

Release date: September 2021

Revised date: December 2022

**Table B6. Building size, number of buildings, 2018**

	Number of buildings (thousand)								
	All buildings	Building size							
		1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Principal building activity</b>									
Education	437	148	98	63	39	57	25	7	0
Food sales	163	121	Q	Q	Q	Q	Q	Q	N
Food service	286	195	80	Q	Q	Q	Q	N	N
Health care	137	57	36	21	10	7	3	3	1
Inpatient	9	N	N	Q	Q	Q	1	2	1
Outpatient	129	57	36	20	9	5	1	0	Q
Lodging	207	Q	Q	42	42	23	9	3	1
Mercantile	517	181	105	141	48	23	13	5	1
Retail (other than mall)	350	163	74	75	22	8	6	3	N
Enclosed and strip malls	167	Q	Q	66	26	15	7	3	1
Office	970	518	198	137	53	35	17	9	2
Public assembly	488	215	115	95	44	14	3	1	1
Public order and safety	81	Q	Q	Q	Q	Q	Q	1	Q
Religious worship	439	167	103	121	39	8	Q	Q	N
Service	867	517	216	100	24	9	Q	Q	Q
Warehouse and storage	1,004	437	255	194	60	33	15	8	2
Other	113	Q	Q	Q	Q	Q	3	2	Q
Vacant	208	131	Q	Q	Q	Q	Q	Q	Q
<b>Year constructed</b>									
Before 1920	329	192	64	45	19	5	3	1	Q
1920 to 1945	379	209	80	58	12	12	5	2	1
1946 to 1959	517	267	114	83	25	19	7	2	Q
1960 to 1969	685	328	164	116	46	19	7	5	1
1970 to 1979	831	399	208	124	54	27	11	6	1
1980 to 1989	794	372	206	112	54	31	13	5	1
1990 to 1999	921	409	203	174	79	33	16	6	1
2000 to 2009	924	411	175	203	63	44	18	8	2
2010 to 2018	537	246	145	66	35	27	13	5	1
<b>Census region</b>									
Northeast	793	373	157	145	58	30	19	8	2
Midwest	1,719	810	416	288	115	57	20	10	2
South	2,143	1,076	459	338	128	89	36	15	3
West	1,264	573	328	209	86	41	18	7	2
<b>Climate zone<sup>a</sup></b>									
Cold or very cold	539	270	115	100	29	14	7	2	Q
Cool	1,727	812	420	271	131	58	23	11	2
Mixed mild	1,216	578	247	208	84	55	28	12	4
Warm	1,606	754	390	266	99	61	24	10	2
Hot or very hot	831	419	187	136	42	30	11	5	1

**Table B6. Building size, number of buildings, 2018**

**Number of buildings (thousand)**

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Number of floors</b>									
1	4,106	2,227	998	581	172	87	28	11	2
2	1,286	476	297	300	122	57	26	7	1
3	370	117	55	80	67	35	10	5	1
4 to 9	142	Q	Q	20	25	37	24	11	2
10 or more	16	N	N	N	N	Q	4	6	3
<b>Elevators and escalators (more than one may apply)</b>									
Any elevators	503	Q	45	147	119	95	54	27	7
1 elevator	366	Q	44	142	96	50	20	4	1
2 to 5 elevators	121	N	Q	Q	23	45	32	14	1
6 or more elevators	16	N	N	N	N	Q	2	9	5
Any escalators	14	Q	N	Q	Q	Q	Q	2	2
<b>Number of workers (main shift)</b>									
Fewer than 5	3,270	2,080	730	366	78	14	Q	1	Q
5 to 9	1,116	559	301	192	49	10	4	Q	N
10 to 19	713	173	223	200	84	26	5	1	Q
20 to 49	492	Q	97	175	107	70	17	3	Q
50 to 99	201	N	Q	47	51	62	27	6	1
100 to 249	90	N	N	Q	16	31	25	15	2
250 or more	37	N	N	N	Q	5	13	13	6
<b>Weekly operating hours</b>									
Fewer than 40	1,370	837	303	172	39	14	4	2	Q
40 to 48	1,483	711	376	252	78	46	16	5	Q
49 to 60	1,250	524	272	257	99	62	25	9	1
61 to 84	645	264	152	115	57	31	17	8	2
85 to 167	465	220	106	51	43	27	12	5	1
Open continuously	705	277	150	134	71	38	18	12	4
<b>Ownership and occupancy</b>									
Nongovernment owned	4,982	2,390	1,174	855	321	143	63	29	7
Owner occupied	3,249	1,565	791	557	203	82	34	13	4
Leased to tenant or tenants	1,581	727	339	294	115	59	28	15	3
Unoccupied	152	98	Q	Q	Q	Q	Q	Q	Q
Government owned	937	443	185	126	65	75	30	11	2
Federal	70	Q	Q	Q	Q	Q	Q	1	1
State	256	113	Q	30	19	28	9	4	1
Local	610	290	124	89	38	43	19	6	1
<b>Party responsible for operation of energy systems</b>									
Building owner	4,872	2,344	1,149	769	307	184	78	34	7
Business owner or tenant	831	379	182	169	61	24	10	4	1
Property management	97	Q	Q	Q	Q	4	2	1	Q
Other	118	Q	Q	28	10	5	3	1	Q

**Table B6. Building size, number of buildings, 2018**

**Number of buildings (thousand)**

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Provider of direct input on energy-related equipment purchases</b>									
Building owner	5,127	2,445	1,211	837	321	189	80	35	7
Business owner or tenant	483	234	103	84	38	14	7	3	1
Property management	49	Q	Q	Q	Q	Q	Q	1	Q
Other	260	128	41	50	23	13	4	2	1
<b>Number of establishments</b>									
1	4,719	2,456	1,068	679	280	150	61	21	4
2 to 5	811	263	218	212	59	34	15	8	2
6 to 10	135	N	Q	67	25	16	6	4	1
11 to 20	63	Q	Q	Q	15	11	6	2	1
More than 20	19	N	Q	Q	Q	5	4	4	2
Currently unoccupied	170	111	Q	Q	Q	Q	Q	Q	Q
<b>Campus or complex activity</b>									
Not part of a campus or complex	3,622	1,841	771	560	239	128	56	24	4
Primary or secondary school	247	101	60	42	18	17	7	3	Q
College or university	103	Q	Q	Q	15	15	7	2	Q
Office complex	141	61	Q	Q	12	8	6	2	1
Retail complex	250	103	Q	54	21	11	5	2	Q
Storage complex	418	157	133	98	Q	8	4	2	Q
Religious campus or complex	253	82	79	69	16	5	Q	Q	Q
Health care complex	60	Q	Q	Q	Q	4	2	2	1
Lodging or resort complex	102	55	Q	Q	16	Q	Q	Q	Q
Transportation complex	36	Q	Q	Q	Q	Q	Q	Q	Q
Government complex	124	80	Q	Q	Q	Q	2	1	Q
Other type of campus or complex	563	291	138	87	27	14	3	2	Q
<b>Predominant exterior wall material</b>									
Brick, stone, or stucco	2,490	1,050	574	469	205	121	50	18	3
Concrete (block or poured)	935	370	224	177	84	48	22	9	2
Concrete panels	137	Q	Q	31	22	20	10	7	2
Siding or shingles	948	661	179	71	29	Q	Q	1	Q
Metal panels	1,250	647	333	204	42	17	4	2	1
Window glass	19	Q	Q	Q	Q	Q	3	2	1
Other	139	73	Q	Q	Q	Q	2	2	Q

**Table B6. Building size, number of buildings, 2018**

Number of buildings (thousand)

	Building size								Over 500,000 square feet
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Predominant roof material</b>									
Metal surfacing	2,198	1,157	555	355	86	33	8	3	1
Synthetic or rubber	940	327	166	172	121	84	46	20	4
Built-up	708	259	149	145	65	55	22	10	3
Slate or tile shingles	376	200	83	62	22	6	3	0	Q
Wooden materials (including shingles)	166	90	Q	35	Q	Q	Q	Q	Q
Asphalt, fiberglass, or other shingles	1,311	698	319	191	66	24	8	4	0
Concrete	83	Q	Q	Q	12	Q	3	1	Q
Other	136	56	Q	Q	Q	8	3	2	0
<b>Roof tilt</b>									
Flat	1,914	719	404	337	200	146	69	32	7
Shallow pitch	2,313	1,117	589	406	123	52	17	7	1
Steeper pitch	1,691	997	365	237	63	20	6	1	Q
<b>Cool roof characteristics (more than one may apply)</b>									
White or reflective coating or paint	1,285	478	267	273	119	87	39	18	4
White or reflective tiles or shingles	140	69	Q	Q	14	7	4	1	Q
Aluminum coating	528	276	134	73	27	11	4	1	Q
Ballasted roof system	114	Q	Q	31	15	14	7	4	1
Other cool roof property	35	Q	Q	Q	Q	Q	Q	1	0
<b>Renovations since 2000 (more than one may apply)</b>									
Any type of renovation	2,032	855	454	362	176	103	51	24	6
Addition or annex	327	95	81	62	44	24	15	5	2
Reduction in floorspace	35	Q	Q	Q	Q	Q	Q	1	1
Roof replacement	847	347	201	142	71	49	22	13	3
Interior wall reconfiguration	709	261	149	139	72	49	23	12	4
Window replacement	484	198	122	91	32	24	10	5	2
HVAC equipment upgrade	1,006	333	268	197	97	59	31	17	4
Lighting upgrade	1,012	366	242	178	105	66	32	18	5
Electrical upgrade	565	225	151	82	43	31	18	10	3
Plumbing system upgrade	584	245	143	87	49	31	16	10	3
Insulation upgrade	307	136	67	57	18	13	10	4	1
Fire, safety, or security upgrade	570	196	105	117	65	48	24	14	3
Structural upgrade	147	54	Q	Q	13	6	4	2	1
Other	43	Q	Q	Q	Q	Q	2	1	Q
No renovations	3,530	1,832	795	575	186	95	33	12	2
Buildings constructed 2013 or later	357	146	110	44	23	19	9	4	1

**Table B6. Building size, number of buildings, 2018**

Number of buildings (thousand)

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Energy sources (more than one may apply)</b>									
Electricity	5,613	2,631	1,288	949	385	217	93	40	9
Natural gas	2,974	1,123	679	595	291	171	75	33	7
Fuel oil	583	242	104	107	48	39	23	14	5
District heat	86	Q	Q	Q	10	15	7	5	2
District chilled water	55	Q	Q	Q	8	11	6	3	1
Propane	676	358	140	110	35	19	8	4	1
Solar	99	Q	Q	29	10	5	5	2	1
Wood, coal, and other	180	76	71	Q	Q	Q	Q	Q	Q
<b>Space-heating energy sources (more than one may apply)</b>									
Electricity	2,563	1,195	540	450	205	105	46	19	4
Natural gas	2,587	952	590	549	251	145	66	28	5
Fuel oil	266	153	52	36	Q	7	4	2	1
District heat	83	Q	Q	Q	10	15	7	4	2
Propane	431	253	96	60	15	Q	2	Q	Q
Other sources <sup>b</sup>	127	64	Q	Q	Q	Q	Q	Q	N
<b>Primary space-heating energy source</b>									
Electricity	1,856	948	385	291	127	69	23	10	2
Natural gas	2,344	871	567	486	216	118	57	24	4
Fuel oil	222	143	Q	31	Q	Q	2	Q	Q
District heat	78	Q	Q	Q	9	14	7	4	2
Propane	338	224	68	Q	Q	Q	Q	Q	Q
Other sources <sup>b</sup>	63	Q	Q	Q	Q	N	Q	Q	N
<b>Cooling energy sources (more than one may apply)</b>									
Electricity	4,584	2,025	1,025	844	357	203	86	35	8
Natural gas	4	Q	N	N	Q	Q	Q	Q	Q
District chilled water	55	Q	Q	Q	8	11	6	3	1
<b>Water-heating energy sources (more than one may apply)</b>									
Electricity	2,785	1,295	618	501	203	99	45	20	4
Natural gas	1,885	638	451	388	196	128	56	24	4
Fuel oil	72	Q	Q	Q	Q	Q	3	1	0
District heat	38	N	Q	Q	Q	9	5	3	1
Propane	145	64	Q	37	Q	5	Q	Q	Q
<b>Cooking energy sources (more than one may apply)</b>									
Electricity	1,216	477	285	206	117	72	38	17	4
Natural gas	727	220	148	143	89	63	40	19	4
Propane	159	77	Q	33	Q	9	4	1	Q

**Table B6. Building size, number of buildings, 2018**

**Number of buildings (thousand)**

	Building size								Over 500,000 square feet
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Energy end uses (more than one may apply)</b>									
Buildings with space heating	4,901	2,229	1,093	869	366	208	90	39	9
Buildings with cooling	4,631	2,033	1,032	853	363	211	90	38	9
Buildings with water heating	4,595	1,984	1,053	848	363	209	90	39	9
Buildings with cooking	1,738	695	390	307	159	103	55	24	6
Buildings with manufacturing	322	139	56	65	35	17	6	3	1
Buildings with electricity generation	706	189	156	152	80	66	37	20	6
Buildings with lighting	5,503	2,577	1,238	948	382	217	92	40	9
<b>Percent of floorspace heated</b>									
Not heated	1,017	604	266	112	20	10	3	2	Q
1 to 50%	693	328	156	140	34	19	10	4	1
51 to 99%	905	329	246	167	83	47	20	10	3
100%	3,303	1,572	691	561	248	141	60	25	5
<b>Percent of floorspace cooled</b>									
Not cooled	1,288	800	327	127	23	7	3	2	N
1 to 50%	1,111	419	298	251	70	45	17	7	2
51 to 99%	998	353	239	184	108	66	31	14	4
100%	2,522	1,261	495	419	185	100	43	17	3
<b>Percent lit when open</b>									
0%	Q	Q	Q	N	Q	N	Q	Q	N
1 to 50%	1,280	595	348	249	60	19	6	2	1
51 to 99%	1,784	712	387	360	161	96	43	20	4
100%	2,272	1,170	452	329	157	99	43	17	4
Building never open or electricity not used	513	332	129	Q	Q	Q	Q	Q	Q
<b>Percent lit during off hours</b>									
0%	2,062	1,217	522	239	64	16	4	2	Q
1 to 50%	3,246	1,279	720	665	285	181	77	32	7
51 to 100%	240	110	Q	40	24	16	9	5	1
Building always open with no off hours	64	Q	Q	Q	Q	4	3	2	0
Electricity not used	305	201	Q	Q	Q	Q	Q	Q	N

**Table B6. Building size, number of buildings, 2018**

	Number of buildings (thousand)								
	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Heating equipment (more than one may apply)</b>									
Packaged heating units	2,187	845	473	429	237	122	55	21	4
Furnaces	1,621	846	391	263	74	32	12	3	Q
Individual space heaters	1,246	554	283	233	102	46	18	8	2
Boilers	703	174	107	164	110	85	43	17	3
Heat pumps	673	265	145	145	55	35	18	9	2
District heat	83	Q	Q	Q	10	15	7	4	2
Duct reheat	134	Q	Q	31	18	17	9	6	2
Other	17	N	Q	Q	Q	Q	Q	Q	Q
<b>Cooling equipment (more than one may apply)</b>									
Packaged air-conditioning units	2,565	927	602	530	270	145	62	24	6
Residential-type central air conditioners	1,309	676	272	226	73	40	14	6	1
Individual air conditioners	735	358	143	124	54	33	17	5	1
Central chillers	202	Q	Q	42	37	42	27	16	4
Heat pumps	492	177	121	120	28	27	12	6	2
District chilled water	55	Q	Q	Q	8	11	6	3	1
Swamp coolers	85	Q	Q	Q	Q	6	2	1	Q
Other	Q	Q	N	Q	Q	N	Q	Q	Q
<b>HVAC features (more than one may apply)</b>									
Economizer cycle	747	155	135	181	113	87	48	22	6
Variable air volume (VAV) system	698	193	164	128	73	73	41	20	6
Dedicated outside air system (DOAS)	249	82	46	54	27	21	10	6	2
Demand controlled ventilation (DCV)	349	122	79	65	38	26	10	7	2
Regular HVAC maintenance	3,554	1,401	824	701	300	196	86	38	9
Building automation system (BAS) controls heating or cooling	933	261	147	211	116	104	60	27	7
Internet-connected or smart thermostat	325	117	84	73	28	15	6	2	Q
Programmable thermostat	1,545	692	398	273	117	48	11	6	1
<b>Main equipment replaced since 2000 (more than one may apply)</b>									
Heating	1,937	818	506	346	153	67	32	14	2
Cooling	1,269	566	288	251	82	46	23	10	3
<b>Water-heating equipment</b>									
Centralized system	3,538	1,562	836	650	262	144	59	22	4
Distributed system	782	357	173	137	60	35	12	7	2
Combination of centralized and distributed systems	274	65	44	61	41	30	20	10	3

**Table B6. Building size, number of buildings, 2018**

**Number of buildings (thousand)**

	Building size								Over 500,000 square feet
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Generation technologies (more than one may apply)</b>									
Reciprocating engine generators	580	157	132	116	64	57	30	17	6
Solar panels	94	Q	Q	29	10	5	5	2	1
Other generation technology	43	Q	Q	Q	Q	Q	4	1	0
<b>Lighting equipment types (more than one may apply)</b>									
Incandescent	1,100	491	268	181	78	49	21	10	2
Standard fluorescent	4,012	1,825	895	717	294	170	72	31	7
Compact fluorescent	1,130	385	235	240	121	83	40	21	5
High-intensity discharge	238	Q	Q	55	30	26	14	7	2
Halogen	552	177	129	128	59	31	16	9	2
LED	2,593	1,007	554	531	239	154	68	33	8
Other	Q	Q	N	Q	N	Q	Q	Q	N
<b>Refrigeration equipment (more than one may apply)</b>									
Any refrigeration	3,850	1,696	828	692	320	186	84	36	8
Walk-in units	706	250	140	98	68	79	45	22	5
Cases or cabinets	837	301	176	144	81	71	39	19	5
Large cold storage areas	69	Q	Q	Q	Q	9	5	2	1
Commercial ice makers	872	269	157	175	106	89	47	23	6
Residential-type or compact units	3,321	1,481	685	621	284	148	66	28	7
Vending machines	800	168	95	190	135	115	61	29	7
No refrigeration	2,068	1,137	531	289	66	32	9	4	Q
<b>Office equipment (more than one may apply)</b>									
Desktop computers	3,804	1,467	900	751	346	204	88	38	8
With multiple monitors	1,504	462	292	332	177	139	63	32	8
Laptop computers	2,786	957	668	579	281	177	80	36	8
Dedicated servers	1,400	345	292	314	199	146	65	31	7
Tablets charged in building	1,556	478	331	347	166	134	65	28	6
Large floor-standing office devices <sup>c</sup>	1,456	326	302	354	210	154	70	31	8
Smaller desktop office devices <sup>c</sup>	3,560	1,490	769	696	305	178	79	35	8
Interactive whiteboards	262	Q	Q	50	40	55	27	12	3
Televisions or video displays	2,451	878	531	508	252	163	79	32	8
Point-of-sale devices or cash registers	1,420	656	282	224	118	75	40	20	5



**Table B6. Building size, number of buildings, 2018**

	Number of buildings (thousand)								
	All buildings	Building size							
		1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	5,918	2,833	1,359	981	386	218	93	40	9
<b>Food preparation or serving areas in non-food service buildings (more than one may apply)</b>									
Snack bar, concession stand, or coffee shop	144	Q	Q	29	22	19	13	8	3
Fast food or small restaurant	160	46	Q	31	23	14	12	8	3
Cafeteria or large restaurant	129	N	Q	Q	23	37	23	11	4
Commercial kitchen or food preparation area	284	Q	Q	93	45	43	26	14	3
Small kitchen area	1,018	426	252	175	91	43	21	8	2
<b>Separate computer areas (more than one may apply)</b>									
Server closet	1,237	284	267	254	182	147	67	29	7
Data center	116	Q	Q	Q	13	17	14	10	4
Computer-based training room	228	Q	Q	48	34	45	25	12	4
Student or public computer center	236	Q	Q	46	34	40	22	10	1
<b>Window and interior lighting features (more than one may apply)</b>									
Multipaned windows	3,527	1,437	800	699	292	180	80	32	8
Tinted window glass	1,679	552	386	391	162	110	49	25	6
Reflective window glass	497	113	102	142	61	40	24	11	2
External overhangs or awnings	1,513	679	311	288	122	70	28	12	3
Skylights or atriums	509	146	102	121	63	38	22	14	4
Light scheduling	910	255	179	213	108	83	47	21	5
Occupancy sensors	1,025	219	195	257	132	123	62	30	7
Multilevel lighting or dimming	332	88	78	65	35	35	18	11	3
Daylight harvesting	138	Q	Q	32	14	12	9	7	2
Plug-load control	58	Q	Q	Q	Q	Q	3	1	0
Demand responsive lighting	98	Q	Q	Q	Q	Q	2	1	0
Building automation system (BAS) for lighting	317	71	Q	84	39	37	25	12	4
<b>Electric vehicle (EV) charging</b>									
Charging stations associated with the building	132	Q	Q	31	24	18	10	8	3

Data source: U.S. Energy Information Administration, Form EIA-871A of the 2018 Commercial Buildings Energy Consumption Survey

Notes: Because of rounding, data may not sum to totals. The *Guide to the 2018 CBECS Tables* and *CBECS Terminology* contain definitions of terms used in these tables and comparisons between previous CBECS tables. You can access both references from <http://www.eia.gov/consumption/commercial/data/2018/>.

Data are sample survey estimates with relative standard errors published in a tab on the Excel worksheet for this table.

<sup>a</sup>Climate zones are based on ASHRAE Standard 169-2021; see <https://www.eia.gov/consumption/commercial/maps.php#defined>.

<sup>b</sup>Other sources includes wood, coal, solar, and all other energy sources.

<sup>c</sup>Office devices refers to any combination of printers, copiers, scanners, or FAX machines.

Q = Data withheld either because the relative standard error was greater than 50% or the reporting sample had fewer than 20 buildings.

N = No buildings in reporting sample.

**Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018**

**RSEs for number of buildings**

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Principal building activity</b>									
Education	7.8	16.2	20.5	17.7	11.4	8.9	10.7	7.4	23.8
Food sales	14.3	16.0	28.7	45.9	59.1	50.2	39.4	34.2	0.0
Food service	7.7	9.6	13.7	26.6	78.5	77.9	77.0	0.0	0.0
Health care	9.8	17.9	22.6	21.6	20.8	17.3	14.8	12.4	9.8
Inpatient	19.4	0.0	0.0	91.5	72.2	35.3	23.4	13.8	9.8
Outpatient	10.3	17.9	22.6	21.6	23.8	20.6	18.0	30.2	45.8
Lodging	9.4	22.5	34.1	15.9	18.5	14.5	15.2	16.7	38.3
Mercantile	7.3	12.3	20.7	13.8	12.8	17.5	13.1	13.7	21.7
Retail (other than mall)	10.1	13.0	26.3	17.6	19.1	27.4	14.0	13.3	0.0
Enclosed and strip malls	7.6	24.7	30.9	20.3	16.4	19.6	20.4	22.9	21.7
Office	7.2	11.3	11.7	14.9	13.9	14.1	10.7	9.9	12.6
Public assembly	9.1	17.8	13.7	14.8	13.6	12.5	18.5	21.9	22.9
Public order and safety	20.2	36.9	52.7	32.2	37.0	45.5	30.5	31.5	75.3
Religious worship	9.5	15.9	22.7	12.4	18.6	21.8	37.5	46.8	0.0
Service	7.4	9.2	15.3	16.9	21.7	21.1	52.6	86.2	70.6
Warehouse and storage	7.4	11.1	14.8	13.2	17.9	15.1	15.3	13.4	18.7
Other	17.1	26.9	31.1	37.6	38.6	38.2	31.7	27.1	67.1
Vacant	17.2	21.6	37.5	54.5	52.2	38.2	34.7	37.3	59.2
<b>Year constructed</b>									
Before 1920	12.8	17.2	19.8	19.3	27.0	26.2	30.8	39.3	49.6
1920 to 1945	10.7	13.9	21.7	19.1	22.2	20.9	19.3	13.7	26.2
1946 to 1959	8.1	12.8	18.8	16.8	17.2	17.0	22.2	18.6	35.3
1960 to 1969	6.4	9.4	14.8	13.9	14.3	13.9	14.8	12.6	23.1
1970 to 1979	7.4	11.7	14.7	14.4	16.3	12.8	15.2	15.2	13.4
1980 to 1989	7.0	11.4	13.9	13.5	13.1	12.1	12.3	9.8	17.0
1990 to 1999	7.5	10.2	16.7	15.1	14.1	11.5	10.5	8.8	14.3
2000 to 2009	8.0	10.8	16.1	12.9	14.2	10.0	10.9	10.5	18.8
2010 to 2018	11.0	15.7	19.9	18.9	14.8	13.7	16.1	15.9	24.5
<b>Census region</b>									
Northeast	9.9	12.9	14.6	12.6	12.5	12.7	10.8	11.7	15.2
Midwest	10.9	13.2	16.6	13.0	12.9	14.1	11.0	11.8	13.5
South	7.7	9.3	9.9	10.5	9.8	8.6	10.0	7.6	14.7
West	8.1	9.6	10.2	11.4	12.0	10.3	12.5	11.4	24.3
<b>Climate zone<sup>a</sup></b>									
Cold or very cold	18.8	23.2	23.7	20.4	32.0	17.6	25.1	25.1	35.9
Cool	11.8	13.9	18.0	10.5	12.2	15.0	11.2	13.7	13.5
Mixed mild	15.1	17.3	20.3	17.2	14.5	15.1	12.6	10.6	14.1
Warm	11.4	13.3	13.7	11.4	12.3	14.7	16.5	10.9	22.1
Hot or very hot	18.8	21.3	21.2	22.0	21.8	14.5	15.0	14.1	16.1

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Number of floors</b>									
1	4.3	5.0	6.9	7.0	8.3	7.6	11.4	10.0	23.3
2	5.8	9.7	12.1	9.3	11.5	8.1	10.2	10.9	19.5
3	10.5	17.7	24.0	13.9	12.9	14.6	13.5	11.9	25.6
4 to 9	9.4	41.8	31.0	45.2	16.5	9.7	10.7	9.1	11.5
10 or more	9.8	0.0	0.0	0.0	0.0	25.6	17.3	11.9	11.2
<b>Elevators and escalators (more than one may apply)</b>									
Any elevators	6.5	56.5	30.2	13.4	9.2	7.0	6.2	5.7	8.2
1 elevator	7.7	56.5	30.9	14.4	9.9	8.7	10.0	13.4	25.2
2 to 5 elevators	6.7	0.0	73.0	39.9	20.8	9.8	7.9	8.4	24.6
6 or more elevators	7.8	0.0	0.0	0.0	0.0	98.6	27.5	9.1	8.3
Any escalators	28.9	85.2	0.0	53.5	60.5	45.7	42.8	17.8	14.0
<b>Number of workers (main shift)</b>									
Fewer than 5	5.5	6.0	9.5	8.4	14.7	18.9	28.6	35.4	82.0
5 to 9	6.1	8.2	11.7	11.9	14.9	19.2	22.0	37.4	0.0
10 to 19	6.5	15.9	9.8	13.7	13.5	15.3	23.0	31.9	59.9
20 to 49	6.3	32.4	16.9	10.3	8.1	9.3	12.1	13.4	49.6
50 to 99	6.7	0.0	22.3	20.8	12.0	8.0	9.6	14.2	34.1
100 to 249	7.1	0.0	0.0	48.7	21.3	12.0	8.8	7.1	19.7
250 or more	7.2	0.0	0.0	0.0	61.6	29.3	11.1	7.5	7.6
<b>Weekly operating hours</b>									
Fewer than 40	6.1	7.8	12.1	12.7	17.6	17.0	18.4	19.5	38.5
40 to 48	6.2	8.7	12.4	11.5	11.8	12.2	13.8	12.7	35.9
49 to 60	5.2	9.3	11.4	10.9	12.3	9.2	9.1	9.8	13.8
61 to 84	7.6	12.0	16.4	12.6	11.9	14.0	10.9	11.0	17.5
85 to 167	8.6	12.5	18.6	19.9	16.2	12.7	15.2	10.6	19.5
Open continuously	8.1	13.3	19.0	15.7	13.2	10.6	9.4	8.2	10.9
<b>Ownership and occupancy</b>									
Nongovernment owned	3.8	5.0	6.1	5.5	6.4	6.6	6.6	6.4	8.7
Owner occupied	4.3	6.1	8.3	5.7	8.2	7.8	8.3	7.9	10.3
Leased to tenant or tenants	5.5	6.8	11.3	10.7	9.8	9.5	9.5	9.0	15.0
Unoccupied	20.3	25.6	40.4	74.4	64.5	64.1	47.5	52.5	50.2
Government owned	9.5	13.5	18.6	14.7	9.8	8.6	9.0	9.0	16.2
Federal	26.0	37.4	52.6	43.3	34.1	31.1	32.3	23.6	30.1
State	12.9	21.9	27.7	28.5	24.5	15.8	17.2	20.3	33.0
Local	10.1	14.4	20.9	15.2	11.6	10.4	11.1	9.3	19.6
<b>Party responsible for operation of energy systems</b>									
Building owner	4.4	5.7	6.9	6.0	6.5	5.8	5.5	5.7	8.3
Business owner or tenant	6.5	9.0	14.6	15.0	14.3	13.3	19.5	15.2	23.4
Property management	20.7	31.5	60.8	36.7	36.0	24.5	31.1	21.3	30.1
Other	18.8	31.3	62.0	27.9	31.4	28.7	20.7	23.4	37.0

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Provider of direct input on energy-related equipment purchases</b>									
Building owner	4.4	5.7	6.6	5.9	6.2	5.8	5.5	5.5	8.1
Business owner or tenant	8.9	12.5	19.0	22.5	15.1	16.5	21.1	17.8	28.6
Property management	25.5	44.2	59.2	40.6	46.2	37.7	48.7	28.7	37.8
Other	10.5	17.5	26.2	21.5	23.8	16.5	20.2	23.0	25.7
<b>Number of establishments</b>									
1	4.6	5.7	7.3	6.4	6.4	6.8	6.0	6.7	11.5
2 to 5	6.0	11.9	11.2	10.6	14.8	11.8	11.6	11.2	17.8
6 to 10	11.5	0.0	35.4	20.6	15.3	17.6	16.7	18.2	21.0
11 to 20	18.0	71.0	61.5	53.0	20.1	16.2	17.8	15.5	19.8
More than 20	18.6	0.0	71.7	70.9	37.7	41.5	26.8	12.1	13.2
Currently unoccupied	18.7	23.6	37.8	74.3	54.5	45.9	36.9	47.7	50.2
<b>Campus or complex activity</b>									
Not part of a campus or complex	4.3	5.7	7.2	7.4	7.7	7.7	6.5	6.7	10.9
Primary or secondary school	12.1	18.7	25.0	22.6	17.3	16.6	17.3	16.0	60.4
College or university	21.8	57.8	42.9	34.8	25.5	22.8	23.1	24.4	28.1
Office complex	12.7	23.1	26.4	46.4	25.3	23.8	19.1	17.7	24.3
Retail complex	13.2	23.1	23.2	20.9	22.6	22.8	22.4	22.3	30.4
Storage complex	14.4	23.9	22.4	22.8	34.9	26.2	26.6	22.9	28.2
Religious campus or complex	11.5	24.0	21.7	19.8	24.6	27.8	37.3	38.8	99.6
Health care complex	18.0	41.1	45.6	29.0	38.5	26.4	16.7	15.3	11.5
Lodging or resort complex	15.1	20.9	41.8	29.5	30.9	50.0	65.8	45.7	44.0
Transportation complex	34.3	51.2	64.4	53.4	106.5	51.6	105.1	35.9	51.6
Government complex	18.1	23.7	56.8	31.3	52.6	44.6	29.9	24.6	42.2
Other type of campus or complex	9.2	15.6	18.1	18.1	20.8	18.7	22.3	14.6	33.7
<b>Predominant exterior wall material</b>									
Brick, stone, or stucco	5.3	7.5	7.3	7.5	5.9	6.3	8.1	7.0	11.0
Concrete (block or poured)	5.3	10.5	13.7	11.1	12.0	9.9	9.3	9.5	18.2
Concrete panels	12.1	34.8	40.5	29.4	22.1	15.6	16.5	12.9	15.1
Siding or shingles	7.3	7.7	19.5	20.8	23.3	38.7	34.0	33.6	52.0
Metal panels	7.6	10.5	11.4	11.1	18.6	20.0	20.4	16.3	26.2
Window glass	21.3	99.8	73.5	47.9	41.7	34.4	28.7	14.0	15.1
Other	14.7	20.3	29.1	34.0	76.6	32.7	23.2	34.0	28.7

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Predominant roof material</b>									
Metal surfacing	6.2	8.1	9.1	9.4	13.2	11.0	14.2	18.2	28.6
Synthetic or rubber	6.0	12.4	12.2	11.0	10.0	8.2	7.7	6.2	9.0
Built-up	7.7	11.8	15.2	14.0	11.0	8.8	10.8	8.6	14.3
Slate or tile shingles	10.1	15.3	21.2	18.0	20.6	22.0	30.3	29.3	33.7
Wooden materials (including shingles)	12.9	17.5	39.4	30.6	40.9	34.6	63.5	76.3	96.6
Asphalt, fiberglass, or other shingles	6.2	7.0	13.3	10.7	13.6	14.1	17.7	18.5	32.0
Concrete	20.6	29.0	62.1	47.9	38.0	23.3	24.5	21.8	28.6
Other	15.6	22.9	27.2	37.5	25.9	19.9	19.6	16.2	27.1
<b>Roof tilt</b>									
Flat	4.9	8.2	10.5	9.8	6.0	6.1	6.0	5.3	8.6
Shallow pitch	5.0	6.7	8.5	8.2	11.4	11.4	14.1	13.0	21.0
Steeper pitch	7.5	8.8	12.9	9.6	12.9	14.2	16.3	19.2	34.0
<b>Cool roof characteristics (more than one may apply)</b>									
White or reflective coating or paint	5.8	10.6	12.4	10.5	10.3	8.0	9.1	7.4	12.1
White or reflective tiles or shingles	15.4	24.0	36.4	23.9	28.0	24.9	21.5	23.1	30.2
Aluminum coating	8.8	10.6	17.7	18.8	25.7	18.5	18.7	25.5	30.1
Ballasted roof system	14.8	76.6	33.5	26.4	22.9	14.9	16.5	14.0	15.9
Other cool roof property	29.3	62.4	51.2	80.0	54.9	52.9	37.6	35.5	26.4
<b>Renovations since 2000 (more than one may apply)</b>									
Any type of renovation	5.0	8.2	8.8	7.8	8.6	7.0	6.8	5.9	7.2
Addition or annex	9.4	17.8	17.9	18.9	19.0	15.6	13.8	9.1	11.3
Reduction in floorspace	22.2	65.7	38.4	55.9	41.0	33.2	31.0	21.4	26.5
Roof replacement	6.8	11.6	14.1	12.6	14.3	9.2	9.7	8.2	10.7
Interior wall reconfiguration	6.0	10.4	13.8	13.7	13.7	10.5	9.6	7.6	8.7
Window replacement	9.5	14.2	17.0	19.1	15.3	12.4	14.0	12.9	14.9
HVAC equipment upgrade	7.0	12.5	12.5	10.1	10.0	9.0	8.6	6.7	8.4
Lighting upgrade	5.9	9.4	13.4	11.3	10.3	8.2	8.7	7.1	7.6
Electrical upgrade	7.1	10.9	16.0	17.3	13.6	12.6	11.7	8.9	9.5
Plumbing system upgrade	7.8	12.0	15.0	18.8	12.8	10.4	12.0	9.3	10.7
Insulation upgrade	9.2	13.7	25.4	18.8	15.6	15.5	13.6	14.0	15.2
Fire, safety, or security upgrade	6.2	11.6	16.6	14.3	10.6	9.8	9.6	7.4	9.9
Structural upgrade	13.9	20.0	30.5	31.1	21.7	21.6	20.3	12.2	16.8
Other	29.5	53.6	63.0	53.3	42.6	43.5	24.6	18.8	31.5
No renovations	4.3	5.6	6.9	6.8	7.8	7.8	8.8	8.3	17.2
Buildings constructed 2013 or later	11.9	16.5	24.3	23.0	15.9	14.4	19.7	18.5	28.8

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Energy sources (more than one may apply)</b>									
Electricity	3.9	5.2	5.8	5.6	5.6	5.3	5.6	5.0	7.8
Natural gas	4.8	7.7	8.1	6.7	6.5	5.6	6.3	5.6	8.3
Fuel oil	9.7	14.5	28.2	14.3	14.5	8.9	9.4	7.3	9.6
District heat	14.7	80.7	40.2	29.6	27.8	19.7	24.1	20.2	13.1
District chilled water	20.1	62.9	70.7	32.2	33.6	27.5	26.6	22.1	20.8
Propane	10.0	13.7	17.2	18.7	17.7	15.5	14.2	12.0	24.0
Solar	15.5	39.5	34.4	26.8	25.4	21.6	18.0	15.6	23.0
Wood, coal, and other	17.3	27.3	29.0	30.9	38.5	42.6	38.4	37.7	50.5
<b>Space-heating energy sources (more than one may apply)</b>									
Electricity	4.7	6.7	8.6	8.2	7.6	7.5	7.4	6.9	10.3
Natural gas	5.2	8.3	9.1	7.2	6.6	6.1	6.2	5.9	9.9
Fuel oil	13.9	19.9	23.5	26.0	28.9	24.9	25.7	19.4	23.2
District heat	15.4	80.7	42.8	30.5	28.2	19.7	24.1	21.4	13.2
Propane	13.5	16.5	22.5	24.1	33.8	28.4	32.1	33.4	88.8
Other sources <sup>b</sup>	21.3	29.2	37.7	40.2	44.0	90.0	51.0	67.4	0.0
<b>Primary space-heating energy source</b>									
Electricity	6.4	8.0	11.4	11.5	8.8	10.4	8.2	9.4	13.2
Natural gas	5.5	8.8	9.3	7.8	7.5	6.4	6.8	6.1	11.0
Fuel oil	16.1	21.4	27.4	29.1	46.5	34.5	36.2	35.0	63.1
District heat	15.8	80.7	42.8	31.7	27.9	20.7	25.9	23.1	14.1
Propane	17.5	20.0	27.3	31.6	40.0	41.2	55.8	62.8	70.8
Other sources <sup>b</sup>	22.4	32.6	52.9	56.1	77.4	0.0	62.8	49.5	0.0
<b>Cooling energy sources (more than one may apply)</b>									
Electricity	3.9	5.7	6.0	5.8	5.8	5.2	5.6	4.8	8.1
Natural gas	37.3	73.9	0.0	0.0	69.6	65.3	61.1	41.6	33.1
District chilled water	20.1	62.9	70.7	32.2	33.6	27.5	26.6	22.1	20.8
<b>Water-heating energy sources (more than one may apply)</b>									
Electricity	4.0	5.7	7.7	8.0	7.2	8.7	7.1	6.5	9.5
Natural gas	5.5	9.9	10.1	8.3	7.9	6.0	6.5	6.2	11.0
Fuel oil	24.0	32.3	54.1	36.4	42.6	44.6	29.3	35.2	30.8
District heat	17.4	0.0	52.8	41.4	49.3	26.3	26.8	18.2	15.0
Propane	15.8	23.3	33.9	30.5	34.5	29.6	36.3	39.2	50.6
<b>Cooking energy sources (more than one may apply)</b>									
Electricity	5.7	8.1	10.4	11.2	9.5	8.2	7.1	5.7	9.0
Natural gas	5.4	12.9	14.6	12.8	10.6	7.4	8.4	5.6	8.7
Propane	14.8	17.2	37.3	25.1	35.1	19.9	22.5	25.5	45.4

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Energy end uses (more than one may apply)</b>									
Buildings with space heating	4.1	5.6	6.6	5.8	5.7	5.3	5.6	5.1	7.9
Buildings with cooling	3.9	5.6	5.9	5.6	5.8	5.1	5.6	4.8	7.8
Buildings with water heating	3.9	5.8	6.3	5.5	5.7	5.3	5.6	5.0	7.8
Buildings with cooking	5.0	8.1	8.7	8.2	8.1	6.5	6.8	5.0	7.7
Buildings with manufacturing	11.3	21.5	26.0	18.9	22.9	15.4	15.0	14.8	28.4
Buildings with electricity generation	7.4	13.5	22.0	12.4	12.5	7.0	7.5	6.0	9.2
Buildings with lighting	3.9	5.2	5.8	5.6	5.5	5.3	5.6	5.0	7.8
<b>Percent of floorspace heated</b>									
Not heated	8.2	9.0	13.7	20.9	31.4	27.0	31.5	29.3	46.3
1 to 50%	8.5	11.7	19.9	14.0	17.6	17.6	14.4	14.5	28.5
51 to 99%	6.7	12.6	12.4	11.4	12.2	11.4	13.0	12.5	12.7
100%	4.1	5.7	7.9	6.6	7.0	6.8	6.6	6.0	9.1
<b>Percent of floorspace cooled</b>									
Not cooled	7.1	8.0	13.7	18.1	28.6	34.0	24.9	30.6	0.0
1 to 50%	5.9	11.4	11.5	10.2	12.1	10.5	12.5	11.2	19.3
51 to 99%	6.6	10.4	12.4	11.5	10.3	9.4	10.6	10.4	10.9
100%	4.3	6.0	8.1	6.9	8.6	6.9	7.5	5.9	9.6
<b>Percent lit when open</b>									
0%	35.1	47.3	43.2	0.0	50.4	0.0	10.0	50.8	0.0
1 to 50%	6.7	10.0	13.7	10.8	15.2	16.1	20.7	23.1	24.4
51 to 99%	4.8	7.5	8.0	7.8	8.6	7.3	7.1	6.5	12.8
100%	4.7	6.1	8.8	8.0	7.2	7.1	8.6	6.9	9.2
Building never open or electricity not used	11.6	14.2	23.5	35.9	46.3	42.5	29.5	36.5	50.2
<b>Percent lit during off hours</b>									
0%	6.5	7.4	10.2	9.7	15.8	15.9	20.7	22.5	75.1
1 to 50%	3.8	5.9	7.3	6.4	5.9	5.8	6.2	5.5	8.9
51 to 100%	10.6	19.9	26.6	24.2	21.3	17.5	17.7	13.6	11.9
Building always open with no off hours	15.2	27.3	31.8	39.8	25.3	27.0	31.7	23.5	36.3
Electricity not used	16.0	18.3	30.4	46.1	5.5	54.4	91.6	79.3	0.0

Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	All buildings	Building size							
		1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Heating equipment (more than one may apply)</b>									
Packaged heating units	4.0	6.7	7.5	8.0	6.7	7.0	7.3	6.4	11.8
Furnaces	7.2	10.2	11.4	9.4	12.7	14.1	15.5	16.6	38.4
Individual space heaters	5.9	7.3	13.4	9.7	12.4	9.7	10.1	9.4	15.7
Boilers	6.2	12.7	18.0	13.1	9.2	6.9	6.7	5.9	12.0
Heat pumps	7.7	12.9	16.7	12.8	14.8	11.3	12.8	10.7	15.2
District heat	15.4	80.7	42.8	30.5	28.2	19.7	24.1	21.4	13.2
Duct reheat	12.6	29.6	35.6	27.4	24.5	20.3	12.0	11.3	14.5
Other	46.4	0.0	50.1	74.2	62.7	57.6	39.7	40.4	71.9
<b>Cooling equipment (more than one may apply)</b>									
Packaged air-conditioning units	4.3	7.2	7.3	7.9	6.5	6.0	7.1	5.9	9.4
Residential-type central air conditioners	7.6	10.8	11.3	10.0	13.6	11.1	12.6	11.3	15.8
Individual air conditioners	6.6	9.8	13.3	12.1	15.2	11.0	13.7	12.5	21.4
Central chillers	9.0	62.0	37.6	21.6	14.8	9.6	7.6	7.2	9.9
Heat pumps	11.0	19.8	23.8	13.9	18.1	12.7	11.4	11.8	17.4
District chilled water	20.1	62.9	70.7	32.2	33.6	27.5	26.6	22.1	20.8
Swamp coolers	12.8	27.2	33.5	24.2	27.7	24.8	30.9	26.2	36.2
Other	53.2	50.8	0.0	70.2	74.3	0.0	3.9	61.5	76.6
<b>HVAC features (more than one may apply)</b>									
Economizer cycle	5.6	14.7	15.9	9.8	8.8	6.5	7.0	5.6	8.8
Variable air volume (VAV) system	8.4	15.5	18.5	13.2	9.8	9.0	7.0	6.7	8.9
Dedicated outside air system (DOAS)	11.0	24.5	23.0	18.6	20.3	13.8	13.3	12.4	16.9
Demand controlled ventilation (DCV)	8.8	16.3	17.9	20.0	16.1	14.1	13.4	10.4	15.6
Regular HVAC maintenance	4.2	6.6	7.1	6.5	6.2	4.9	5.8	5.1	8.0
Building automation system (BAS) controls heating or cooling	6.4	11.9	16.0	11.3	8.3	6.3	5.9	5.2	8.2
Internet-connected or smart thermostat	12.2	19.2	17.9	21.2	19.1	17.2	21.7	26.0	35.9
Programmable thermostat	4.7	6.4	10.3	9.0	10.3	10.0	15.2	15.5	24.0
<b>Main equipment replaced since 2000 (more than one may apply)</b>									
Heating	4.9	8.0	9.8	8.1	11.1	8.5	7.8	8.3	11.5
Cooling	4.8	8.0	9.9	9.1	10.9	8.3	9.7	8.7	13.3
<b>Water-heating equipment</b>									
Centralized system	4.4	6.7	6.6	5.9	6.4	6.2	6.5	6.9	11.4
Distributed system	8.9	12.1	15.4	14.3	12.1	11.9	13.7	13.8	17.7
Combination of centralized and distributed systems	8.8	18.3	26.9	19.2	15.0	12.3	10.1	7.2	11.4



Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018

RSEs for number of buildings

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Generation technologies (more than one may apply)</b>									
Reciprocating engine generators	8.8	16.0	27.0	13.5	13.9	7.8	8.3	6.3	10.0
Solar panels	15.4	37.1	34.4	27.1	25.4	21.6	18.3	15.9	23.0
Other generation technology	21.4	38.1	50.2	49.4	46.3	46.5	22.2	24.0	28.3
<b>Lighting equipment types (more than one may apply)</b>									
Incandescent	7.8	12.4	12.1	12.2	11.4	10.9	10.6	9.8	12.2
Standard fluorescent	4.2	6.2	6.4	6.7	6.5	5.8	6.3	5.5	7.8
Compact fluorescent	5.2	9.8	11.9	9.5	9.2	7.8	8.0	6.9	9.6
High-intensity discharge	9.8	26.5	31.4	21.9	17.0	11.3	15.9	9.6	12.7
Halogen	8.0	14.3	18.7	14.1	12.3	12.0	12.3	9.8	11.1
LED	3.6	5.6	7.2	6.6	7.1	5.6	6.2	5.9	8.0
Other	57.3	51.3	0.0	50.3	0.0	60.3	10.2	70.9	0.0
<b>Refrigeration equipment (more than one may apply)</b>									
Any refrigeration	4.1	6.1	6.8	6.3	6.1	5.4	5.6	5.2	8.2
Walk-in units	5.4	10.5	12.9	13.4	11.9	7.2	7.2	5.2	8.9
Cases or cabinets	5.8	9.9	13.2	12.0	11.5	8.4	7.4	5.9	9.6
Large cold storage areas	17.2	34.3	46.7	52.0	36.9	22.4	20.6	18.8	22.1
Commercial ice makers	5.5	10.0	13.5	10.8	10.0	6.5	6.4	6.2	9.1
Residential-type or compact units	4.3	6.5	7.3	6.6	5.9	5.8	6.0	6.1	8.6
Vending machines	6.1	14.0	17.3	14.5	8.1	6.4	5.9	5.5	8.9
No refrigeration	5.3	6.5	10.3	10.8	14.9	14.0	13.7	17.2	25.7
<b>Office equipment (more than one may apply)</b>									
Desktop computers	4.0	6.1	6.7	6.1	5.5	5.1	5.7	5.1	7.8
With multiple monitors	5.0	10.7	9.5	8.8	8.2	6.7	6.9	5.2	7.9
Laptop computers	4.0	6.7	7.4	7.3	6.3	5.7	5.3	5.3	7.8
Dedicated servers	4.9	10.1	10.2	9.5	7.6	6.0	5.7	5.5	8.4
Tablets charged in building	4.4	8.4	9.9	8.7	7.8	5.8	6.4	5.7	8.3
Large floor-standing office devices <sup>c</sup>	4.4	12.0	9.3	8.8	6.4	5.4	5.7	5.5	8.4
Smaller desktop office devices <sup>c</sup>	4.1	5.7	7.5	6.4	6.1	5.4	5.7	5.5	8.2
Interactive whiteboards	8.7	28.3	39.5	21.9	12.7	8.2	8.3	6.8	12.7
Televisions or video displays	3.8	6.3	8.5	6.9	5.3	5.5	5.5	5.4	7.9
Point-of-sale devices or cash registers	5.2	7.7	11.6	10.5	9.3	8.3	6.9	5.8	8.3

**Relative Standard Errors (RSEs) for Table B6. Building size, number of buildings, 2018**

**RSEs for number of buildings**

	Building size								
	All buildings	1,001 to 5,000 square feet	5,001 to 10,000 square feet	10,001 to 25,000 square feet	25,001 to 50,000 square feet	50,001 to 100,000 square feet	100,001 to 200,000 square feet	200,001 to 500,000 square feet	Over 500,000 square feet
<b>All buildings</b>	3.9	4.9	5.9	5.6	5.6	5.3	5.6	5.0	7.8
<b>Food preparation or serving areas in non-food service buildings (more than one may apply)</b>									
Snack bar, concession stand, or coffee shop	11.0	28.6	47.0	29.4	15.5	14.7	12.6	8.8	11.5
Fast food or small restaurant	9.4	25.2	29.0	21.6	23.2	13.4	11.6	9.9	11.8
Cafeteria or large restaurant	7.7	0.0	47.6	37.0	16.1	11.5	8.6	6.0	8.8
Commercial kitchen or food preparation area	8.5	37.9	30.2	15.2	12.9	9.8	8.2	6.8	11.4
Small kitchen area	6.5	10.4	11.3	12.5	10.1	9.6	11.0	7.9	11.7
<b>Separate computer areas (more than one may apply)</b>									
Server closet	5.3	14.0	10.7	9.3	7.6	5.7	5.5	5.5	8.3
Data center	13.1	49.9	49.1	32.3	21.0	13.8	11.2	8.3	12.9
Computer-based training room	8.4	33.0	37.8	18.2	14.2	8.3	9.6	6.8	12.0
Student or public computer center	8.0	28.5	23.0	25.0	12.3	9.3	10.3	7.8	16.4
<b>Window and interior lighting features (more than one may apply)</b>									
Multipaned windows	4.2	5.7	7.5	6.2	6.6	5.6	6.1	5.8	8.4
Tinted window glass	4.2	8.4	8.9	7.7	6.8	7.1	7.9	6.5	8.6
Reflective window glass	7.0	17.3	19.4	13.3	12.7	12.3	10.5	8.5	11.9
External overhangs or awnings	5.0	6.9	9.4	9.5	10.2	8.6	10.2	8.1	14.7
Skylights or atriums	7.1	18.7	17.0	12.7	10.9	10.6	8.6	7.5	11.0
Light scheduling	5.2	11.0	13.3	11.2	8.2	7.1	7.0	7.5	9.3
Occupancy sensors	6.5	14.1	19.0	11.1	7.8	5.9	7.3	6.3	8.4
Multilevel lighting or dimming	10.0	20.3	24.4	17.9	14.2	11.8	11.2	9.5	11.9
Daylight harvesting	12.0	27.5	39.7	25.3	15.5	16.1	14.0	12.9	11.6
Plug-load control	18.4	34.2	45.9	42.1	77.0	26.2	23.6	21.0	28.3
Demand responsive lighting	30.7	50.7	57.1	36.0	35.3	43.1	33.9	21.3	32.2
Building automation system (BAS) for lighting	9.3	21.2	28.2	17.2	14.3	10.2	9.1	7.7	11.4
<b>Electric vehicle (EV) charging</b>									
Charging stations associated with the building	11.5	39.1	40.7	22.6	20.0	14.6	14.1	10.0	11.9

Data source: U.S. Energy Information Administration, Forms EIA-871A of the 2018 Commercial Buildings Energy Consumption Survey

Note: RSE is a measure of the reliability or precision of a survey statistic. Variability occurs in survey statistics because the different samples that could be drawn would each produce different values for the survey statistics. *Estimation of Standard Errors* and *What is a Relative Standard Error (RSE)?* contain more information on how RSEs are estimated and used. Both references can be accessed from <https://www.eia.gov/consumption/commercial/survey-background-technical-information.php>.

<sup>a</sup>Climate zones are based on ASHRAE Standard 169-2021; see <https://www.eia.gov/consumption/commercial/maps.php#defined>.

<sup>b</sup>Other sources includes wood, coal, solar, and all other energy sources.

<sup>c</sup>Office devices refers to any combination of printers, copiers, scanners, or FAX machines.