2 93.7	108.2 104.4 100.9 98.8 111.2 105.3
Skylights or atriums Light scheduling Occupancy sensors Multi-level lighting or dimming Daylight harvesting Demand responsive lighting Building automation system (BAS) for lighting ² Equipment usage reduced when building not in full use	109 298 188 126 22 45	610 1,054 1,263 577 184 164	1,291 1,578 1,983 916 413 201	5,805 1,539 2,401 1,699 813 225 494	14,678 8,361 12,227 14,108 5,480 1,963 1,997	11,705 12,360 15,635 20,064 8,240 3,927 2,246	107.4 71.1 124.2 110.8 154.3 97.4 91.1	81.6 73.0 86.2 89.6 105.2 93.7 82.1	108.2 104.4 100.9 98.8 111.2 105.3 89.4
Skylights or atriums Light scheduling Occupancy sensors Multi-level lighting or dimming Daylight harvesting Demand responsive lighting Building automation system (BAS) for lighting ² Equipment usage reduced when building not in full use (more than one may apply)	109 298 188 126 22 45	610 1,054 1,263 577 184 164	1,291 1,578 1,983 916 413 201	5,805 1,539 2,401 1,699 813 225 494	14,678 8,361 12,227 14,108 5,480 1,963 1,997 4,003	11,705 12,360 15,635 20,064 8,240 3,927 2,246 7,641	107.4 71.1 124.2 110.8 154.3 97.4 91.1	81.6 73.0 86.2 89.6 105.2 93.7 82.1	108.2 104.4 100.9 98.8 111.2 105.3 89.4
Skylights or atriums Light scheduling Occupancy sensors Multi-level lighting or dimming Daylight harvesting Demand responsive lighting Building automation system (BAS) for lighting ² Equipment usage reduced when building not in full use	109 298 188 126 22 45	610 1,054 1,263 577 184 164	1,291 1,578 1,983 916 413 201	5,805 1,539 2,401 1,699 813 225 494	14,678 8,361 12,227 14,108 5,480 1,963 1,997	11,705 12,360 15,635 20,064 8,240 3,927 2,246	107.4 71.1 124.2 110.8 154.3 97.4 91.1	81.6 73.0 86.2 89.6 105.2 93.7 82.1	108.2 104.4 100.9 98.8 111.2 105.3 89.4

¹These climate regions were created by the Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE).

Notes: • Because of rounding, data may not sum to totals. • See the *Guide to the 2012 CBECS Detailed Tables* or *CBECS Terminology* for definitions of terms used in these tables and/or comparison of differences with prior CBECS tables. Both references can be accessed from

http://www.eia.gov/consumption/commercial/data/2012/ • 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.

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-871A, C, D, E, and F of the 2012 Commercial Buildings Energy Consumption Survey.

²In earlier CBECS publications, BAS was referred to as *Energy Management and Control System (EMCS)*.

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

N = No cases in reporting sample.