

Release date: September 2021

Revised date: December 2022

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Building floorspace (square feet)										
1,001 to 5,000	2,833	373	810	1,076	573	8,025	1,126	2,269	2,979	1,651
5,001 to 10,000	1,359	157	416	459	328	10,204	1,154	3,021	3,542	2,488
10,001 to 25,000	981	145	288	338	209	15,838	2,371	4,469	5,656	3,342
25,001 to 50,000	386	58	115	128	86	13,957	2,140	4,064	4,716	3,036
50,001 to 100,000	218	30	57	89	41	15,302	2,195	3,942	6,312	2,853
100,001 to 200,000	93	19	20	36	18	13,003	2,659	2,759	4,999	2,586
200,001 to 500,000	40	8	10	15	7	11,776	2,397	3,062	4,203	2,115
Over 500,000	9	2	2	3	2	8,317	1,908	2,347	2,500	1,562
Principal building activity										
Education	437	44	90	153	150	13,623	2,545	3,837	4,967	2,275
Food sales	163	Q	58	71	Q	1,006	Q	404	249	Q
Food service	286	29	72	110	75	1,385	138	279	563	405
Health care	137	23	20	50	45	4,018	779	1,076	1,173	990
Inpatient	9	1	1	3	3	2,259	367	712	716	463
Outpatient	129	21	18	47	42	1,760	412	364	457	527
Lodging	207	34	68	55	50	6,976	1,207	1,661	2,379	1,729
Mercantile	517	60	139	207	112	10,781	1,394	2,625	4,463	2,300
Retail (other than mall)	350	49	97	138	67	5,193	606	1,482	2,163	943
Enclosed and strip malls	167	11	42	69	45	5,588	788	1,143	2,300	1,357
Office	970	138	265	375	193	16,662	3,196	4,336	5,703	3,427
Public assembly	488	91	141	168	88	7,192	1,107	1,890	2,711	1,485
Public order and safety	81	Q	Q	28	28	1,538	Q	Q	673	323
Religious worship	439	61	122	201	55	5,471	585	1,444	2,569	873
Service	867	144	305	237	181	6,240	1,268	2,223	1,684	1,066
Warehouse and storage	1,004	119	307	366	212	17,483	2,398	4,714	6,365	4,006
Other	113	22	41	36	15	2,435	744	601	809	281
Vacant	208	Q	78	87	35	1,612	Q	544	599	260
Year constructed										
Before 1920	329	101	116	72	40	3,600	1,285	1,113	790	412
1920 to 1945	379	70	142	109	58	5,646	1,589	1,914	1,251	891
1946 to 1959	517	80	135	170	132	6,937	1,539	1,714	2,420	1,264
1960 to 1969	685	122	207	204	152	10,360	2,045	2,806	3,758	1,752
1970 to 1979	831	79	256	311	184	13,061	2,263	3,889	4,243	2,666
1980 to 1989	794	92	180	329	193	13,465	2,015	2,933	5,244	3,272
1990 to 1999	921	107	237	354	223	15,535	1,948	4,110	6,158	3,320
2000 to 2009	924	82	281	377	183	17,500	2,107	4,846	7,050	3,497
2010 to 2018	537	59	164	215	99	10,319	1,159	2,609	3,994	2,557
Climate zone^a										
Cold or very cold	539	117	326	N	95	7,044	1,099	4,814	N	1,131
Cool	1,727	393	1,019	N	315	26,768	6,984	15,176	N	4,608
Mixed mild	1,216	283	374	386	Q	25,096	7,868	5,942	7,660	3,626
Warm	1,606	N	N	1,109	497	25,085	N	N	17,361	7,725
Hot or very hot	831	N	N	648	183	12,429	N	N	9,886	2,543

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Number of floors										
1	4,106	365	1,145	1,636	959	43,576	4,478	11,650	17,683	9,765
2	1,286	258	419	375	234	23,300	4,001	6,929	7,821	4,549
3	370	117	121	90	42	10,516	2,409	3,505	3,188	1,414
4 to 9	142	47	33	37	25	13,031	3,313	2,649	4,427	2,642
10 or more	16	7	2	5	3	6,000	1,751	1,199	1,787	1,262
Elevators and escalators (more than one may apply)										
Any elevators	503	119	135	154	95	36,501	8,202	9,377	12,038	6,885
1 elevator	366	86	108	106	65	14,215	3,109	4,062	4,660	2,384
2 to 5 elevators	121	29	25	42	26	13,316	3,009	3,326	4,455	2,526
6 or more elevators	16	4	3	6	4	8,970	2,085	1,988	2,924	1,974
Any escalators	14	3	Q	3	3	3,753	890	766	1,292	805
Number of workers (main shift)										
Fewer than 5	3,270	461	1,039	1,140	629	21,065	3,059	6,270	7,676	4,060
5 to 9	1,116	114	294	450	259	10,323	1,322	2,749	4,122	2,129
10 to 19	713	93	185	258	177	11,348	1,471	3,544	3,911	2,421
20 to 49	492	64	133	175	119	16,132	2,296	4,507	5,858	3,470
50 to 99	201	35	44	73	50	12,961	2,347	3,136	4,836	2,642
100 to 249	90	19	18	32	21	12,442	2,652	3,151	4,425	2,214
250 or more	37	8	6	14	9	12,152	2,803	2,576	4,078	2,695
Weekly operating hours										
Fewer than 40	1,370	155	491	486	236	10,766	1,390	3,282	4,043	2,051
40 to 48	1,483	156	387	595	344	18,826	2,318	4,905	7,411	4,191
49 to 60	1,250	233	321	410	287	22,845	4,062	5,738	8,352	4,693
61 to 84	645	92	145	266	143	14,736	2,746	4,062	5,016	2,912
85 to 167	465	59	138	163	105	10,038	1,822	2,935	3,138	2,143
Open continuously	705	98	237	223	148	19,213	3,612	5,011	6,948	3,642
Ownership and occupancy										
Nongovernment owned	4,982	708	1,483	1,803	988	74,728	12,696	20,467	26,255	15,311
Owner occupied	3,249	490	1,022	1,204	533	45,355	7,704	12,897	16,788	7,966
Leased to tenant or tenants	1,581	212	412	533	424	28,382	4,824	7,282	9,140	7,136
Unoccupied	152	Q	Q	66	Q	990	Q	Q	326	Q
Government owned	937	85	236	340	276	21,695	3,255	5,466	8,653	4,322
Federal	70	10	Q	31	13	1,946	288	406	914	337
State	256	16	47	106	87	6,888	919	1,329	3,215	1,425
Local	610	58	173	203	176	12,861	2,048	3,730	4,523	2,559
Party responsible for operation of energy systems										
Building owner	4,872	682	1,463	1,746	980	79,282	13,448	21,859	28,685	15,290
Business owner or tenant	831	93	199	327	213	12,842	2,034	2,842	4,674	3,292
Property management	97	Q	Q	32	45	1,994	265	430	725	573
Other	118	9	47	38	25	2,306	205	801	823	477

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Provider of direct input on energy-related equipment purchases										
Building owner	5,127	710	1,522	1,850	1,045	82,862	13,953	22,684	30,258	15,967
Business owner or tenant	483	55	104	188	136	7,585	1,234	1,729	2,704	1,918
Property management	49	Q	Q	17	Q	1,072	Q	Q	393	Q
Other	260	25	86	88	61	4,904	617	1,265	1,552	1,470
Number of establishments										
1	4,719	629	1,383	1,707	1,001	65,391	10,254	18,669	23,733	12,736
2 to 5	811	127	214	298	172	16,431	2,796	3,859	5,957	3,820
6 to 10	135	21	43	34	36	5,539	1,172	1,311	1,908	1,148
11 to 20	63	6	Q	26	17	3,894	759	736	1,533	867
More than 20	19	3	Q	7	5	3,999	785	967	1,412	835
Currently unoccupied	170	Q	61	71	Q	1,168	Q	390	365	Q
Campus or complex activity										
Not part of a campus or complex	3,622	494	1,099	1,350	680	56,609	10,146	16,521	19,547	10,395
Primary or secondary school	247	20	20	86	122	5,106	711	990	2,112	1,293
College or university	103	12	Q	44	24	3,761	712	653	1,725	671
Office complex	141	20	32	51	37	3,823	666	602	1,468	1,087
Retail complex	250	26	76	69	79	4,573	547	1,125	1,679	1,223
Storage complex	418	36	144	147	91	5,684	673	1,825	2,012	1,174
Religious campus or complex	253	Q	52	123	46	3,209	Q	541	1,825	528
Health care complex	60	Q	12	25	14	2,838	485	911	754	687
Lodging or resort complex	102	Q	Q	34	31	1,575	Q	Q	572	638
Transportation complex	36	Q	Q	10	Q	774	Q	Q	Q	Q
Government complex	124	Q	50	44	18	1,706	Q	581	574	377
Other	563	101	182	160	119	6,765	1,152	1,885	2,231	1,497
Predominant exterior wall material										
Brick, stone, or stucco	2,490	303	613	1,014	561	46,134	8,079	11,616	18,335	8,104
Concrete (block or poured)	935	152	236	335	212	19,357	3,608	4,672	6,316	4,761
Concrete panels	137	7	28	58	44	8,331	883	2,110	3,015	2,323
Siding or shingles	948	218	333	218	178	5,992	1,294	2,217	1,124	1,357
Metal panels	1,250	84	485	462	220	12,198	1,147	4,378	4,899	1,774
Window glass	19	3	2	8	6	2,192	396	450	685	661
Other	139	26	22	48	43	2,219	544	489	532	653
Predominant roof material										
Metal surfacing	2,198	159	665	942	432	20,936	1,852	5,702	9,752	3,629
Synthetic or rubber	940	188	272	266	214	31,563	7,029	8,655	9,849	6,030
Built-up	708	62	190	256	200	19,308	3,081	5,119	6,955	4,154
Slate or tile shingles	376	63	76	144	93	3,997	710	892	1,318	1,077
Wooden materials (including shingles)	166	Q	Q	45	71	1,568	Q	Q	227	814
Asphalt, fiberglass, or other shingles	1,311	257	468	394	192	14,058	2,351	4,528	4,588	2,591
Concrete	83	Q	Q	39	16	1,968	249	Q	989	513
Other	136	21	11	57	47	3,026	393	577	1,231	825

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Roof tilt										
Flat	1,914	259	462	643	551	54,253	10,648	13,377	18,431	11,797
Shallow pitch	2,313	247	744	891	431	27,609	2,699	8,448	10,882	5,580
Steeper pitch	1,691	287	514	608	282	14,561	2,604	4,108	5,594	2,255
Cool roof characteristics (more than one may apply)										
White or reflective coating or paint	1,285	94	371	434	386	32,799	3,767	7,627	12,470	8,934
White or reflective tiles or shingles	140	17	28	60	35	2,713	452	515	1,215	532
Aluminum coating	528	58	108	268	94	6,149	1,114	956	3,100	978
Ballasted roof system	114	20	36	24	33	6,277	1,273	2,295	1,623	1,085
Other cool roof property	35	Q	Q	16	13	1,603	386	Q	698	241
Renovations since 2000 (more than one may apply)										
Any type of renovation	2,032	343	565	747	377	45,165	8,419	12,619	15,951	8,176
Addition or annex	327	56	112	116	44	10,854	1,893	4,018	3,410	1,534
Reduction in floorspace	35	5	6	18	Q	1,784	422	538	585	238
Roof replacement	847	161	202	350	133	20,862	4,394	5,933	7,265	3,270
Interior wall reconfiguration	709	103	213	262	131	21,283	4,209	6,338	7,074	3,661
Window replacement	484	105	152	144	83	10,977	2,667	3,264	3,124	1,922
HVAC equipment upgrade	1,006	181	254	393	178	27,575	5,893	7,252	9,635	4,794
Lighting upgrade	1,012	192	304	324	192	29,098	5,958	8,390	9,312	5,438
Electrical upgrade	565	109	144	210	102	15,761	3,872	4,485	4,924	2,480
Plumbing system upgrade	584	113	151	218	103	15,537	3,759	4,158	4,908	2,711
Insulation upgrade	307	79	77	112	39	7,980	2,257	2,055	2,406	1,263
Fire, safety, or security upgrade	570	120	151	199	101	19,985	4,398	5,671	6,570	3,347
Structural upgrade	147	43	24	60	20	4,203	1,045	1,150	1,126	882
Other	43	Q	Q	10	21	1,168	Q	Q	606	233
No renovations	3,530	415	1,048	1,262	805	43,832	6,619	11,442	16,367	9,403
Buildings constructed 2013 or later	357	35	107	133	81	7,426	913	1,871	2,589	2,053
Energy sources (more than one may apply)										
Electricity	5,613	769	1,647	2,011	1,186	94,844	15,811	25,488	34,353	19,192
Natural gas	2,974	373	982	894	725	67,722	11,331	20,410	21,895	14,086
Fuel oil	583	230	120	144	89	21,185	5,930	4,585	6,794	3,875
District heat	86	29	15	25	17	6,745	1,823	1,507	2,130	1,284
District chilled water	55	5	3	33	14	4,288	520	746	2,059	963
Propane	676	157	225	219	75	10,157	2,470	2,381	3,358	1,948
Solar	99	20	14	12	53	3,820	1,214	650	531	1,424
Wood, coal, and other	180	47	61	45	26	2,113	415	617	676	405
Space-heating energy sources (more than one may apply)										
Electricity	2,563	264	534	1,185	580	45,603	6,375	9,632	19,917	9,679
Natural gas	2,587	334	930	712	611	58,042	9,984	18,816	17,479	11,764
Fuel oil	266	183	Q	39	Q	4,134	2,515	710	728	180
District heat	83	29	15	22	17	6,547	1,779	1,428	2,092	1,247
Propane	431	74	191	128	38	3,896	920	1,111	1,264	601
Other sources ^b	127	Q	50	Q	Q	927	Q	375	Q	Q

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Primary space-heating energy source										
Electricity	1,856	134	328	990	404	27,618	2,650	4,676	14,237	6,054
Natural gas	2,344	313	878	615	538	50,060	8,893	17,082	14,158	9,927
Fuel oil	222	162	Q	28	Q	2,223	1,632	Q	408	Q
District heat	78	29	15	19	16	6,090	1,696	1,363	1,873	1,159
Propane	338	57	163	91	Q	2,290	508	797	751	Q
Other sources ^b	63	Q	Q	Q	Q	380	Q	Q	Q	Q
Cooling energy sources (more than one may apply)										
Electricity	4,584	580	1,207	1,838	960	84,526	14,054	22,160	31,905	16,406
Natural gas	4	Q	Q	Q	Q	400	Q	Q	Q	Q
District chilled water	55	5	3	33	14	4,288	520	746	2,059	963
Water-heating energy sources (more than one may apply)										
Electricity	2,785	368	712	1,184	521	47,125	7,664	10,882	19,834	8,745
Natural gas	1,885	215	613	557	500	46,652	6,978	14,118	14,834	10,722
Fuel oil	72	63	Q	Q	Q	1,807	1,154	194	322	Q
District heat	38	14	7	11	6	4,206	1,380	958	1,167	700
Propane	145	37	Q	59	Q	1,947	482	Q	860	Q
Cooking energy sources (more than one may apply)										
Electricity	1,216	152	381	445	237	30,509	5,198	9,198	10,589	5,523
Natural gas	727	94	197	222	214	27,705	5,216	7,671	9,205	5,614
Propane	159	35	18	66	40	3,101	1,017	290	1,227	566
Energy end uses (more than one may apply)										
Buildings with space heating	4,901	710	1,417	1,755	1,019	88,661	15,465	24,096	31,527	17,572
Buildings with cooling	4,631	585	1,209	1,865	972	87,506	14,557	22,577	33,255	17,118
Buildings with water heating	4,595	655	1,284	1,690	966	87,717	15,001	23,634	31,781	17,301
Buildings with cooking	1,738	242	499	615	382	43,580	8,071	12,282	15,176	8,051
Buildings with manufacturing	322	34	106	101	81	6,871	979	2,302	2,067	1,522
Buildings with electricity generation	706	140	195	236	135	29,457	6,798	7,193	9,746	5,720
Buildings with lighting	5,503	758	1,591	1,981	1,174	94,103	15,760	25,183	34,055	19,106
Percentage of floorspace heated										
Not heated	1,017	83	302	388	245	7,762	486	1,837	3,380	2,060
1 to 50%	693	87	172	270	165	10,620	1,095	1,661	4,818	3,046
51 to 99%	905	131	193	362	218	20,174	3,212	4,032	8,281	4,648
100%	3,303	492	1,052	1,122	636	57,867	11,158	18,402	18,428	9,878
Percentage of floorspace cooled										
Not cooled	1,288	208	510	278	292	8,917	1,394	3,356	1,652	2,515
1 to 50%	1,111	170	311	394	236	19,722	3,624	5,427	6,519	4,152
51 to 99%	998	168	247	388	195	26,277	5,243	6,607	9,780	4,647
100%	2,522	246	652	1,083	541	41,507	5,691	10,543	16,955	8,319

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Percentage lit when open										
0%	Q	N	Q	Q	Q	Q	N	Q	Q	Q
1 to 50%	1,280	203	455	425	197	14,172	2,018	4,754	5,048	2,352
51 to 99%	1,784	249	500	611	424	38,847	6,450	10,568	13,858	7,971
100%	2,272	293	547	899	533	39,877	7,115	9,323	14,811	8,628
Building never open or electricity not used	513	47	174	186	105	2,998	367	1,040	945	646
Percentage lit during off hours										
0%	2,062	303	641	658	461	15,578	2,230	4,352	5,419	3,577
1 to 50%	3,246	428	904	1,244	669	69,800	11,610	19,201	25,236	13,753
51 to 100%	240	28	82	87	42	7,243	1,480	1,524	2,778	1,461
Building always open with no off hours	64	10	20	21	13	2,223	492	410	921	401
Electricity not used	305	Q	Q	132	78	1,579	Q	Q	554	440
Heating equipment (more than one may apply)										
Packaged heating units	2,187	212	467	963	545	48,064	6,568	12,471	18,507	10,518
Furnaces	1,621	221	743	403	254	17,272	2,562	7,055	4,552	3,103
Individual space heaters	1,246	185	393	380	288	21,122	3,794	6,298	6,794	4,236
Boilers	703	226	217	130	131	28,831	7,386	8,614	7,445	5,385
Heat pumps	673	90	113	314	157	15,110	2,502	3,025	6,318	3,265
District heat	83	29	15	22	17	6,547	1,779	1,428	2,092	1,247
Duct reheat	134	17	26	65	26	7,418	1,069	1,694	3,660	996
Other	17	Q	Q	Q	Q	821	Q	Q	Q	Q
Cooling equipment (more than one may apply)										
Packaged air-conditioning units	2,565	300	569	1,089	607	56,290	9,366	14,019	21,324	11,581
Residential-type central air conditioners	1,309	132	541	460	176	18,270	2,790	6,687	6,230	2,563
Individual air conditioners	735	168	170	258	140	13,619	3,657	3,387	4,428	2,146
Central chillers	202	37	54	64	46	17,926	3,722	4,575	6,522	3,107
Heat pumps	492	83	87	217	105	11,098	2,394	2,034	4,170	2,501
District chilled water	55	5	3	33	14	4,288	520	746	2,059	963
Swamp coolers	85	Q	Q	16	65	2,070	Q	Q	439	1,311
Other	Q	Q	N	Q	Q	Q	Q	N	Q	Q
HVAC features (more than one may apply)										
Economizer cycle	747	116	202	200	229	34,087	6,948	10,004	9,425	7,711
Variable air volume (VAV) system	698	74	218	248	158	29,268	5,195	7,959	10,180	5,934
Dedicated outside air system (DOAS)	249	39	61	83	66	9,027	1,743	2,202	3,426	1,655
Demand controlled ventilation (DCV)	349	69	80	114	85	10,474	2,763	2,445	3,399	1,866
Regular HVAC maintenance	3,554	496	903	1,364	792	78,015	13,396	19,821	28,848	15,949
Building automation system (BAS) controls heating or cooling	933	132	229	333	240	40,462	7,665	10,073	14,346	8,378
Internet-connected or smart thermostat	325	42	53	148	82	5,966	652	1,229	2,899	1,185
Programmable thermostat	1,545	246	405	516	379	20,882	3,733	5,846	6,437	4,865

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Main equipment replaced since 2000 (more than one may apply)										
Heating	1,937	306	557	696	378	32,451	6,012	9,489	11,249	5,701
Cooling	1,269	243	364	449	213	23,013	5,307	6,184	7,636	3,886
Water-heating equipment										
Centralized system	3,538	483	1,045	1,297	714	59,280	9,881	16,972	21,111	11,316
Distributed system	782	139	173	284	187	14,307	2,886	3,220	5,109	3,093
Combination of centralized and distributed systems	274	33	66	109	66	14,129	2,234	3,442	5,561	2,892
Generation technologies (more than one may apply)										
Reciprocating engine generators	580	112	173	214	80	25,163	5,771	6,335	8,899	4,158
Solar panels	94	20	14	12	48	3,750	1,211	636	520	1,384
Other generation technology	43	12	11	11	9	2,055	470	541	548	497
Lighting equipment types (more than one may apply)										
Incandescent	1,100	191	381	357	170	21,081	4,136	5,931	7,274	3,740
Standard fluorescent	4,012	552	1,128	1,493	839	72,912	12,356	19,199	26,601	14,756
Compact fluorescent	1,130	182	363	351	235	33,691	6,318	9,007	11,489	6,876
High-intensity discharge (HID)	238	44	74	72	48	11,356	2,096	3,054	4,244	1,962
Halogen	552	71	129	222	130	15,012	2,581	3,297	5,936	3,198
LED	2,593	439	716	851	587	61,849	11,641	16,613	20,663	12,931
Other	Q	N	Q	Q	Q	Q	N	Q	Q	Q
Refrigeration equipment (more than one may apply)										
Any refrigeration	3,850	533	1,061	1,453	803	77,589	12,962	21,011	28,694	14,922
Walk-in units	706	101	201	238	166	29,384	5,493	8,043	10,369	5,479
Cases or cabinets	837	107	242	319	168	28,517	5,324	7,642	10,221	5,331
Large cold storage areas	69	11	19	26	13	3,592	540	705	1,343	1,004
Commercial ice makers	872	88	221	347	217	34,672	5,157	8,764	13,922	6,829
Residential-type or compact units	3,321	461	938	1,262	661	64,735	10,759	17,793	23,691	12,492
Vending machines	800	105	207	338	150	42,071	7,167	11,359	16,051	7,494
No refrigeration	2,068	259	659	689	461	18,834	2,989	4,921	6,213	4,710
Office equipment (more than one may apply)										
Desktop computers	3,804	526	978	1,448	851	82,012	13,897	21,432	30,192	16,492
With multiple monitors	1,504	213	421	543	327	50,844	8,928	12,903	18,299	10,714
Laptop computers	2,786	395	796	1,037	558	69,375	11,999	18,798	25,117	13,461
Dedicated servers	1,400	192	361	512	335	51,595	9,474	13,726	17,711	10,685
Tablets charged in building	1,556	234	409	577	336	48,778	8,447	12,818	17,690	9,823
Large floor-standing office devices ^c	1,456	217	381	557	300	54,088	9,853	14,091	19,509	10,636
Smaller desktop office devices ^c	3,560	508	962	1,344	746	74,467	13,145	19,163	27,409	14,750
Interactive whiteboards	262	34	67	93	68	16,939	3,542	4,667	5,892	2,838
Televisions or video displays	2,451	347	663	940	501	63,618	11,323	16,168	23,646	12,481
Point-of-sale devices or cash registers	1,420	197	376	532	316	33,606	6,127	9,093	11,564	6,822

Table B3. Census region, number of buildings and floorspace, 2018

	Number of buildings (thousand)					Total floorspace (million square feet)				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	5,918	793	1,719	2,143	1,264	96,423	15,951	25,932	34,907	19,633
Food preparation or serving areas in non-food service buildings (more than one may apply)										
Snack bar, concession stand, or coffee shop	144	12	46	49	38	10,361	1,614	2,935	3,369	2,443
Fast food or small restaurant	160	18	47	49	46	9,759	1,657	2,581	3,165	2,356
Cafeteria or large restaurant	129	28	39	38	25	14,531	3,161	4,250	4,837	2,283
Commercial kitchen or food preparation area	284	52	68	106	58	17,698	3,289	4,923	6,243	3,244
Small kitchen area	1,018	149	315	346	208	20,519	3,784	6,211	6,683	3,840
Separate computer areas (more than one may apply)										
Server closet	1,237	159	327	482	270	48,722	8,779	12,544	17,501	9,898
Data center	116	25	16	43	32	11,383	2,570	3,036	3,409	2,369
Computer-based training room	228	23	53	90	61	16,556	2,945	4,509	5,745	3,356
Student or public computer center	236	22	52	92	70	12,527	2,273	3,202	4,635	2,418
Window and interior lighting features (more than one may apply)										
Multipaned windows	3,527	512	1,108	1,191	716	72,694	12,812	20,761	25,145	13,977
Tinted window glass	1,679	145	386	724	424	44,363	6,274	10,859	17,061	10,169
Reflective window glass	497	50	137	164	146	17,929	2,618	4,768	5,450	5,093
External overhangs or awnings	1,513	131	378	601	403	28,718	3,445	6,990	11,241	7,042
Skylights or atriums	509	66	105	189	149	19,815	3,193	5,228	6,385	5,009
Light scheduling	910	133	227	314	236	33,552	6,304	8,096	11,521	7,630
Occupancy sensors	1,025	150	302	291	282	44,304	9,010	11,768	14,044	9,482
Multilevel lighting or dimming	332	56	95	105	77	14,424	2,189	4,420	4,496	3,318
Daylight harvesting	138	14	32	54	38	7,244	1,350	1,390	2,488	2,017
Plug-load control	58	3	12	25	18	1,961	181	569	764	446
Demand responsive lighting	98	Q	Q	13	24	2,045	354	684	538	468
Building automation system (BAS) for lighting	317	31	59	124	103	16,645	2,713	3,673	6,054	4,205
Electric vehicle (EV) charging										
Charging stations associated with the building	132	21	24	41	46	10,165	1,658	2,083	3,348	3,075

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.

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

^b*Other sources* includes wood, coal, solar, and all other energy sources.

^c*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.

Release date: September 2021

Revised date: December 2022

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Building floorspace (square feet)										
1,001 to 5,000	4.9	12.9	13.2	9.3	9.6	5.3	14.6	14.5	9.7	8.7
5,001 to 10,000	5.9	14.6	16.6	9.9	10.2	5.8	14.0	16.1	10.3	10.1
10,001 to 25,000	5.6	12.6	13.0	10.5	11.4	6.1	14.6	13.5	11.6	12.3
25,001 to 50,000	5.6	12.5	12.9	9.8	12.0	5.6	12.8	13.6	9.2	11.8
50,001 to 100,000	5.3	12.7	14.1	8.6	10.3	5.3	11.6	14.2	8.6	10.5
100,001 to 200,000	5.6	10.8	11.0	10.0	12.5	5.5	11.3	10.6	9.2	13.2
200,001 to 500,000	5.0	11.7	11.8	7.6	11.4	5.0	11.4	12.1	7.3	11.1
Over 500,000	7.8	15.2	13.5	14.7	24.3	8.6	14.3	14.2	15.7	29.3
Principal building activity										
Education	7.8	17.4	20.2	14.5	13.1	5.3	8.9	11.6	10.5	11.5
Food sales	14.3	53.7	24.3	22.2	37.1	17.0	59.3	29.8	27.3	26.2
Food service	7.7	21.5	14.2	13.2	16.9	8.5	27.4	12.5	13.6	16.9
Health care	9.8	20.8	31.0	15.9	18.1	5.5	15.2	11.5	9.7	14.5
Inpatient	19.4	43.4	19.6	27.0	48.2	7.2	20.9	14.9	10.6	19.9
Outpatient	10.3	21.4	33.6	16.3	19.2	8.0	17.8	19.7	15.6	15.8
Lodging	9.4	22.6	18.7	17.3	16.7	8.3	18.3	12.9	13.9	21.9
Mercantile	7.3	19.1	21.3	11.5	12.6	6.0	13.6	16.2	10.3	9.7
Retail (other than mall)	10.1	23.2	26.4	15.6	18.6	8.6	15.9	22.3	13.2	16.2
Enclosed and strip malls	7.6	25.5	26.3	17.3	18.4	7.6	25.5	17.5	14.0	13.0
Office	7.2	21.4	18.4	11.9	13.1	5.5	12.1	11.9	10.7	10.2
Public assembly	9.1	22.7	16.6	17.8	13.3	5.8	13.5	11.9	10.7	13.2
Public order and safety	20.2	52.1	48.6	37.6	29.4	15.9	27.1	38.1	28.3	26.6
Religious worship	9.5	22.8	15.3	16.2	25.8	9.3	26.2	18.8	14.4	20.5
Service	7.4	15.1	16.9	14.6	12.7	8.1	13.5	16.3	18.1	17.4
Warehouse and storage	7.4	18.8	15.9	13.6	15.1	7.2	17.2	12.5	14.0	15.0
Other	17.1	31.4	30.7	31.0	42.9	15.1	26.5	33.9	26.2	27.0
Vacant	17.2	37.3	31.8	27.4	37.1	14.1	37.7	28.8	20.1	39.1
Year constructed										
Before 1920	12.8	20.6	29.7	17.8	31.3	10.8	19.4	16.8	21.6	42.3
1920 to 1945	10.7	20.7	23.6	19.5	18.1	8.8	13.9	19.8	16.7	19.6
1946 to 1959	8.1	20.9	16.3	14.3	17.7	7.6	17.3	18.9	14.6	13.0
1960 to 1969	6.4	19.5	12.8	11.4	13.6	5.2	11.8	12.2	8.1	14.5
1970 to 1979	7.4	20.1	16.1	13.8	15.9	6.0	15.9	10.9	10.3	17.1
1980 to 1989	7.0	14.5	16.3	13.1	10.2	5.9	10.2	12.7	9.6	14.3
1990 to 1999	7.5	17.0	16.9	13.2	12.1	6.6	13.5	16.4	9.5	12.0
2000 to 2009	8.0	23.2	15.2	14.4	15.0	6.3	16.0	11.1	11.5	11.3
2010 to 2018	11.0	23.0	25.0	17.6	18.9	7.6	16.8	16.1	12.9	16.8
Climate zone^a										
Cold or very cold	18.8	27.6	26.6	0.0	43.7	17.0	16.8	22.1	0.0	44.5
Cool	11.8	14.6	18.7	0.0	19.2	8.3	13.7	12.4	0.0	16.5
Mixed mild	15.1	16.2	27.9	28.7	57.4	10.5	12.3	23.0	20.8	39.9
Warm	11.4	0.0	0.0	15.0	16.7	10.0	0.0	0.0	13.8	10.7
Hot or very hot	18.8	0.0	0.0	21.4	38.4	14.1	0.0	0.0	15.1	33.9

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Number of floors										
1	4.3	11.6	10.7	8.7	8.6	4.5	9.7	9.5	8.8	8.1
2	5.8	12.3	13.4	10.2	13.3	4.4	9.6	10.3	8.1	8.8
3	10.5	13.5	25.6	20.1	26.6	7.6	16.7	14.3	15.1	19.4
4 to 9	9.4	18.7	23.8	15.3	16.3	6.3	10.9	12.4	13.0	13.3
10 or more	9.8	16.5	19.7	17.7	17.9	11.0	12.2	25.1	22.5	30.1
Elevators and escalators (more than one may apply)										
Any elevators	6.5	14.5	12.3	13.7	11.6	4.5	8.0	7.5	9.5	11.8
1 elevator	7.7	17.5	14.3	16.8	14.5	6.0	10.8	9.8	13.8	14.3
2 to 5 elevators	6.7	14.2	11.6	13.1	12.7	5.2	11.3	10.7	10.6	9.6
6 or more elevators	7.8	16.1	14.0	14.3	17.6	8.4	12.8	13.9	16.0	23.7
Any escalators	28.9	25.3	78.5	30.9	13.7	13.7	17.5	20.5	23.6	43.9
Number of workers (main shift)										
Fewer than 5	5.5	13.7	14.4	9.7	11.2	5.9	15.6	13.9	10.6	13.4
5 to 9	6.1	13.4	14.4	10.5	10.5	6.9	15.4	17.6	10.3	13.8
10 to 19	6.5	15.7	12.3	13.3	12.3	7.4	15.2	18.6	11.4	11.5
20 to 49	6.3	11.6	13.6	12.5	10.0	4.8	7.9	10.9	9.6	8.6
50 to 99	6.7	15.9	15.3	12.9	13.6	5.9	12.6	10.2	11.7	11.8
100 to 249	7.1	14.3	20.2	11.0	15.6	5.6	13.7	10.2	8.4	15.4
250 or more	7.2	14.5	11.1	13.7	12.2	6.4	10.5	12.2	11.0	16.6
Weekly operating hours										
Fewer than 40	6.1	16.0	12.1	11.4	14.3	6.6	19.3	11.0	12.5	15.5
40 to 48	6.2	15.7	18.1	10.7	11.6	5.1	13.2	12.1	9.4	9.9
49 to 60	5.2	12.5	12.2	10.4	8.7	4.3	9.2	11.6	7.2	8.7
61 to 84	7.6	19.8	22.1	12.5	11.5	5.3	12.6	9.3	10.9	10.6
85 to 167	8.6	16.5	14.5	17.6	17.0	6.2	11.9	12.3	10.7	16.0
Open continuously	8.1	16.7	17.9	11.5	18.2	5.0	9.1	9.8	9.1	13.3
Ownership and occupancy										
Nongovernment owned	3.8	9.8	10.0	6.9	10.0	3.3	8.2	7.9	6.0	8.0
Owner occupied	4.3	11.7	11.1	8.0	9.8	3.3	10.2	7.0	6.2	8.9
Leased to tenant or tenants	5.5	10.9	11.9	7.6	13.2	4.8	10.1	11.9	8.1	9.3
Unoccupied	20.3	41.5	35.9	34.2	44.3	19.2	45.3	44.0	28.3	46.0
Government owned	9.5	18.2	23.7	19.8	11.1	6.0	11.1	11.9	12.5	11.1
Federal	26.0	40.2	61.5	45.2	45.7	16.1	31.7	25.7	28.3	33.5
State	12.9	37.1	37.8	22.2	16.5	11.8	25.5	21.8	22.0	17.8
Local	10.1	25.9	23.4	20.8	13.9	6.0	10.8	12.0	11.8	13.8
Party responsible for operation of energy systems										
Building owner	4.4	10.3	12.8	8.2	8.6	3.2	7.5	8.1	6.4	7.2
Business owner or tenant	6.5	19.1	12.1	11.0	13.3	7.2	16.2	16.4	10.4	14.0
Property management	20.7	53.8	51.5	31.1	35.0	11.7	24.1	30.3	18.5	24.0
Other	18.8	34.8	33.2	22.5	44.4	11.1	28.6	19.6	18.2	22.6

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Provider of direct input on energy-related equipment purchases										
Building owner	4.4	10.3	12.4	8.4	8.7	3.1	7.6	8.1	6.3	7.1
Business owner or tenant	8.9	17.8	15.2	15.0	18.0	8.8	15.1	16.2	13.0	19.5
Property management	25.5	51.8	41.6	34.1	49.6	16.2	30.7	38.2	25.5	33.4
Other	10.5	30.3	21.5	15.0	17.3	8.1	20.7	19.0	13.4	13.7
Number of establishments										
1	4.6	10.6	12.3	9.0	8.7	3.6	7.6	8.2	7.6	7.6
2 to 5	6.0	14.5	13.5	8.6	14.5	5.5	14.8	8.5	8.5	14.8
6 to 10	11.5	21.8	23.3	20.1	26.5	7.9	17.6	22.5	10.8	16.1
11 to 20	18.0	24.7	57.0	24.6	27.7	8.9	21.3	24.2	13.8	12.0
More than 20	18.6	28.2	63.2	19.9	28.4	10.1	17.9	29.1	14.8	16.1
Currently unoccupied	18.7	39.8	31.9	32.4	40.4	16.5	42.0	32.7	25.2	43.0
Campus or complex activity										
Not part of a campus or complex	4.3	8.9	10.9	8.3	10.8	3.7	8.5	8.5	7.0	9.4
Primary or secondary school	12.1	32.4	34.0	24.4	16.6	9.4	18.4	18.3	17.5	18.9
College or university	21.8	34.3	63.5	35.1	32.1	15.9	19.5	25.5	32.3	20.9
Office complex	12.7	32.3	33.7	21.7	17.1	10.0	22.0	20.7	19.0	16.3
Retail complex	13.2	36.5	34.3	20.6	14.9	9.2	23.6	21.6	15.6	12.3
Storage complex	14.4	44.2	23.6	26.5	28.0	11.0	33.3	20.4	19.0	18.8
Religious campus or complex	11.5	30.1	19.9	18.9	24.9	12.0	41.9	18.7	17.5	26.9
Health care complex	18.0	58.0	31.0	29.7	36.1	8.2	21.1	15.1	13.5	20.1
Lodging or resort complex	15.1	44.6	39.3	24.1	26.5	13.7	50.2	39.2	22.5	19.9
Transportation complex	34.3	61.9	57.7	50.0	61.6	33.2	35.2	24.7	61.8	56.2
Government complex	18.1	46.2	28.6	34.1	36.7	17.0	39.4	39.2	23.2	27.2
Other	9.2	26.7	20.2	15.3	17.8	7.4	19.6	14.7	12.1	16.6
Predominant exterior wall material										
Brick, stone, or stucco	5.3	13.9	11.6	9.8	10.9	3.9	8.4	7.7	7.7	8.6
Concrete (block or poured)	5.3	11.3	13.7	9.4	8.9	4.8	11.4	13.9	7.6	9.2
Concrete panels	12.1	26.4	23.6	19.6	21.3	8.4	22.2	20.3	11.9	15.7
Siding or shingles	7.3	13.4	15.8	15.4	19.0	9.3	21.7	17.2	14.6	24.1
Metal panels	7.6	27.0	16.5	10.7	19.3	6.0	18.8	13.2	8.1	15.4
Window glass	21.3	43.7	37.8	41.7	34.2	11.4	23.8	18.5	18.5	23.4
Other	14.7	36.2	26.1	27.7	24.0	13.7	33.2	38.3	21.3	18.1
Predominant roof material										
Metal surfacing	6.2	14.3	13.7	11.4	12.2	5.6	9.3	11.6	10.1	11.5
Synthetic or rubber	6.0	12.6	12.2	11.0	15.5	4.1	9.2	7.5	7.5	9.8
Built-up	7.7	20.6	19.7	12.3	15.6	4.8	10.9	12.5	6.8	12.8
Slate or tile shingles	10.1	18.7	30.5	17.4	14.3	10.1	19.1	28.4	17.4	19.3
Wooden materials (including shingles)	12.9	30.2	41.3	24.1	20.5	17.8	54.3	48.0	26.3	23.2
Asphalt, fiberglass, or other shingles	6.2	12.6	12.8	12.8	13.9	5.6	13.6	12.4	9.5	14.2
Concrete	20.6	50.9	56.5	29.9	29.0	11.9	26.3	29.6	19.4	15.7
Other	15.6	40.2	32.5	17.7	32.5	9.8	19.8	16.4	15.4	21.9

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Roof tilt										
Flat	4.9	13.2	12.3	8.9	10.8	3.3	7.7	7.1	5.2	9.0
Shallow pitch	5.0	13.9	12.8	8.3	10.9	4.8	12.0	10.4	9.3	9.2
Steeper pitch	7.5	14.8	14.6	14.9	16.3	5.7	13.5	12.4	9.8	15.8
Cool roof characteristics (more than one may apply)										
White or reflective coating or paint	5.8	15.6	11.2	11.6	11.2	4.4	10.9	8.9	6.6	9.9
White or reflective tiles or shingles	15.4	38.6	25.8	27.4	32.1	10.4	22.0	24.7	18.9	15.7
Aluminum coating	8.8	23.7	19.4	11.1	30.2	9.2	18.4	24.3	11.8	30.9
Ballasted roof system	14.8	32.3	27.1	25.8	35.1	9.5	11.9	19.5	15.4	27.6
Other cool roof property	29.3	71.6	80.6	48.6	44.4	19.2	33.4	31.9	34.8	27.6
Renovations since 2000 (more than one may apply)										
Any type of renovation	5.0	10.8	13.6	7.6	14.5	3.4	7.1	8.2	6.0	8.9
Addition or annex	9.4	32.2	17.4	13.4	17.8	6.0	12.2	12.3	9.3	13.9
Reduction in floorspace	22.2	45.9	40.3	33.8	57.5	13.2	26.1	25.7	23.8	33.2
Roof replacement	6.8	14.6	18.7	11.4	18.0	4.3	9.9	8.6	8.0	13.5
Interior wall reconfiguration	6.0	16.1	13.3	8.8	14.0	4.2	10.3	7.5	5.7	13.5
Window replacement	9.5	13.7	26.8	12.6	18.9	5.8	9.7	12.3	10.3	18.9
HVAC equipment upgrade	7.0	15.2	20.8	10.9	14.0	4.2	9.6	8.9	7.3	12.1
Lighting upgrade	5.9	12.2	16.3	7.7	14.1	3.9	8.2	8.7	6.5	10.7
Electrical upgrade	7.1	12.5	20.4	10.7	17.7	5.6	9.4	11.6	10.9	15.3
Plumbing system upgrade	7.8	14.5	24.3	10.6	16.0	5.2	10.8	11.7	8.5	14.3
Insulation upgrade	9.2	20.4	23.9	13.0	25.6	7.8	14.6	16.1	10.8	27.4
Fire, safety, or security upgrade	6.2	16.5	15.6	8.2	11.7	4.4	9.7	8.9	7.2	14.0
Structural upgrade	13.9	26.2	21.1	24.9	36.8	10.2	15.5	19.3	15.7	32.7
Other	29.5	35.6	66.5	40.4	47.5	14.9	28.3	59.9	17.0	30.5
No renovations	4.3	12.2	9.9	9.5	8.4	3.9	9.9	8.4	8.2	7.4
Buildings constructed 2013 or later	11.9	22.6	30.3	15.8	21.6	8.3	19.9	18.4	14.8	15.6
Energy sources (more than one may apply)										
Electricity	3.9	9.8	10.8	7.6	7.8	3.0	7.1	7.3	6.0	7.0
Natural gas	4.8	10.5	12.0	7.1	11.6	3.4	8.2	7.5	6.3	8.6
Fuel oil	9.7	15.2	33.2	12.8	14.7	5.4	10.3	10.3	7.9	17.2
District heat	14.7	23.2	29.3	35.2	26.8	11.4	9.5	18.6	30.2	16.5
District chilled water	20.1	34.2	35.1	30.8	31.2	13.7	18.4	25.4	26.8	17.1
Propane	10.0	17.1	21.3	18.5	21.9	7.6	13.8	14.8	13.9	22.7
Solar	15.5	32.1	34.8	43.4	22.4	11.5	24.6	19.0	26.4	16.2
Wood, coal, and other	17.3	30.6	35.9	24.5	38.6	14.0	33.3	30.7	18.5	33.9
Space-heating energy sources (more than one may apply)										
Electricity	4.7	9.7	14.3	8.9	6.7	3.7	9.1	9.4	6.3	7.9
Natural gas	5.2	10.4	12.0	8.0	11.5	3.6	8.6	8.0	6.5	9.0
Fuel oil	13.9	16.2	52.8	25.3	54.6	11.6	16.6	18.5	23.4	41.6
District heat	15.4	23.4	29.1	40.0	28.3	11.6	10.2	17.7	30.8	16.2
Propane	13.5	26.5	22.8	25.5	36.4	13.1	18.6	21.0	26.6	44.9
Other sources ^b	21.3	32.6	40.8	33.9	47.1	19.6	34.8	34.1	48.7	42.3

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Primary space-heating energy source										
Electricity	6.4	11.8	18.8	10.5	10.2	5.5	12.5	16.4	8.5	10.4
Natural gas	5.5	10.8	12.2	8.6	12.6	4.1	8.5	8.5	7.6	10.1
Fuel oil	16.1	18.0	66.3	35.0	79.6	15.3	18.7	30.9	29.8	74.0
District heat	15.8	23.6	30.6	43.0	29.2	12.6	11.8	18.8	33.0	17.9
Propane	17.5	25.9	29.3	33.3	39.0	16.9	22.0	26.3	38.9	40.6
Other sources ^b	22.4	38.5	32.6	45.7	55.6	30.3	43.6	37.9	85.5	58.7
Cooling energy sources (more than one may apply)										
Electricity	3.9	9.3	11.2	7.5	7.5	3.0	7.7	7.0	5.9	6.7
Natural gas	37.3	38.8	55.7	60.5	82.2	24.2	30.0	52.7	48.3	52.5
District chilled water	20.1	34.2	35.1	30.8	31.2	13.7	18.4	25.4	26.8	17.1
Water-heating energy sources (more than one may apply)										
Electricity	4.0	11.2	11.0	8.2	6.8	3.6	9.3	9.3	6.5	6.5
Natural gas	5.5	11.2	12.7	8.8	11.3	3.7	8.6	8.5	6.5	8.7
Fuel oil	24.0	27.0	71.7	75.3	60.1	15.4	20.3	28.2	40.6	39.2
District heat	17.4	30.9	36.2	35.4	34.2	12.8	11.1	31.5	31.9	19.4
Propane	15.8	30.3	32.8	28.7	40.6	14.7	27.5	33.4	26.1	35.5
Cooking energy sources (more than one may apply)										
Electricity	5.7	11.3	12.2	10.1	11.9	3.9	7.1	7.7	6.8	10.9
Natural gas	5.4	14.1	11.1	9.1	11.8	3.4	8.5	6.8	5.6	10.4
Propane	14.8	29.2	31.4	25.7	30.8	11.7	22.1	24.6	21.1	21.0
Energy end uses (more than one may apply)										
Buildings with space heating	4.1	9.6	11.3	8.1	7.5	3.0	7.2	7.0	6.0	7.4
Buildings with cooling	3.9	9.3	11.2	7.5	7.3	3.0	7.5	6.8	5.9	6.7
Buildings with water heating	3.9	9.6	10.6	7.6	7.7	2.9	7.2	7.1	5.6	7.1
Buildings with cooking	5.0	10.5	11.3	9.0	10.7	3.1	6.5	7.0	5.5	9.0
Buildings with manufacturing	11.3	25.9	18.2	20.9	27.5	7.9	22.9	15.6	12.6	15.4
Buildings with electricity generation	7.4	16.5	21.3	9.8	11.9	4.4	9.0	7.1	7.3	12.7
Buildings with lighting	3.9	9.8	11.0	7.7	7.8	3.0	7.1	7.2	5.9	6.9
Percentage of floorspace heated										
Not heated	8.2	18.5	15.5	16.5	15.6	10.0	23.4	22.8	17.4	16.9
1 to 50%	8.5	18.8	25.4	13.3	15.0	7.1	19.7	19.2	10.6	14.1
51 to 99%	6.7	15.6	13.9	11.3	14.0	5.3	11.3	10.4	9.6	8.6
100%	4.1	10.2	10.9	8.2	7.7	3.2	7.3	7.3	6.6	9.0
Percentage of floorspace cooled										
Not cooled	7.1	17.2	13.0	15.0	18.3	8.0	16.6	14.9	16.1	18.6
1 to 50%	5.9	13.4	14.8	9.7	16.2	5.2	11.9	9.8	10.3	11.9
51 to 99%	6.6	12.7	14.3	10.4	16.4	5.1	8.9	10.0	9.3	10.2
100%	4.3	14.1	11.7	8.3	8.5	3.5	10.4	8.0	6.6	9.0

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Percentage lit when open										
0%	35.1	0.0	49.4	42.6	81.6	38.5	0.0	49.8	61.1	61.7
1 to 50%	6.7	18.0	15.3	10.2	16.5	6.0	16.3	13.0	10.8	14.9
51 to 99%	4.8	10.2	11.0	9.1	9.5	3.6	7.2	7.1	6.3	8.7
100%	4.7	10.3	15.1	8.6	9.1	3.8	7.6	10.9	7.4	7.7
Building never open or electricity not used	11.6	31.0	21.4	22.7	24.3	12.1	29.6	24.1	20.2	27.8
Percentage lit during off hours										
0%	6.5	14.9	14.4	12.3	14.5	6.7	14.8	12.2	14.0	15.4
1 to 50%	3.8	11.6	10.0	7.1	6.9	3.0	7.6	7.6	5.5	7.1
51 to 100%	10.6	24.1	23.3	13.4	25.9	6.7	16.2	13.4	10.8	12.8
Building always open with no off hours	15.2	29.9	27.0	26.9	37.6	11.6	24.3	28.2	17.8	28.5
Electricity not used	16.0	38.1	32.1	28.1	30.6	17.6	54.1	38.7	26.6	34.4
Heating equipment (more than one may apply)										
Packaged heating units	4.0	8.4	10.3	8.3	7.8	3.6	7.7	8.0	7.1	8.4
Furnaces	7.2	19.0	13.1	14.2	11.7	5.7	15.0	10.0	10.3	11.0
Individual space heaters	5.9	11.3	12.4	11.1	12.8	4.8	10.4	10.2	7.9	11.7
Boilers	6.2	13.2	14.2	12.2	10.2	4.0	9.3	7.6	5.9	12.7
Heat pumps	7.7	15.6	18.5	12.3	16.2	5.4	12.5	13.9	7.9	12.4
District heat	15.4	23.4	29.1	40.0	28.3	11.6	10.2	17.7	30.8	16.2
Duct reheat	12.6	45.1	26.7	16.6	32.8	7.0	17.4	16.3	9.7	16.8
Other	46.4	93.8	101.0	38.2	46.1	24.1	61.9	62.6	34.3	29.9
Cooling equipment (more than one may apply)										
Packaged air-conditioning units	4.3	10.6	10.9	8.7	8.0	3.4	8.0	7.7	6.6	7.0
Residential-type central air conditioners	7.6	17.4	12.2	15.7	15.7	5.2	11.5	8.1	10.8	13.4
Individual air conditioners	6.6	15.0	19.9	9.3	14.2	5.3	11.9	12.0	9.4	13.0
Central chillers	9.0	18.2	24.3	10.8	15.7	5.0	9.5	10.0	9.6	9.6
Heat pumps	11.0	22.0	25.7	17.2	25.7	6.8	16.2	17.0	10.3	15.5
District chilled water	20.1	34.2	35.1	30.8	31.2	13.7	18.4	25.4	26.8	17.1
Swamp coolers	12.8	58.5	54.1	49.6	11.6	13.1	71.5	31.2	39.0	13.7
Other	53.2	70.2	0.0	81.6	88.7	36.4	70.2	0.0	59.8	50.8
HVAC features (more than one may apply)										
Economizer cycle	5.6	13.6	10.0	13.6	11.9	3.9	8.2	6.1	7.9	11.1
Variable air volume (VAV) system	8.4	15.6	16.2	18.4	12.4	4.9	10.2	6.7	11.0	11.0
Dedicated outside air system (DOAS)	11.0	26.8	22.6	22.6	16.9	7.8	10.9	14.2	14.9	23.1
Demand controlled ventilation (DCV)	8.8	20.7	24.3	14.4	19.6	5.5	12.1	11.9	9.3	13.6
Regular HVAC maintenance	4.2	10.0	10.5	8.4	8.9	3.2	8.0	6.9	6.2	7.8
Building automation system (BAS) controls heating or cooling	6.4	13.9	10.3	14.2	10.3	3.7	7.1	5.1	7.4	9.7
Internet-connected or smart thermostat	12.2	25.5	26.6	22.4	19.1	10.5	17.9	26.3	17.6	16.3
Programmable thermostat	4.7	12.9	10.6	10.2	8.9	5.4	11.8	11.2	13.3	7.3

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Main equipment replaced since 2000 (more than one may apply)										
Heating	4.9	10.6	13.2	8.9	9.2	3.8	10.1	8.4	7.8	8.0
Cooling	4.8	11.7	15.5	6.0	8.2	4.3	11.8	9.3	5.6	12.6
Water-heating equipment										
Centralized system	4.4	10.6	10.3	8.5	7.9	3.4	7.1	7.8	6.5	7.8
Distributed system	8.9	24.7	21.9	17.1	14.8	6.4	11.8	13.6	13.7	10.8
Combination of centralized and distributed systems	8.8	18.9	13.9	17.3	19.5	5.2	12.6	8.1	10.2	11.2
Generation technologies (more than one may apply)										
Reciprocating engine generators	8.8	18.0	25.2	9.9	18.4	4.8	9.3	8.7	7.4	16.1
Solar panels	15.4	32.1	35.0	43.6	22.2	11.5	24.7	19.4	27.1	15.9
Other generation technology	21.4	37.8	46.9	44.2	36.2	14.4	24.6	31.9	25.6	28.7
Lighting equipment types (more than one may apply)										
Incandescent	7.8	14.1	18.3	10.7	17.3	4.5	10.7	9.9	7.4	11.4
Standard fluorescent	4.2	10.4	10.2	8.3	8.8	3.4	8.5	8.0	6.4	7.7
Compact fluorescent	5.2	12.3	9.8	11.4	9.1	4.2	8.7	9.1	8.0	8.4
High-intensity discharge (HID)	9.8	23.7	17.2	15.5	22.7	7.1	10.7	12.5	13.1	19.2
Halogen	8.0	14.9	27.5	12.7	9.7	4.2	10.2	11.3	6.6	12.0
LED	3.6	10.5	10.5	6.7	5.6	2.9	7.4	6.6	5.7	6.9
Other	57.3	0.0	64.3	67.0	51.3	24.1	0.0	26.9	53.5	51.3
Refrigeration equipment (more than one may apply)										
Any refrigeration	4.1	10.0	10.4	8.3	8.3	3.0	7.8	7.0	5.8	7.4
Walk-in units	5.4	11.8	11.0	10.1	10.6	3.4	6.1	6.7	5.6	9.3
Cases or cabinets	5.8	16.2	12.7	10.3	11.6	3.7	7.2	8.3	5.8	11.3
Large cold storage areas	17.2	38.1	42.1	27.0	21.0	11.3	16.8	21.9	14.7	29.8
Commercial ice makers	5.5	12.4	10.7	8.8	13.3	3.5	7.0	6.4	6.4	9.6
Residential-type or compact units	4.3	10.3	10.6	8.6	9.3	3.2	8.2	7.3	6.3	7.7
Vending machines	6.1	10.9	12.8	10.9	15.6	3.8	7.8	7.3	6.8	10.8
No refrigeration	5.3	12.5	13.4	10.8	10.5	5.3	7.7	12.6	10.1	11.6
Office equipment (more than one may apply)										
Desktop computers	4.0	9.8	11.1	8.1	7.3	2.9	7.2	6.9	5.6	7.1
With multiple monitors	5.0	12.1	11.6	8.5	10.7	3.5	7.9	6.4	6.1	10.3
Laptop computers	4.0	10.1	11.3	7.3	6.3	3.0	7.6	7.0	5.4	7.5
Dedicated servers	4.9	11.8	12.7	7.6	10.6	3.3	8.9	6.5	5.5	8.9
Tablets charged in building	4.4	13.4	10.5	8.8	8.2	3.3	7.7	7.1	5.8	8.5
Large floor-standing office devices ^c	4.4	12.3	10.6	7.5	9.1	3.0	7.6	6.0	5.4	9.1
Smaller desktop office devices ^c	4.1	8.5	11.1	8.1	8.0	3.1	7.0	7.8	5.8	7.4
Interactive whiteboards	8.7	23.6	15.8	14.5	18.3	4.5	8.1	8.0	8.1	15.1
Televisions or video displays	3.8	10.8	9.2	7.5	8.2	3.0	8.0	7.1	5.5	8.0
Point-of-sale devices or cash registers	5.2	13.2	13.6	9.4	10.8	3.4	7.7	7.4	5.1	10.8

Relative standard errors (RSEs) for Table B3. Census region, number of buildings and floorspace, 2018

	RSEs for number of buildings					RSEs for total floorspace				
	All buildings	North-east	Mid-west	South	West	All buildings	North-east	Mid-west	South	West
All buildings	3.9	9.9	10.9	7.7	8.1	3.1	7.2	7.4	6.1	7.1
Food preparation or serving areas in non-food service buildings (more than one may apply)										
Snack bar, concession stand, or coffee shop	11.0	23.4	21.6	19.5	20.5	6.7	12.7	12.3	11.7	15.9
Fast food or small restaurant	9.4	21.0	15.0	20.3	20.2	5.9	11.6	11.5	9.3	15.9
Cafeteria or large restaurant	7.7	17.0	14.9	9.0	23.8	4.6	7.0	7.5	7.2	19.1
Commercial kitchen or food preparation area	8.5	20.2	16.8	15.0	17.3	4.4	10.7	9.7	6.5	12.6
Small kitchen area	6.5	13.3	14.9	11.3	13.4	4.7	9.1	10.5	8.0	12.6
Separate computer areas (more than one may apply)										
Server closet	5.3	14.4	13.4	9.2	11.5	3.4	8.3	7.2	5.7	9.6
Data center	13.1	15.3	17.2	24.8	30.6	6.7	14.7	10.3	8.9	22.1
Computer-based training room	8.4	14.2	15.4	13.9	20.4	4.6	8.3	7.4	7.6	16.1
Student or public computer center	8.0	18.1	22.4	14.2	13.6	4.6	9.8	7.3	7.1	17.0
Window and interior lighting features (more than one may apply)										
Multipaned windows	4.2	10.1	11.0	8.5	6.7	3.2	7.0	7.1	6.5	8.1
Tinted window glass	4.2	13.1	10.2	7.2	9.7	3.4	8.3	7.3	6.1	8.4
Reflective window glass	7.0	18.9	17.1	11.4	11.1	5.6	9.9	11.3	9.2	12.2
External overhangs or awnings	5.0	13.5	10.0	9.5	7.2	4.5	12.0	9.5	7.7	10.3
Skylights or atriums	7.1	16.7	16.7	12.9	13.7	4.5	12.1	9.2	6.1	11.4
Light scheduling	5.2	12.8	11.9	9.2	9.9	4.1	9.7	8.8	6.8	9.5
Occupancy sensors	6.5	9.8	15.7	13.5	9.4	3.8	7.8	7.4	7.2	9.8
Multilevel lighting or dimming	10.0	24.1	21.6	17.1	15.5	6.6	12.0	10.3	13.0	15.2
Daylight harvesting	12.0	47.9	23.2	19.1	22.3	6.3	14.3	17.1	10.3	10.2
Plug-load control	18.4	40.8	26.1	29.4	39.6	12.2	25.1	26.0	20.5	21.2
Demand responsive lighting	30.7	77.7	50.1	36.8	36.8	15.2	28.1	36.6	24.4	24.7
Building automation system (BAS) for lighting	9.3	21.9	22.6	14.8	17.1	5.2	13.3	8.9	6.7	13.6
Electric vehicle (EV) charging										
Charging stations associated with the building	11.5	24.2	28.8	23.6	16.7	7.2	17.4	16.7	11.9	12.6

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>.

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

^bOther sources includes wood, coal, solar, and all other energy sources.

^cOffice devices refers to any combination of printers, copiers, scanners, or FAX machines.