

Table A47. Heating Equipment, Number of Buildings, 1992
(Thousand)

Building Characteristics	All Buildings	All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.5	0.5	1.3	0.8	0.8	1.7	0.9	1.0	3.1	
All Buildings	4,806	4,178	449	1,692	1,464	93	624	870	42	6.7
Building Floorspace (square feet)										
1,001 to 5,000	2,681	2,247	198	1,002	812	18	165	396	28	10.5
5,001 to 10,000	975	883	121	387	287	11	145	190	Q	10.2
10,001 to 25,000	647	585	71	193	210	28	135	162	Q	9.6
25,001 to 50,000	280	255	30	72	84	15	91	62	Q	13.2
50,001 to 100,000	116	110	13	20	38	9	43	36	Q	12.6
100,001 to 200,000	71	64	10	14	21	6	28	16	Q	16.6
200,001 to 500,000	26	24	4	4	9	5	12	6	Q	18.9
Over 500,000	9	9	2	1	4	1	4	3	Q	33.9
Principal Building Activity										
Education	301	295	36	78	67	20	91	77	Q	14.8
Food Sales	130	120	Q	28	40	Q	Q	30	Q	26.6
Food Service	260	249	Q	102	50	Q	34	100	Q	15.7
Health Care	63	61	11	27	7	2	9	14	Q	29.4
Lodging	154	150	22	33	72	9	36	20	Q	21.0
Mercantile and Service	1,272	1,214	90	548	497	9	141	220	Q	10.8
Office	749	745	109	321	162	24	118	189	7	11.1
Parking Garage	24	17	Q	Q	12	Q	Q	Q	Q	47.0
Public Assembly	278	257	35	108	93	10	43	46	Q	15.0
Public Order and Safety	60	60	Q	26	19	Q	17	Q	Q	31.6
Religious Worship	366	364	37	188	125	Q	58	55	Q	18.0
Warehouse and Storage	761	445	38	168	235	Q	39	76	Q	14.7
Other	69	48	Q	13	23	4	11	13	Q	29.5
Vacant	319	154	23	45	62	2	20	21	Q	19.5
Year Constructed										
1899 or Before	169	158	Q	74	61	4	53	Q	Q	22.6
1900 to 1919	255	232	Q	104	65	10	70	20	Q	18.7
1920 to 1945	724	623	34	285	230	12	128	84	Q	13.4
1946 to 1959	880	760	44	358	258	22	127	137	Q	12.2
1960 to 1969	783	687	58	282	259	22	107	136	Q	12.0
1970 to 1979	982	850	112	324	305	9	79	219	13	11.3
1980 to 1989	884	761	155	244	249	11	48	228	8	12.5
1990 to 1992	128	107	23	21	36	Q	12	33	Q	29.4
Census Region										
Northeast	771	694	41	290	218	23	260	86	12	12.7
Midwest	1,202	1,047	28	592	376	23	188	121	11	13.3
South	1,963	1,687	280	557	626	27	111	440	15	12.2
West	870	750	99	252	245	20	65	223	Q	17.0
Energy Sources (more than one may apply)										
Electricity	4,616	4,173	449	1,692	1,460	93	624	870	42	6.7
Natural Gas	2,665	2,627	137	1,259	886	34	444	605	23	8.5
Fuel Oil	559	554	26	265	189	11	220	29	6	16.7
District Heat	95	95	8	Q	15	93	Q	2	Q	21.2
District Chilled Water	28	28	Q	Q	3	24	Q	Q	Q	28.5
Propane	337	330	34	134	188	Q	35	36	Q	23.8
Any Other	163	161	Q	56	110	Q	21	Q	Q	23.6

See footnotes at end of table.

Table A47. Heating Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.5	0.5	1.3	0.8	0.8	1.7	0.9	1.0	3.1	
Energy End Uses (more than one may apply)										
Heated Buildings	4,178	4,178	449	1,692	1,464	93	624	870	42	6.7
Air-Conditioned Buildings	3,502	3,439	443	1,391	1,081	80	509	855	36	7.0
Buildings with Water Heating	3,502	3,436	404	1,433	1,097	80	600	771	40	6.9
Buildings with Cooking	734	715	79	259	180	18	178	216	18	10.3
Buildings with Manufacturing	121	117	16	47	64	5	21	23	Q	23.1
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	399	344	12	162	134	10	99	31	Q	23.4
5,500-7,000 HDD	1,134	1,018	31	525	352	28	272	125	11	14.6
4,000-5,499 HDD	1,077	959	127	459	331	27	156	97	Q	21.9
Fewer than 4,000 HDD	1,101	955	148	294	345	13	61	297	Q	22.1
More than 2,000 CDD and --										
Fewer than 4,000 HDD	1,095	903	131	251	302	15	36	319	Q	19.2
Predominant Exterior Wall Material										
Masonry	3,115	2,850	306	1,136	860	75	498	650	33	6.9
Siding or Shingles	764	635	50	308	264	Q	76	93	Q	14.6
Metal Panels	745	533	71	204	285	6	24	73	Q	17.4
Concrete Panels	87	76	14	12	28	7	14	32	Q	21.5
Window Glass	46	41	Q	9	14	1	8	13	Q	33.3
Other	47	42	Q	23	14	Q	Q	9	Q	39.2
Predominant Roof Material										
Built-Up	1,642	1,489	162	560	457	39	247	392	21	7.7
Shingles (Not Wood)	1,381	1,246	117	619	412	10	177	179	Q	11.3
Metal Surfacing	1,037	763	103	296	381	10	37	125	Q	15.7
Synthetic or Rubber	386	368	30	115	126	14	102	105	6	14.2
Slate or Tile	155	140	Q	46	35	13	29	28	Q	21.1
Concrete	37	22	Q	Q	9	Q	4	5	Q	46.0
Other	167	150	14	54	43	Q	27	35	Q	26.2
Percent Window Glass										
25 or Less	4,193	3,597	392	1,507	1,295	74	473	701	39	7.3
26 to 50	490	464	45	149	132	15	121	135	Q	11.3
51 to 75	94	89	9	27	28	3	24	29	Q	25.4
76 to 100	29	27	Q	Q	10	1	7	5	Q	33.9
Workers (main shift)										
Less than 5	2,718	2,154	199	912	846	22	211	305	Q	10.3
5 to 9	895	861	96	407	281	14	119	188	Q	10.5
10 to 19	561	540	59	210	158	21	95	169	Q	12.0
20 to 49	405	401	61	120	113	16	111	133	Q	11.2
50 to 99	130	128	17	30	41	10	43	46	Q	14.1
100 to 249	64	64	10	10	17	4	29	21	Q	15.7
250 or More	31	30	6	3	9	7	15	8	1	17.4
Weekly Operating Hours										
39 or Fewer	1,039	725	52	333	257	9	96	104	Q	14.5
40 to 48	1,278	1,186	150	474	401	34	165	240	Q	10.0
49 to 60	1,004	920	101	402	357	16	133	170	Q	9.7
61 to 84	645	603	54	226	201	9	103	158	Q	10.8
85 to 167	478	436	49	173	117	7	60	140	Q	13.9
Open Continuously	362	307	44	84	130	19	67	58	Q	13.5

See footnotes at end of table.

Table A47. Heating Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.5	0.5	1.3	0.8	0.8	1.7	0.9	1.0	3.1	
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	735	714	79	259	180	18	176	217	18	10.3
Computer Room	223	222	22	63	70	11	78	66	6	15.3
Rooms with Special Ventilation	236	229	28	75	77	17	58	64	Q	16.0
Activities with Large Amounts of Hot Water	203	194	22	66	76	6	58	51	Q	14.0
Multibuilding Facility										
Part of Multibuilding Facility	1,667	1,338	167	434	466	81	214	277	9	10.1
with Central Physical Plant	223	208	28	32	48	80	39	29	Q	19.6
No Central Physical Plant	1,444	1,130	139	403	418	1	175	248	9	11.9
Not on Multibuilding Facility	3,139	2,840	282	1,258	998	12	410	593	34	8.2
Space-Heating Energy Source (more than one may apply)										
Electricity	1,513	1,513	444	403	668	16	116	407	19	9.6
Natural Gas	2,405	2,405	98	1,218	819	5	419	535	22	9.3
Fuel Oil	479	479	17	251	151	3	199	13	Q	20.8
District Heat	94	94	8	Q	14	93	Q	2	Q	21.5
Propane	255	255	18	108	162	Q	16	Q	Q	25.4
Wood	102	102	Q	Q	81	Q	Q	Q	Q	29.6
Any Other	39	39	Q	Q	Q	Q	Q	Q	Q	69.4
Primary Space-Heating Energy Source										
Electricity	1,107	1,107	362	205	384	Q	33	331	18	10.9
Natural Gas	2,276	2,276	60	1,162	753	2	393	507	19	10.1
Fuel Oil	394	394	10	209	114	Q	170	Q	Q	21.0
District Heat	91	91	7	Q	14	91	Q	2	Q	22.1
Propane	217	217	Q	92	134	Q	Q	Q	Q	28.3
Wood	68	68	Q	Q	53	Q	Q	Q	Q	36.9
Any Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Replacement Energy Source for Primary Heating										
Electricity Only	350	350	Q	201	143	Q	17	67	Q	17.4
Natural Gas Only	213	213	46	56	86	6	37	37	Q	20.3
Fuel Oil Only	161	161	12	65	55	6	63	20	Q	20.5
Propane Only	212	212	Q	107	85	Q	29	26	Q	23.1
Any Other Single Energy Source	57	57	Q	33	29	Q	Q	Q	Q	27.2
More than One Energy Source	93	93	Q	55	36	Q	Q	Q	Q	28.3
Percent of Floorspace Heated										
Not Heated	653	25	Q	Q	Q	Q	Q	Q	Q	25.9
1 to 50	688	688	74	241	352	4	47	96	Q	14.2
51 to 99	618	618	68	267	210	9	93	166	Q	12.6
100	2,846	2,846	307	1,184	902	80	484	608	36	7.4
Heating Equipment (more than one may apply)										
Heat Pumps	449	449	449	60	100	8	21	40	Q	16.0
Furnaces	1,692	1,692	60	1,692	428	Q	84	62	Q	9.9
Individual Space Heaters	1,464	1,464	100	428	1,464	14	128	158	12	10.4
District Heat	93	93	8	Q	14	93	Q	2	Q	21.5
Boilers	624	624	21	84	128	Q	624	44	4	10.7
Packaged Heating Units	870	870	40	62	158	2	44	870	Q	15.5
Other	42	42	Q	Q	12	Q	4	Q	42	29.7

See footnotes at end of table.

Table A47. Heating Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.5	0.5	1.3	0.8	0.8	1.7	0.9	1.0	3.1	
Heating Distribution Equipment (more than one may apply)										
Radiators or Baseboards	473	473	10	56	96	47	426	23	Q	13.3
Ducts for Heating	2,955	2,955	431	1,619	659	50	281	849	33	7.1
Heating Only	577	577	Q	505	150	5	71	27	Q	15.9
Heating and Cooling	2,378	2,378	427	1,114	509	45	210	822	28	7.7
Variable Air-Volume System Used	210	210	19	74	42	13	50	83	5	14.4
Fan Coil Units for Heating	99	99	20	7	22	16	67	9	Q	19.2
Heating Only	78	78	19	Q	19	11	52	8	Q	21.5
Heating and Cooling	21	21	Q	Q	3	5	15	2	Q	31.3
Individual Space Heaters	1,464	1,464	100	428	1,464	14	128	158	12	10.4
Other	181	181	16	111	43	Q	48	36	Q	20.9
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	816	811	35	624	247	11	103	64	Q	15.3
Heat Pumps	454	453	427	66	98	8	27	40	Q	15.9
Individual Air Conditioners	1,023	1,001	51	377	526	25	263	88	Q	10.9
District Chilled Water	28	28	Q	Q	3	24	Q	Q	Q	28.5
Central Chillers	142	141	11	15	34	14	100	24	3	16.8
Packaged Air-Conditioning Units	1,459	1,426	57	474	338	24	182	780	16	9.7
Swamp Coolers	179	172	Q	69	75	Q	19	38	Q	34.0
Other	8	8	Q	Q	Q	Q	Q	Q	Q	84.4
Building Shell Conservation Features (more than one may apply)										
Roof or Ceiling Insulation	3,343	3,164	393	1,323	1,057	65	487	692	33	7.2
Wall Insulation	2,320	2,206	304	946	744	39	269	484	29	8.6
Storm or Multiple Glazing	1,680	1,642	195	776	513	37	354	278	14	9.2
Tinted, Reflective or Shading Glass	1,068	1,018	152	415	272	22	144	316	13	10.0
Exterior or Interior Shading or Awnings	1,853	1,804	253	727	527	47	292	475	23	8.6
Windows that Open	2,119	1,932	183	804	732	57	390	268	16	9.6
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	250	249	19	75	64	19	65	83	5	13.5
Economizer Cycle	414	408	76	112	121	26	99	123	13	12.6
HVAC Maintenance	2,503	2,473	292	995	698	84	484	580	23	7.4
Off-Hour Equipment Reduction (more than one may apply)										
Heating	3,400	3,400	335	1,437	1,187	61	477	721	30	7.2
Cooling	2,872	2,821	328	1,191	881	59	388	712	27	7.4
Hot Water	578	557	64	199	154	13	127	131	Q	13.6
Lighting	4,089	3,768	392	1,575	1,289	73	546	795	36	7.0
Other	547	523	43	215	200	6	88	122	Q	17.1

NF = No applicable RSE row factor.

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A48. Heating Equipment, Floorspace, 1992
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.6	0.6	1.2	0.9	0.8	1.5	0.9	1.0	2.5	
All Buildings	67,876	61,996	8,269	16,909	22,380	5,225	20,664	16,000	903	6.8
Building Floorspace (square feet)										
1,001 to 5,000	7,327	6,210	542	2,780	2,291	56	511	1,116	74	10.8
5,001 to 10,000	7,199	6,533	899	2,816	2,153	73	1,100	1,415	Q	9.7
10,001 to 25,000	10,375	9,424	1,159	3,131	3,305	443	2,210	2,667	Q	9.3
25,001 to 50,000	10,069	9,132	1,119	2,559	2,942	516	3,351	2,168	Q	13.0
50,001 to 100,000	8,062	7,622	932	1,352	2,681	624	3,037	2,509	Q	12.2
100,001 to 200,000	9,678	8,730	1,433	1,860	2,793	777	3,879	2,126	Q	15.9
200,001 to 500,000	7,889	7,470	1,012	1,075	2,934	1,521	3,477	1,603	Q	18.6
Over 500,000	7,278	6,876	1,172	1,337	3,281	1,215	3,098	2,396	Q	30.3
Principal Building Activity										
Education	8,470	8,379	609	973	1,922	641	5,430	1,725	Q	15.1
Food Sales	757	723	Q	228	305	Q	Q	231	Q	27.0
Food Service	1,491	1,435	Q	539	260	Q	343	507	Q	17.6
Health Care	1,763	1,746	362	129	360	403	1,034	395	Q	19.1
Lodging	2,891	2,870	696	409	1,068	580	912	733	Q	22.8
Mercantile and Service	12,402	11,835	1,501	4,948	4,860	148	2,105	4,219	Q	16.2
Office	12,319	12,255	1,937	2,490	3,582	1,706	4,393	2,979	267	11.0
Parking Garage	1,652	1,165	Q	Q	718	Q	Q	Q	Q	51.1
Public Assembly	4,556	4,470	516	910	1,197	348	2,076	702	Q	24.5
Public Order and Safety	820	820	Q	252	249	Q	398	Q	Q	41.0
Religious Worship	3,747	3,737	368	1,909	1,184	Q	1,294	536	Q	21.0
Warehouse and Storage	11,484	8,800	1,633	2,953	4,878	Q	1,624	3,001	Q	17.1
Other	1,130	1,025	Q	254	453	326	321	381	Q	28.0
Vacant	4,396	2,738	248	754	1,344	393	451	450	Q	28.3
Year Constructed										
1899 or Before	1,721	1,637	Q	511	530	91	852	Q	Q	22.1
1900 to 1919	3,608	3,329	Q	1,043	1,286	255	1,644	536	Q	27.0
1920 to 1945	8,712	7,717	619	2,659	2,345	1,125	2,541	1,271	Q	19.6
1946 to 1959	10,421	9,371	1,013	3,131	3,173	545	3,926	1,740	Q	14.6
1960 to 1969	12,612	11,548	1,055	3,367	3,862	1,363	4,027	3,226	Q	16.0
1970 to 1979	14,014	12,814	1,783	2,982	5,434	972	3,734	3,911	231	10.9
1980 to 1989	14,287	13,276	2,962	2,894	4,983	673	3,396	4,306	309	14.6
1990 to 1992	2,502	2,303	534	323	768	202	544	893	Q	20.5
Census Region										
Northeast	13,400	12,858	1,328	3,268	4,907	1,553	6,192	2,890	180	14.4
Midwest	17,280	16,303	1,324	5,579	6,187	1,869	6,478	3,033	205	12.4
South	24,577	21,659	3,632	4,971	7,642	927	5,404	6,440	309	11.1
West	12,619	11,176	1,985	3,092	3,643	875	2,590	3,637	Q	13.4
Energy Sources (more than one may apply)										
Electricity	66,549	61,971	8,269	16,909	22,369	5,225	20,664	16,000	903	6.8
Natural Gas	45,097	44,624	4,675	14,343	16,295	2,721	17,039	12,908	678	8.0
Fuel Oil	13,218	12,933	1,579	2,239	4,695	1,241	7,856	1,974	359	10.9
District Heat	5,339	5,324	450	Q	1,192	5,225	Q	279	Q	16.9
District Chilled Water	2,066	2,063	Q	Q	650	1,702	Q	Q	Q	25.7
Propane	3,393	3,340	707	826	1,584	Q	1,067	855	Q	19.6
Any Other	1,551	1,522	Q	480	655	Q	459	Q	Q	30.8

See footnotes at end of table.

Table A48. Heating Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.6	0.6	1.2	0.9	0.8	1.5	0.9	1.0	2.5	
Energy End Uses (more than one may apply)										
Heated Buildings	61,996	61,996	8,269	16,909	22,380	5,225	20,664	16,000	903	6.8
Air-Conditioned Buildings	57,041	56,073	8,207	15,209	19,667	4,708	19,086	15,870	845	7.2
Buildings with Water Heating	58,479	57,708	7,995	15,734	20,270	5,081	20,447	15,348	894	7.0
Buildings with Cooking	23,065	22,736	2,871	4,459	7,233	2,198	11,342	6,349	513	11.1
Buildings with Manufacturing	3,174	3,121	620	826	1,804	412	1,131	1,059	Q	25.4
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	5,623	5,218	437	1,920	1,736	513	2,118	609	Q	22.6
5,500-7,000 HDD	18,024	17,196	1,282	5,075	6,624	1,900	7,706	3,756	277	13.8
4,000-5,499 HDD	16,162	14,966	2,459	4,763	5,781	1,692	5,136	2,987	Q	16.5
Fewer than 4,000 HDD	15,251	13,537	2,501	3,217	4,508	560	3,341	4,836	Q	18.9
More than 2,000 CDD and --										
Fewer than 4,000 HDD	12,816	11,079	1,590	1,935	3,730	560	2,363	3,812	Q	18.7
Predominant Exterior Wall Material										
Masonry	48,585	45,520	5,863	11,739	14,669	3,669	16,840	11,586	598	7.7
Siding or Shingles	3,873	3,303	413	1,460	1,485	Q	725	546	Q	14.5
Metal Panels	7,392	5,682	1,182	2,246	3,203	331	740	1,149	Q	19.1
Concrete Panels	4,961	4,663	575	1,063	1,942	699	1,379	2,009	Q	25.3
Window Glass	2,028	1,839	202	183	788	Q	695	395	Q	27.7
Other	1,037	988	Q	218	292	Q	287	Q	Q	37.7
Predominant Roof Material										
Built-Up	30,257	28,271	3,873	6,443	9,232	2,346	10,393	8,536	441	9.9
Shingles (Not Wood)	10,570	9,764	1,068	4,091	3,083	459	2,570	1,586	Q	13.6
Metal Surfacing	9,019	7,121	1,231	2,786	3,518	306	751	1,476	Q	15.8
Synthetic or Rubber	11,702	11,541	1,385	2,476	4,653	1,470	5,013	3,518	291	14.5
Slate or Tile	1,998	1,863	Q	539	513	400	633	284	Q	25.0
Concrete	2,544	1,741	Q	Q	845	Q	688	160	Q	44.3
Other	1,786	1,695	437	414	535	Q	616	439	Q	27.6
Percent Window Glass										
25 or Less	51,356	45,868	5,874	13,831	16,789	3,044	13,633	11,684	597	7.4
26 to 50	11,815	11,493	2,022	2,576	3,710	1,349	4,994	3,346	Q	14.7
51 to 75	3,206	3,185	293	364	1,340	473	1,498	768	Q	19.2
76 to 100	1,499	1,450	80	Q	540	Q	539	201	Q	29.7
Workers (main shift)										
Less than 5	17,944	13,604	1,219	4,981	5,455	396	2,755	1,694	Q	16.7
5 to 9	7,524	7,075	812	2,917	2,569	314	1,516	1,372	Q	11.6
10 to 19	8,077	7,528	938	2,488	2,655	487	1,831	1,992	Q	13.5
20 to 49	10,556	10,440	1,408	2,590	3,314	500	3,784	3,380	Q	11.4
50 to 99	7,763	7,652	1,161	2,133	2,638	785	2,882	2,406	Q	17.1
100 to 249	7,378	7,323	1,327	800	2,610	674	3,911	2,689	Q	19.9
250 or More	8,633	8,374	1,404	1,001	3,138	2,070	3,984	2,466	186	17.7
Weekly Operating Hours										
39 or Fewer	8,246	6,000	353	2,241	2,076	332	1,829	784	Q	18.5
40 to 48	14,998	13,745	1,904	3,794	4,460	792	4,262	3,548	Q	10.2
49 to 60	14,046	13,251	1,852	4,053	5,593	1,051	4,104	3,166	Q	11.1
61 to 84	12,062	11,529	1,683	3,019	4,165	695	3,636	3,832	Q	14.4
85 to 167	8,467	8,141	900	2,682	2,717	504	2,639	2,932	Q	18.3
Open Continuously	10,057	9,329	1,578	1,121	3,368	1,850	4,194	1,737	Q	17.1

See footnotes at end of table.

Table A48. Heating Equipment, Floorspace, 1992 (Continued)

(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.6	0.6	1.2	0.9	0.8	1.5	0.9	1.0	2.5	
Energy-Related Space Functions (more than one may apply)										
Commercial Food										
Preparation	22,166	21,833	2,871	4,459	7,233	2,198	10,439	6,349	513	10.3
Computer Room	14,199	14,170	2,290	2,291	5,158	2,070	6,599	4,384	418	12.7
Rooms with Special										
Ventilation	8,042	7,995	1,054	1,261	2,902	1,592	3,915	1,773	Q	13.7
Activities with Large										
Amounts of Hot Water	6,862	6,829	1,470	1,300	2,580	783	3,490	2,137	Q	14.8
Multibuilding Facility										
Part of Multibuilding Facility	31,564	28,365	3,949	5,908	10,324	4,403	9,877	7,405	364	11.5
with Central Physical Plant	8,395	8,088	744	1,166	2,547	4,150	2,306	1,219	Q	21.6
No Central Physical Plant	23,170	20,277	3,205	4,743	7,777	253	7,571	6,187	362	13.2
Not on Multibuilding Facility	36,312	33,631	4,320	11,001	12,056	822	10,787	8,594	538	7.2
Space-Heating Energy Source (more than one may apply)										
Electricity	25,636	25,636	8,243	6,018	12,980	970	6,583	8,375	491	11.2
Natural Gas	38,524	38,524	3,651	13,797	13,980	553	15,967	11,524	549	8.9
Fuel Oil	7,334	7,334	602	1,746	2,099	413	5,260	627	Q	16.6
District Heat	5,242	5,242	443	Q	1,139	5,225	Q	279	Q	17.1
Propane	1,568	1,568	242	534	984	Q	219	Q	Q	24.8
Wood	504	504	Q	Q	380	Q	Q	Q	Q	23.8
Any Other	661	661	Q	Q	Q	Q	Q	Q	Q	70.4
Primary Space-Heating Energy Source										
Electricity	15,502	15,502	4,723	2,201	6,528	Q	2,371	4,591	363	12.6
Natural Gas	35,161	35,161	2,541	12,649	12,523	Q	14,727	10,609	474	9.2
Fuel Oil	4,415	4,415	275	1,292	1,266	Q	3,131	Q	Q	19.5
District Heat	5,014	5,014	376	Q	1,074	4,996	Q	271	Q	18.1
Propane	1,101	1,101	Q	406	679	Q	Q	Q	Q	27.6
Wood	257	257	Q	Q	188	Q	Q	Q	Q	29.8
Any Other	546	546	Q	Q	Q	Q	Q	Q	Q	80.5
Replacement Energy Source for Primary Heating										
Electricity Only	2,559	2,559	Q	1,250	934	Q	398	605	Q	18.0
Natural Gas Only	2,260	2,260	542	539	761	Q	754	250	Q	25.3
Fuel Oil Only	5,451	5,451	589	922	1,995	546	3,844	799	Q	23.0
Propane Only	2,174	2,174	Q	921	736	Q	439	598	Q	20.2
Any Other Single										
Energy Source	477	477	Q	136	127	Q	Q	Q	Q	43.0
More than One										
Energy Source	895	895	Q	338	344	Q	Q	Q	Q	29.5
Percent of Floorspace Heated										
Not Heated	6,211	330	Q	Q	Q	Q	Q	Q	Q	33.6
1 to 50	11,195	11,195	1,611	4,139	5,663	385	1,366	2,623	Q	18.8
51 to 99	10,211	10,211	1,908	2,671	3,667	815	3,551	3,519	Q	13.8
100	40,260	40,260	4,750	10,099	13,049	4,024	15,747	9,857	625	7.7
Heating Equipment (more than one may apply)										
Heat Pumps	8,269	8,269	8,269	1,493	2,717	443	2,267	1,908	Q	15.2
Furnaces	16,909	16,909	1,493	16,909	6,657	Q	1,831	2,642	Q	11.4
Individual Space Heaters	22,380	22,380	2,717	6,657	22,380	1,139	5,131	5,318	354	10.4
District Heat	5,225	5,225	443	Q	1,139	5,225	Q	279	Q	17.1
Boilers	20,664	20,664	2,267	1,831	5,131	Q	20,664	2,870	284	11.9
Packaged Heating Units	16,000	16,000	1,908	2,642	5,318	279	2,870	16,000	Q	13.7
Other	903	903	Q	Q	354	Q	284	Q	903	25.4

See footnotes at end of table.

Table A48. Heating Equipment, Floorspace, 1992 (Continued)

(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Heated Buildings	Heating Equipment (more than one may apply)							RSE Row Factor
			Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other	
RSE Column Factor:	0.6	0.6	1.2	0.9	0.8	1.5	0.9	1.0	2.5	
Heating Distribution Equipment (more than one may apply)										
Radiators or Baseboards	13,263	13,263	997	1,038	3,437	2,695	10,602	1,480	Q	13.4
Ducts for Heating	45,422	45,422	7,892	16,427	13,853	3,141	13,713	15,774	737	7.6
Heating Only	5,950	5,950	Q	3,651	1,958	207	2,202	Q	Q	21.0
Heating and Cooling	39,472	39,472	7,774	12,776	11,895	2,935	11,511	14,932	661	7.6
Variable Air-Volume System Used	11,528	11,528	1,551	2,489	3,634	1,721	5,627	3,650	253	17.7
Fan Coil Units for Heating	5,474	5,474	1,364	395	1,398	1,444	3,770	1,041	Q	20.2
Heating Only	3,569	3,569	1,179	Q	959	693	2,606	739	Q	24.8
Heating and Cooling	1,906	1,906	Q	Q	439	751	1,164	302	Q	24.0
Individual Space Heaters	22,380	22,380	2,717	6,657	22,380	1,139	5,131	5,318	354	10.4
Other	3,310	3,310	791	1,431	1,185	245	1,716	954	Q	22.9
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	9,021	8,968	750	5,712	3,549	661	2,512	1,258	Q	13.0
Heat Pumps	8,406	8,383	7,638	1,534	2,679	414	2,467	1,944	Q	14.9
Individual Air Conditioners	17,979	17,806	2,110	5,214	8,131	1,497	8,503	3,614	Q	14.5
District Chilled Water	2,066	2,063	Q	Q	650	1,702	Q	Q	Q	25.7
Central Chillers	12,991	12,606	1,395	775	3,476	1,814	8,931	1,929	387	14.7
Packaged Air-Conditioning Units	27,830	27,411	2,562	7,004	9,886	1,745	7,936	13,810	385	8.9
Swamp Coolers	2,085	2,036	374	507	815	Q	516	574	Q	29.5
Other	268	268	Q	Q	Q	Q	Q	Q	Q	67.3
Building Shell Conservation Features (more than one may apply)										
Roof or Ceiling Insulation	50,311	48,409	7,215	13,130	17,426	3,953	17,060	12,791	827	7.2
Wall Insulation	33,240	32,180	5,335	9,371	11,509	2,226	10,460	8,601	547	8.1
Storm or Multiple Glazing	29,684	29,441	4,100	8,620	9,846	2,303	11,905	6,681	470	9.4
Tinted, Reflective or Shading Glass	25,396	24,816	4,330	5,466	8,405	2,382	9,406	7,985	454	12.1
Exterior or Interior Shading or Awnings	34,071	33,454	5,078	8,168	11,182	2,931	12,568	9,793	675	8.4
Windows that Open	28,937	27,381	3,310	7,507	9,247	2,724	11,218	5,341	397	9.9
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	13,970	13,969	1,594	2,503	5,083	2,115	6,575	3,651	331	16.2
Economizer Cycle	18,313	18,231	2,637	3,395	7,069	2,285	8,524	5,409	537	12.0
HVAC Maintenance	49,173	48,460	6,442	11,789	15,970	4,984	18,475	12,488	825	7.4
Off-Hour Equipment Reduction (more than one may apply)										
Heating	46,248	46,248	5,587	14,148	16,889	2,830	14,367	12,862	564	7.2
Cooling	42,768	42,090	5,605	12,673	15,017	2,663	13,369	12,835	542	7.7
Hot Water	9,966	9,854	1,275	1,850	2,635	586	4,512	2,623	Q	11.9
Lighting	54,944	51,638	6,607	15,547	18,578	3,146	16,319	14,078	647	6.6
Other	7,996	7,839	754	2,412	3,427	474	2,301	2,221	Q	19.8

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A49. Cooling Equipment, Number of Buildings, 1992
(Thousand)

Building Characteristics	All Buildings	All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.4	0.9	1.0	0.7	1.8	1.0	0.6	2.0	3.9	
All Buildings	4,806	3,502	816	454	1,023	28	142	1,459	179	8	9.2
Building Floorspace (square feet)											
1,001 to 5,000	2,681	1,792	470	202	536	Q	Q	625	110	Q	12.4
5,001 to 10,000	975	758	173	120	198	Q	20	347	33	Q	12.4
10,001 to 25,000	647	519	107	71	155	8	21	264	21	Q	14.3
25,001 to 50,000	280	236	44	31	73	9	29	119	8	Q	17.4
50,001 to 100,000	116	103	12	15	34	Q	24	58	Q	Q	16.2
100,001 to 200,000	71	59	7	11	16	2	20	30	Q	Q	17.8
200,001 to 500,000	26	24	3	3	7	2	9	12	Q	Q	20.9
Over 500,000	9	9	1	2	5	1	5	4	Q	Q	41.0
Principal Building Activity											
Education	301	251	42	34	72	9	29	106	19	Q	18.4
Food Sales	130	119	Q	Q	26	Q	Q	50	Q	Q	32.6
Food Service	260	244	36	Q	46	Q	Q	160	24	Q	20.2
Health Care	63	59	11	13	13	Q	6	27	Q	Q	33.2
Lodging	154	120	16	22	72	Q	7	28	Q	Q	26.6
Mercantile and Service	1,272	942	227	93	338	Q	13	360	60	Q	13.1
Office	749	731	223	108	126	8	43	331	12	Q	13.7
Parking Garage	24	12	Q	Q	8	Q	Q	1	Q	Q	64.6
Public Assembly	278	208	39	34	76	Q	17	80	Q	Q	19.0
Public Order and Safety	60	47	Q	Q	19	Q	5	17	Q	Q	41.2
Religious Worship	366	286	79	38	68	Q	6	121	Q	Q	24.6
Warehouse and Storage	761	324	74	39	116	Q	3	120	Q	Q	19.6
Other	69	44	Q	Q	11	Q	3	25	Q	Q	37.0
Vacant	319	114	30	22	32	Q	4	33	Q	Q	27.3
Year Constructed											
1899 or Before	169	119	34	Q	65	Q	Q	41	Q	Q	29.3
1900 to 1919	255	169	64	13	78	Q	5	41	Q	Q	25.6
1920 to 1945	724	491	105	29	203	Q	12	186	28	Q	17.4
1946 to 1959	880	643	156	43	217	7	27	256	42	Q	16.2
1960 to 1969	783	563	135	62	172	5	36	241	40	Q	15.3
1970 to 1979	982	741	162	116	166	5	27	348	24	Q	14.6
1980 to 1989	884	682	144	157	110	Q	23	306	34	Q	15.2
1990 to 1992	128	93	17	25	12	Q	5	40	Q	Q	39.2
Census Region											
Northeast	771	521	97	43	269	2	28	208	Q	Q	15.5
Midwest	1,202	784	275	29	229	7	31	331	Q	Q	17.9
South	1,963	1,569	363	285	433	10	58	610	39	Q	14.4
West	870	627	82	96	92	9	25	310	129	Q	19.1
Energy Sources (more than one may apply)											
Electricity	4,616	3,502	816	454	1,023	28	142	1,459	179	8	9.1
Natural Gas	2,665	2,263	609	140	641	15	109	1,051	134	Q	11.3
Fuel Oil	559	378	81	30	195	2	35	116	Q	Q	17.8
District Heat	95	82	11	8	26	24	14	24	Q	Q	26.0
District Chilled Water	28	28	Q	Q	2	28	Q	3	Q	Q	37.3
Propane	337	230	70	33	91	Q	4	63	Q	Q	28.0
Any Other	163	71	Q	Q	42	Q	Q	13	Q	Q	36.7

See footnotes at end of table.

Table A49. Cooling Equipment, Number of Buildings, 1992 (Continued)
(Thousand)

Building Characteristics	All Buildings	All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.4	0.9	1.0	0.7	1.8	1.0	0.6	2.0	3.9	
Energy End Uses (more than one may apply)											
Heated Buildings	4,178	3,439	811	453	1,001	28	141	1,426	172	8	9.2
Air-Conditioned Buildings	3,502	3,502	816	454	1,023	28	142	1,459	179	8	9.2
Buildings with Water Heating	3,502	3,016	716	411	855	22	136	1,304	137	8	9.4
Buildings with Cooking	734	663	118	80	190	8	54	345	38	Q	14.1
Buildings with Manufacturing	121	92	24	14	31	Q	4	40	Q	Q	30.8
Climate Zone: 45-Year Average											
Fewer than 2,000 CDD and --											
More than 7,000 HDD	399	229	54	12	93	Q	11	90	Q	Q	29.9
5,500-7,000 HDD	1,134	766	224	36	279	5	40	312	33	Q	18.8
4,000-5,499 HDD	1,077	753	198	129	257	4	29	253	Q	Q	27.1
Fewer than 4,000 HDD	1,101	838	139	149	166	10	38	398	71	Q	25.7
More than 2,000 CDD and --											
Fewer than 4,000 HDD	1,095	915	203	128	228	9	25	405	60	Q	20.9
Predominant Exterior Wall Material											
Masonry	3,115	2,491	552	311	683	25	115	1,109	124	Q	9.5
Siding or Shingles	764	473	136	50	185	Q	5	145	Q	Q	18.8
Metal Panels	745	394	107	71	132	Q	5	126	25	Q	21.2
Concrete Panels	87	71	8	13	8	2	10	43	4	Q	26.1
Window Glass	46	38	Q	Q	9	Q	6	22	Q	Q	34.8
Other	47	35	Q	Q	Q	Q	2	14	Q	Q	48.2
Predominant Roof Material											
Built-Up	1,642	1,319	253	165	333	11	66	642	92	Q	10.2
Shingles (Not Wood)	1,381	1,025	309	117	341	Q	18	344	41	Q	13.7
Metal Surfacing	1,037	576	154	103	180	Q	13	185	32	Q	17.8
Synthetic or Rubber	386	318	53	32	92	6	30	174	9	Q	17.0
Slate or Tile	155	113	22	Q	33	Q	7	46	Q	Q	28.2
Concrete	37	27	Q	Q	5	Q	Q	12	Q	Q	66.6
Other	167	124	20	15	38	Q	5	57	Q	Q	34.0
Percent Window Glass											
25 or Less	4,193	2,987	717	397	885	21	96	1,191	154	Q	9.7
26 to 50	490	410	84	45	110	6	32	214	20	Q	14.9
51 to 75	94	80	12	9	22	Q	8	46	Q	Q	31.6
76 to 100	29	25	Q	Q	Q	Q	6	8	Q	Q	40.6
Workers (main shift)											
Less than 5	2,718	1,623	380	202	574	Q	24	512	83	Q	13.8
5 to 9	895	781	208	92	194	Q	9	351	52	Q	13.5
10 to 19	561	502	130	61	121	10	15	263	22	Q	15.9
20 to 49	405	384	75	65	85	5	33	205	12	Q	14.7
50 to 99	130	118	14	16	32	3	24	77	Q	Q	18.7
100 to 249	64	63	8	11	12	2	19	34	Q	Q	18.8
250 or More	31	31	2	6	5	3	18	16	Q	Q	19.6
Weekly Operating Hours											
39 or Fewer	1,039	513	139	50	156	Q	13	188	Q	Q	19.8
40 to 48	1,278	1,007	268	151	286	8	42	381	55	Q	13.0
49 to 60	1,004	786	189	103	241	4	20	313	43	Q	13.1
61 to 84	645	528	104	57	151	4	30	259	15	Q	14.2
85 to 167	478	405	73	49	82	Q	15	216	37	Q	16.7
Open Continuously	362	262	43	44	108	5	21	101	8	Q	17.5

See footnotes at end of table.

Table A49. Cooling Equipment, Number of Buildings, 1992 (Continued)
(Thousand)

Building Characteristics	All Buildings	All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.4	0.9	1.0	0.7	1.8	1.0	0.6	2.0	3.9	
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation	735	661	118	80	188	8	52	345	38	Q	14.1
Computer Room	223	223	43	25	70	5	37	127	5	Q	17.9
Rooms with Special Ventilation	236	215	37	28	54	3	25	112	15	Q	19.3
Activities with Large Amounts of Hot Water	203	164	28	20	57	2	16	84	15	Q	18.8
Multibuilding Facility											
Part of Multibuilding Facility	1,667	1,090	215	164	300	27	71	434	61	Q	12.6
with Central Physical Plant	223	174	32	29	47	27	25	51	Q	Q	23.2
No Central Physical Plant	1,444	916	184	135	253	Q	46	383	56	Q	13.8
Not on Multibuilding Facility	3,139	2,412	601	290	723	Q	71	1,025	117	Q	9.5
Cooling Energy Sources (more than one may apply)											
Electricity	3,404	3,404	783	449	1,015	11	137	1,419	178	7	9.9
Natural Gas	106	106	48	8	16	Q	8	52	Q	Q	28.6
District Chilled Water	28	28	Q	Q	2	28	Q	3	Q	Q	37.3
Percent of Floorspace Cooled											
Not Cooled	1,304	Q	Q	Q	Q	Q	Q	Q	Q	Q	14.1
1 to 50	1,176	1,176	259	111	568	Q	20	346	57	Q	12.4
51 to 99	658	658	168	79	191	6	46	317	31	Q	13.9
100	1,668	1,668	389	263	265	20	76	796	91	Q	11.9
Heating Equipment (more than one may apply)											
Heat Pumps	449	443	35	427	51	Q	11	57	Q	Q	19.6
Furnaces	1,692	1,391	624	66	377	Q	15	474	69	Q	13.3
Individual Space Heaters	1,464	1,081	247	98	526	3	34	338	75	Q	12.7
District Heat	93	80	11	8	25	24	14	24	Q	Q	26.3
Boilers	624	509	103	27	263	Q	100	182	19	Q	12.4
Packaged Heating Units	870	855	64	40	88	Q	24	780	38	Q	17.2
Other	42	36	Q	Q	Q	Q	3	16	Q	Q	50.7
Cooling Equipment (more than one may apply)											
Residential-Type Central Air Conditioners	816	816	816	30	142	Q	7	61	Q	Q	17.8
Heat Pumps	454	454	30	454	48	Q	9	54	Q	Q	20.8
Individual Air Conditioners	1,023	1,023	142	48	1,023	2	35	158	17	Q	14.1
District Chilled Water	28	28	Q	Q	2	28	Q	3	Q	Q	37.3
Central Chillers	142	142	7	9	35	Q	142	40	4	Q	20.3
Packaged Air-Conditioning Units	1,459	1,459	61	54	158	3	40	1,459	38	Q	14.3
Swamp Coolers	179	179	Q	Q	17	Q	4	38	179	Q	35.3
Other	8	8	Q	Q	Q	Q	Q	Q	Q	8	49.5

See footnotes at end of table.

Table A49. Cooling Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.4	0.9	1.0	0.7	1.8	1.0	0.6	2.0	3.9	
Cooling Distribution Equipment (more than one may apply)											
Ducts for Cooling	2,733	2,733	798	444	324	25	124	1,450	144	8	9.6
Cooling Only	355	355	102	11	88	5	31	189	47	Q	18.8
Heating and Cooling	2,378	2,378	696	433	236	21	93	1,261	98	Q	10.0
Variable Air-Volume System Used	221	221	43	20	26	12	38	139	5	Q	18.0
Fan Coil Units for Cooling	56	56	Q	2	16	5	36	14	15	Q	28.1
Cooling Only	35	35	Q	Q	12	Q	19	10	14	Q	40.5
Heating and Cooling	21	21	Q	Q	4	3	16	4	Q	Q	33.3
Individual Air Conditioners	1,023	1,023	142	48	1,023	2	35	158	17	Q	14.1
Other	111	111	32	27	22	Q	9	37	50	Q	29.8
Building Shell Conservation Features (more than one may apply)											
Roof or Ceiling Insulation	3,343	2,727	664	399	719	23	118	1,165	128	Q	9.5
Wall Insulation	2,320	1,908	487	310	455	11	77	805	80	Q	11.4
Storm or Multiple Glazing	1,680	1,405	390	197	393	8	72	575	38	Q	12.3
Tinted, Reflective or Shading Glass	1,068	977	237	150	164	12	60	491	62	Q	12.9
Exterior or Interior Shading or Awnings	1,853	1,705	431	254	424	17	94	751	91	Q	11.6
Windows that Open	2,119	1,515	377	186	584	15	73	499	70	Q	12.4
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System	250	235	47	20	35	12	39	140	5	Q	17.2
Economizer Cycle	414	414	55	76	74	11	62	226	20	Q	16.6
HVAC Maintenance	2,503	2,176	490	294	559	28	127	992	104	Q	10.2
Off-Hour Equipment Reduction (more than one may apply)											
Heating	3,400	2,804	673	337	787	20	103	1,178	149	Q	9.8
Cooling	2,872	2,872	687	334	825	20	106	1,214	152	Q	9.7
Hot Water	578	445	86	63	123	4	28	187	23	Q	17.7
Lighting	4,089	3,168	757	397	899	23	118	1,331	167	8	9.5
Other	547	446	98	43	138	Q	16	195	27	Q	19.9

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A50. Cooling Equipment, Floorspace, 1992
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
			0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
RSE Column Factor:	0.4	0.5	0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
All Buildings	67,876	57,041	9,021	8,406	17,979	2,066	12,991	27,830	2,085	268	9.0
Building Floorspace (square feet)											
1,001 to 5,000	7,327	4,994	1,313	549	1,516	Q	Q	1,750	316	Q	12.6
5,001 to 10,000	7,199	5,601	1,268	902	1,470	Q	157	2,550	250	Q	12.1
10,001 to 25,000	10,375	8,364	1,716	1,152	2,370	115	357	4,319	331	Q	13.9
25,001 to 50,000	10,069	8,435	1,528	1,181	2,604	311	1,088	4,245	304	Q	17.4
50,001 to 100,000	8,062	7,185	810	1,032	2,390	Q	1,651	4,040	Q	Q	15.5
100,001 to 200,000	9,678	8,072	913	1,511	2,167	252	2,752	4,172	Q	Q	17.4
200,001 to 500,000	7,889	7,217	851	889	2,082	737	3,072	3,678	Q	Q	21.0
Over 500,000	7,278	7,174	622	1,191	3,381	515	3,869	3,075	Q	Q	33.3
Principal Building Activity											
Education	8,470	7,389	900	618	3,182	253	2,243	3,067	185	Q	17.6
Food Sales	757	725	Q	Q	148	Q	Q	386	Q	Q	32.8
Food Service	1,491	1,449	160	Q	327	Q	Q	994	66	Q	21.1
Health Care	1,763	1,747	163	407	652	227	1,141	938	Q	Q	22.1
Lodging	2,891	2,493	325	668	1,310	Q	629	906	Q	Q	29.6
Mercantile and Service	12,402	10,874	1,679	1,572	3,109	Q	1,188	5,676	605	Q	18.1
Office	12,319	12,198	1,999	1,924	1,855	659	4,345	6,506	402	Q	14.8
Parking Garage	1,652	922	Q	Q	Q	Q	Q	256	Q	Q	71.1
Public Assembly	4,556	4,077	465	494	Q	Q	Q	1,533	Q	Q	35.4
Public Order and Safety	820	741	Q	Q	283	Q	306	352	Q	Q	49.8
Religious Worship	3,747	3,121	804	405	1,021	Q	Q	1,460	Q	Q	26.4
Warehouse and Storage	11,484	7,885	1,412	1,686	2,844	Q	421	3,888	410	Q	21.4
Other	1,130	1,040	Q	Q	264	Q	216	619	Q	Q	31.4
Vacant	4,396	2,382	487	274	877	Q	500	1,249	Q	Q	38.4
Year Constructed											
1899 or Before	1,721	1,307	232	Q	702	Q	Q	643	Q	Q	29.5
1900 to 1919	3,608	2,759	702	193	1,675	Q	242	1,272	Q	Q	33.4
1920 to 1945	8,712	6,586	1,441	672	3,223	Q	847	2,905	186	Q	21.6
1946 to 1959	10,421	8,260	1,770	963	3,183	241	1,551	3,537	285	Q	17.8
1960 to 1969	12,612	10,601	1,528	1,170	3,603	376	3,032	5,411	510	Q	16.8
1970 to 1979	14,014	12,286	1,800	1,807	2,586	632	3,306	6,494	386	Q	15.2
1980 to 1989	14,287	12,985	1,357	2,921	2,900	243	3,228	6,338	549	Q	20.3
1990 to 1992	2,502	2,258	190	562	108	164	571	1,230	Q	Q	26.0
Census Region											
Northeast	13,400	11,158	1,508	1,286	5,806	302	2,519	5,879	Q	Q	18.7
Midwest	17,280	14,383	2,968	1,416	4,723	684	3,163	6,564	Q	Q	16.3
South	24,577	21,205	3,455	3,745	5,683	659	4,854	10,058	335	Q	15.0
West	12,619	10,296	1,091	1,959	1,767	421	2,456	5,329	1,546	Q	15.7
Energy Sources (more than one may apply)											
Electricity	66,549	57,041	9,021	8,406	17,979	2,066	12,991	27,830	2,085	268	9.0
Natural Gas	45,097	41,423	7,449	4,872	13,165	1,109	9,868	22,082	1,404	211	10.0
Fuel Oil	13,218	12,081	1,487	1,643	4,010	588	5,753	6,004	326	Q	15.2
District Heat	5,339	4,786	661	456	1,557	1,737	1,821	1,805	Q	Q	22.4
District Chilled Water	2,066	2,066	Q	Q	225	2,066	Q	628	Q	Q	31.8
Propane	3,393	2,837	713	710	979	Q	453	1,372	Q	Q	26.0
Any Other	1,551	1,117	Q	Q	602	Q	Q	237	Q	Q	49.5

See footnotes at end of table.

Table A50. Cooling Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.5	0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
Energy End Uses (more than one may apply)											
Heated Buildings	61,996	56,073	8,968	8,383	17,806	2,063	12,606	27,411	2,036	268	9.1
Air-Conditioned Buildings	57,041	57,041	9,021	8,406	17,979	2,066	12,991	27,830	2,085	268	9.1
Buildings with Water											
Heating	58,479	53,839	8,471	8,100	16,976	1,978	12,779	26,570	1,865	268	9.3
Buildings with Cooking	23,065	22,003	2,553	2,991	7,650	920	8,725	10,900	755	Q	14.0
Buildings with											
Manufacturing	3,174	2,870	601	689	1,268	Q	513	1,494	Q	Q	30.4
Climate Zone: 45-Year Average											
Fewer than 2,000 CDD and --											
More than 7,000 HDD	5,623	4,267	804	487	1,572	Q	843	1,779	Q	Q	29.2
5,500-7,000 HDD	18,024	14,977	2,889	1,393	5,670	574	3,647	7,396	477	Q	18.3
4,000-5,499 HDD	16,162	13,549	2,037	2,425	5,140	526	2,771	6,302	Q	Q	20.0
Fewer than 4,000 HDD	15,251	12,870	1,492	2,565	2,446	437	3,180	6,966	532	Q	22.1
More than 2,000 CDD and --											
Fewer than 4,000 HDD	12,816	11,379	1,798	1,536	3,151	467	2,550	5,386	753	Q	23.0
Predominant Exterior Wall Material											
Masonry	48,585	42,084	6,291	6,068	14,229	1,630	9,400	21,081	1,323	Q	10.6
Siding or Shingles	3,873	2,625	594	433	981	Q	170	1,095	Q	Q	18.3
Metal Panels	7,392	4,854	1,384	1,167	1,430	Q	234	1,862	289	Q	21.4
Concrete Panels	4,961	4,563	453	550	956	221	1,579	2,328	350	Q	26.4
Window Glass	2,028	1,978	Q	145	305	Q	1,259	897	Q	Q	31.5
Other	1,037	938	Q	Q	Q	Q	350	568	Q	Q	47.7
Predominant Roof Material											
Built-Up	30,257	26,404	3,631	3,998	8,114	969	6,838	14,295	1,342	Q	13.2
Shingles (Not Wood)	10,570	8,606	2,080	1,087	2,990	Q	951	3,529	252	Q	16.8
Metal Surfacing	9,019	6,077	1,623	1,157	1,594	Q	441	2,331	252	Q	18.5
Synthetic or Rubber	11,702	10,893	1,045	1,397	3,175	626	3,687	5,666	185	Q	16.6
Slate or Tile	1,998	1,608	193	Q	743	Q	118	657	Q	Q	30.4
Concrete	2,544	1,909	Q	78	830	Q	676	692	Q	Q	47.0
Other	1,786	1,544	190	451	533	Q	280	660	Q	Q	32.4
Percent Window Glass											
25 or Less	51,356	41,691	6,884	5,929	12,874	1,317	7,610	20,356	1,737	Q	10.3
26 to 50	11,815	10,873	1,669	2,132	4,006	503	3,184	5,193	255	Q	16.6
51 to 75	3,206	3,031	409	291	925	Q	1,311	1,639	Q	Q	23.3
76 to 100	1,499	1,447	Q	53	Q	Q	886	643	Q	Q	35.9
Workers (main shift)											
Less than 5	17,944	10,719	2,114	1,272	4,095	Q	Q	3,619	368	Q	19.1
5 to 9	7,524	6,249	1,399	818	2,143	Q	182	2,612	239	Q	14.5
10 to 19	8,077	6,954	1,546	898	2,301	193	355	3,389	296	Q	17.5
20 to 49	10,556	9,990	1,596	1,454	2,807	191	1,320	5,525	374	Q	15.0
50 to 99	7,763	7,313	861	1,140	2,678	327	1,730	4,500	Q	Q	20.9
100 to 249	7,378	7,195	594	1,405	1,950	192	2,688	3,770	Q	Q	21.6
250 or More	8,633	8,621	910	1,420	2,004	868	5,397	4,414	Q	Q	18.3
Weekly Operating Hours											
39 or Fewer	8,246	4,632	912	374	1,767	Q	374	2,088	Q	Q	24.5
40 to 48	14,998	12,558	2,481	1,916	3,649	312	2,013	5,989	494	Q	13.9
49 to 60	14,046	12,218	2,250	1,757	3,303	357	2,143	5,784	582	Q	15.1
61 to 84	12,062	11,158	1,329	1,810	2,838	178	3,212	5,879	287	Q	16.8
85 to 167	8,467	7,742	1,002	945	2,054	278	1,358	4,224	297	Q	20.1
Open Continuously	10,057	8,733	1,046	1,604	4,368	724	3,891	3,866	309	Q	21.9

See footnotes at end of table.

Table A50. Cooling Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
RSE Column Factor:	0.4	0.5	0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation	22,166	21,096	2,553	2,991	6,750	920	7,823	10,896	755	Q	12.1
Computer Room	14,199	14,199	1,762	2,355	4,361	839	5,942	8,419	482	Q	15.4
Rooms with Special Ventilation	8,042	7,744	975	1,101	2,339	500	3,247	4,013	343	Q	17.2
Activities with Large Amounts of Hot Water	6,862	6,546	911	1,392	2,338	416	2,261	3,496	213	Q	18.7
Multibuilding Facility											
Part of Multibuilding Facility	31,564	26,158	3,469	3,926	8,488	1,784	7,722	11,757	1,057	Q	13.3
with Central Physical Plant	8,395	7,402	972	807	2,487	1,710	2,844	2,475	Q	Q	20.4
No Central Physical Plant	23,170	18,756	2,497	3,119	6,001	Q	4,879	9,282	781	Q	15.6
Not on Multibuilding Facility	36,312	30,883	5,551	4,480	9,492	Q	5,268	16,073	1,028	Q	8.9
Cooling Energy Sources (more than one may apply)											
Electricity	54,628	54,628	8,761	8,388	17,734	842	12,500	26,928	2,063	255	9.6
Natural Gas	1,906	1,906	465	175	420	Q	783	1,047	Q	Q	30.7
District Chilled Water	2,066	2,066	Q	Q	225	2,066	Q	628	Q	Q	31.8
Percent of Floorspace Cooled											
Not Cooled	10,835	Q	Q	Q	Q	Q	Q	Q	Q	Q	16.0
1 to 50	21,715	21,715	4,166	3,024	10,452	Q	1,752	9,007	659	Q	14.1
51 to 99	13,872	13,872	1,961	1,832	3,767	702	4,712	7,824	652	Q	13.6
100	21,454	21,454	2,894	3,550	3,761	988	6,527	10,999	774	Q	14.4
Heating Equipment (more than one may apply)											
Heat Pumps	8,269	8,207	750	7,638	2,110	Q	1,395	2,562	374	Q	18.3
Furnaces	16,909	15,209	5,712	1,534	5,214	Q	775	7,004	507	Q	13.6
Individual Space Heaters	22,380	19,667	3,549	2,679	8,131	650	3,476	9,886	815	Q	12.6
District Heat	5,225	4,708	661	414	1,497	1,702	1,814	1,745	Q	Q	22.8
Boilers	20,664	19,086	2,512	2,467	8,503	Q	8,931	7,936	516	Q	14.5
Packaged Heating Units	16,000	15,870	1,258	1,944	3,614	Q	1,929	13,810	574	Q	15.0
Other	903	845	Q	Q	Q	Q	387	385	Q	Q	39.3
Cooling Equipment (more than one may apply)											
Residential-Type Central Air Conditioners	9,021	9,021	9,021	748	2,756	Q	1,134	1,979	Q	Q	15.4
Heat Pumps	8,406	8,406	748	8,406	2,078	Q	1,308	2,579	381	Q	17.8
Individual Air Conditioners	17,979	17,979	2,756	2,078	17,979	225	3,468	5,856	333	Q	18.1
District Chilled Water	2,066	2,066	Q	Q	225	2,066	Q	628	Q	Q	31.8
Central Chillers	12,991	12,991	1,134	1,308	3,468	Q	12,991	4,608	352	Q	20.3
Packaged Air-Conditioning Units	27,830	27,830	1,979	2,579	5,856	628	4,608	27,830	746	Q	12.3
Swamp Coolers	2,085	2,085	Q	381	333	Q	352	746	2,085	Q	32.3
Other	268	268	Q	Q	Q	Q	Q	Q	Q	268	40.7

See footnotes at end of table.

Table A50. Cooling Equipment, Floorspace, 1992 (Continued)

(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Cooled Buildings	Cooling Equipment (more than one may apply)								RSE Row Factor
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air-Conditioning Units	Swamp Coolers	Other	
			0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
RSE Column Factor:	0.4	0.5	0.8	0.9	0.9	1.6	1.0	0.6	1.9	3.7	
Cooling Distribution Equipment (more than one may apply)											
Ducts for Cooling	47,755	47,755	8,883	8,263	10,414	1,785	11,840	27,614	1,862	267	9.7
Cooling Only	8,283	8,283	1,363	378	2,364	389	2,855	5,213	349	Q	17.7
Heating and Cooling	39,472	39,472	7,520	7,885	8,050	1,396	8,985	22,401	1,513	Q	10.4
Variable Air-Volume System Used	12,430	12,430	1,581	1,606	2,799	904	6,640	6,568	283	Q	20.7
Fan Coil Units for Cooling	3,875	3,875	449	356	919	767	2,968	1,510	251	Q	25.8
Cooling Only	1,969	1,969	Q	Q	448	Q	1,529	810	208	Q	36.5
Heating and Cooling	1,906	1,906	Q	Q	471	459	1,439	700	Q	Q	25.5
Individual Air Conditioners	17,979	17,979	2,756	2,078	17,979	225	3,468	5,856	333	Q	18.1
Other	2,919	2,919	531	911	725	Q	1,237	1,688	536	Q	30.1
Building Shell Conservation Features (more than one may apply)											
Roof or Ceiling Insulation	50,311	45,186	7,175	7,372	13,734	1,616	11,124	21,969	1,747	231	9.8
Wall Insulation	33,240	30,278	5,004	5,354	7,885	994	7,938	14,852	1,133	Q	11.8
Storm or Multiple Glazing	29,684	27,331	4,497	4,133	8,563	808	7,663	13,555	650	Q	12.8
Tinted, Reflective or Shading Glass	25,396	24,350	3,245	4,225	5,521	1,103	8,081	12,481	1,087	Q	14.7
Exterior or Interior Shading or Awnings	34,071	32,198	5,114	5,234	9,117	1,239	9,189	16,949	1,256	Q	11.5
Windows that Open	28,937	23,966	4,487	3,471	10,572	1,042	4,967	10,421	644	Q	11.7
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System	13,970	13,727	1,623	1,606	3,768	916	6,914	6,603	283	Q	19.9
Economizer Cycle	18,313	18,313	1,832	2,627	4,869	1,110	8,255	9,808	695	Q	15.9
HVAC Maintenance	49,173	45,836	6,637	6,524	13,562	2,058	12,480	22,979	1,646	168	9.7
Off-Hour Equipment Reduction (more than one may apply)											
Heating	46,248	41,926	7,011	5,753	11,708	1,058	7,870	20,867	1,614	Q	8.9
Cooling	42,768	42,768	7,147	5,822	12,112	1,061	8,233	21,335	1,639	Q	8.8
Hot Water	9,966	8,831	1,126	1,330	2,306	326	2,525	4,190	253	Q	15.7
Lighting	54,944	47,342	7,900	6,732	13,493	1,149	8,883	23,440	1,758	237	8.7
Other	7,996	7,291	1,102	773	2,177	Q	1,575	3,983	Q	Q	22.5

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A51. Refrigeration Equipment, Number of Buildings, 1992

Building Characteristics	Number of Buildings (thousand)							RSE Row Factor
	All Buildings	Refrigeration Equipment Used (more than one may apply)						
		All Buildings	Walk-in	Cases and Cabinets			Type Unspecified	
				Any	Open	Closed		
RSE Column Factor:	0.5	0.8	0.9	0.9	1.9	0.9	1.9	
All Buildings	4,806	974	591	786	99	774	72	6.3
Building Floorspace (square feet)								
1,001 to 5,000	2,681	500	300	416	51	410	30	10.2
5,001 to 10,000	975	155	97	121	Q	121	18	12.2
10,001 to 25,000	647	139	75	106	15	103	15	11.4
25,001 to 50,000	280	79	46	59	Q	58	6	14.0
50,001 to 100,000	116	49	32	40	5	39	Q	12.3
100,001 to 200,000	71	30	22	24	5	24	Q	12.5
200,001 to 500,000	26	16	14	13	2	13	Q	15.3
Over 500,000	9	7	6	6	1	6	Q	34.9
Principal Building Activity								
Education	301	89	43	66	3	64	10	12.8
Food Sales	130	127	91	127	38	126	Q	16.9
Food Service	260	246	209	213	Q	210	Q	10.6
Health Care	63	10	5	9	Q	9	Q	29.1
Lodging	154	42	22	35	Q	35	Q	21.5
Mercantile and Service	1,272	223	124	176	29	173	Q	11.5
Office	749	40	16	32	2	32	Q	17.2
Parking Garage	24	Q	Q	Q	Q	Q	Q	46.4
Public Assembly	278	84	33	56	Q	55	Q	16.4
Public Order and Safety	60	Q	Q	Q	Q	Q	Q	36.6
Religious Worship	366	28	Q	17	Q	17	Q	24.3
Warehouse and Storage	761	47	30	25	Q	25	Q	24.2
Other	69	7	5	6	Q	6	Q	40.6
Vacant	319	22	9	20	Q	20	Q	33.5
Year Constructed								
1899 or Before	169	40	26	35	Q	35	Q	22.2
1900 to 1919	255	55	30	47	Q	47	Q	19.3
1920 to 1945	724	127	75	108	Q	107	Q	15.0
1946 to 1959	880	180	91	142	13	140	17	11.8
1960 to 1969	783	173	105	139	22	133	14	13.1
1970 to 1979	982	206	143	161	30	158	15	12.0
1980 to 1989	884	168	113	136	22	135	11	11.9
1990 to 1992	128	24	9	19	1	19	Q	31.2
Census Region								
Northeast	771	176	109	150	16	149	12	11.9
Midwest	1,202	256	164	212	21	211	12	12.9
South	1,963	358	207	276	41	268	38	11.7
West	870	183	111	148	21	146	9	16.7
Energy Sources (more than one may apply)								
Electricity	4,616	970	591	783	99	771	72	6.3
Natural Gas	2,665	683	417	551	69	544	53	7.8
Fuel Oil	559	112	64	91	7	90	7	16.9
District Heat	95	20	13	15	Q	15	Q	23.9
District Chilled Water	28	9	6	7	Q	6	Q	40.5
Propane	337	93	59	73	Q	72	Q	22.1
Any Other	163	16	6	15	Q	15	Q	33.5

See footnotes at end of table.

Table A51. Refrigeration Equipment, Number of Buildings, 1992 (Continued)

Building Characteristics	Number of Buildings (thousand)							RSE Row Factor
	All Buildings	Refrigeration Equipment Used (more than one may apply)						
		All Buildings	Walk-in	Cases and Cabinets			Type Unspecified	
				Any	Open	Closed		
RSE Column Factor:	0.5	0.8	0.9	0.9	1.9	0.9	1.9	
Energy End Uses (more than one may apply)								
Heated Buildings	4,178	926	566	752	95	740	70	6.2
Air-Conditioned Buildings	3,502	862	544	699	96	687	67	6.5
Buildings with Water Heating	3,502	918	569	744	97	732	66	6.6
Buildings with Cooking	734	591	422	498	63	489	32	7.2
Buildings with Manufacturing	121	14	8	12	Q	12	Q	35.1
Workers (main shift)								
Less than 5	2,718	414	219	342	32	337	32	11.1
5 to 9	895	198	133	158	21	156	Q	10.8
10 to 19	561	147	97	111	19	110	Q	12.7
20 to 49	405	119	74	99	14	96	8	12.0
50 to 99	130	47	29	38	4	37	Q	13.4
100 to 249	64	29	24	24	6	23	Q	12.9
250 or More	31	19	14	16	3	16	Q	13.0
Weekly Operating Hours								
39 or Fewer	1,039	82	22	59	Q	59	Q	17.1
40 to 48	1,278	118	55	80	7	76	15	15.8
49 to 60	1,004	127	61	93	4	92	13	14.2
61 to 84	645	214	139	176	28	175	11	10.4
85 to 167	478	319	240	281	45	277	Q	10.4
Open Continuously	362	113	75	97	13	95	Q	13.5
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	735	591	422	497	63	488	32	7.1
Computer Room	223	63	40	53	6	51	3	12.7
Rooms with Special Ventilation	236	90	60	79	16	76	Q	14.5
Activity with Large Amounts of Hot Water	203	106	68	82	9	79	Q	14.5
Multibuilding Facility								
Part of Multibuilding Facility	1,667	234	132	169	15	164	26	9.7
with Central Physical Plant	223	38	23	29	1	28	Q	21.3
No Central Physical Plant	1,444	196	110	140	14	135	22	11.4
Not on Multibuilding Facility	3,139	740	459	618	84	611	46	7.6

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A52. Refrigeration Equipment, Floorspace, 1992

Building Characteristics	Total Floorspace (million square feet)							RSE Row Factor
	All Buildings	Refrigeration Equipment Used (more than one may apply)						
		All Buildings	Walk-in	Cases and Cabinets			Type Unspecified	
				Any	Open	Closed		
RSE Column Factor:	0.5	0.8	0.9	0.9	1.8	0.9	2.0	
All Buildings	67,876	25,414	18,680	20,995	3,846	20,477	1,082	7.9
Building Floorspace (square feet)								
1,001 to 5,000	7,327	1,421	865	1,159	144	1,139	96	10.5
5,001 to 10,000	7,199	1,153	695	896	Q	896	135	12.3
10,001 to 25,000	10,375	2,246	1,245	1,717	268	1,662	239	10.8
25,001 to 50,000	10,069	2,925	1,683	2,177	Q	2,135	221	14.3
50,001 to 100,000	8,062	3,440	2,227	2,794	400	2,709	Q	12.1
100,001 to 200,000	9,678	4,141	3,137	3,355	682	3,302	Q	12.7
200,001 to 500,000	7,889	4,906	4,230	4,132	709	4,000	Q	15.6
Over 500,000	7,278	5,181	4,599	4,765	1,360	4,633	Q	27.8
Principal Building Activity								
Education	8,470	5,636	4,169	4,414	288	4,249	192	14.0
Food Sales	757	753	644	753	351	715	Q	18.2
Food Service	1,491	1,446	1,335	1,325	Q	1,313	Q	13.2
Health Care	1,763	1,333	1,191	1,179	Q	1,176	Q	16.9
Lodging	2,891	1,754	1,332	1,568	Q	1,568	Q	22.1
Mercantile and Service	12,402	4,721	3,710	4,286	2,179	4,209	Q	18.6
Office	12,319	3,637	2,517	2,983	529	2,903	Q	12.9
Parking Garage	1,652	Q	Q	Q	Q	Q	Q	52.3
Public Assembly	4,556	2,574	Q	2,173	Q	2,155	Q	50.9
Public Order and Safety	820	Q	Q	Q	Q	Q	Q	45.7
Religious Worship	3,747	620	Q	411	Q	411	Q	31.5
Warehouse and Storage	11,484	1,372	943	624	Q	624	Q	21.7
Other	1,130	369	211	329	Q	314	Q	35.0
Vacant	4,396	828	424	Q	Q	592	Q	45.9
Year Constructed								
1899 or Before	1,721	471	297	407	Q	407	Q	20.7
1900 to 1919	3,608	1,373	662	1,222	Q	1,222	Q	30.9
1920 to 1945	8,712	2,600	1,741	2,245	Q	2,029	Q	17.2
1946 to 1959	10,421	3,252	2,061	2,565	266	2,524	242	12.4
1960 to 1969	12,612	5,346	4,015	4,280	1,060	4,166	239	17.1
1970 to 1979	14,014	5,627	4,707	4,507	787	4,471	170	13.2
1980 to 1989	14,287	5,738	4,441	4,889	1,006	4,807	206	19.1
1990 to 1992	2,502	1,006	755	879	221	852	Q	22.3
Census Region								
Northeast	13,400	6,350	4,873	5,216	1,293	5,071	265	14.1
Midwest	17,280	6,572	4,779	5,431	953	5,309	310	11.7
South	24,577	8,299	6,056	6,722	871	6,588	404	15.4
West	12,619	4,192	2,971	3,626	729	3,509	102	14.4
Energy Sources (more than one may apply)								
Electricity	66,549	25,406	18,680	20,987	3,846	20,470	1,082	7.9
Natural Gas	45,097	20,308	14,900	16,781	3,356	16,350	790	7.7
Fuel Oil	13,218	7,895	6,473	6,444	1,112	6,231	242	10.7
District Heat	5,339	2,809	2,302	2,443	295	2,297	Q	18.6
District Chilled Water	2,066	1,143	985	1,073	Q	1,056	Q	29.9
Propane	3,393	1,655	1,366	1,360	Q	1,346	Q	21.5
Any Other	1,551	421	294	386	Q	356	Q	36.0

See footnotes at end of table.

Table A52. Refrigeration Equipment, Floorspace, 1992 (Continued)

Building Characteristics	Total Floorspace (million square feet)							RSE Row Factor
	All Buildings	Refrigeration Equipment Used (more than one may apply)						
		All Buildings	Walk-in	Cases and Cabinets			Type Unspecified	
				Any	Open	Closed		
RSE Column Factor:	0.5	0.8	0.9	0.9	1.8	0.9	2.0	
Energy End Uses (more than one may apply)								
Heated Buildings	61,996	24,956	18,328	20,606	3,607	20,089	1,074	8.0
Air-Conditioned Buildings	57,041	24,152	18,129	20,101	3,806	19,602	979	8.3
Buildings with Water Heating	58,479	25,090	18,523	20,802	3,836	20,284	1,053	8.1
Buildings with Cooking	23,065	20,594	16,061	17,880	3,420	17,550	549	10.0
Buildings with Manufacturing	3,174	790	464	643	Q	513	Q	27.0
Workers (main shift)								
Less than 5	17,944	3,090	Q	2,553	148	2,542	303	29.4
5 to 9	7,524	1,719	928	1,254	168	1,232	Q	14.3
10 to 19	8,077	2,214	1,237	1,717	156	1,699	Q	14.6
20 to 49	10,556	3,701	2,383	2,943	402	2,835	156	13.1
50 to 99	7,763	3,730	2,481	3,082	294	3,064	Q	14.9
100 to 249	7,378	4,341	3,912	3,645	789	3,490	Q	16.5
250 or More	8,633	6,618	5,600	5,801	1,890	5,615	Q	14.5
Weekly Operating Hours								
39 or Fewer	8,246	1,602	764	1,156	Q	1,156	Q	24.8
40 to 48	14,998	3,484	2,213	2,611	268	2,477	267	13.0
49 to 60	14,046	3,650	2,507	2,998	275	2,950	132	13.6
61 to 84	12,062	5,575	3,974	4,707	1,325	4,607	158	13.6
85 to 167	8,467	5,391	4,336	4,629	1,386	4,580	Q	16.7
Open Continuously	10,057	5,713	4,887	4,894	559	4,708	Q	21.7
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	22,166	19,699	15,165	16,981	3,420	16,651	549	8.4
Computer Room	14,199	7,860	6,090	6,429	1,095	6,160	219	10.7
Rooms with Special Ventilation	8,042	4,855	3,868	4,199	670	3,937	Q	12.6
Activity with Large Amounts of Hot Water	6,862	5,393	4,509	4,590	882	4,467	Q	13.9
Multibuilding Facility								
Part of Multibuilding Facility	31,564	12,528	10,009	10,872	2,119	10,462	388	13.4
with Central Physical Plant	8,395	4,042	3,309	3,702	811	3,530	Q	19.3
No Central Physical Plant	23,170	8,486	6,700	7,171	1,309	6,932	310	16.1
Not on Multibuilding Facility	36,312	12,886	8,670	10,122	1,727	10,015	694	7.2

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A53. Water-Heating Equipment, Number of Buildings, 1992
(Thousand)

Building Characteristics	All Buildings	All Buildings With Water Heating	Water-Heating Equipment (more than one may apply)								RSE Row Factor
			Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.8	1.6	0.8	0.8	2.0	2.1	
All Buildings	4,806	3,502	1,994	1,799	103	106	1,557	1,489	56	24	7.8
Building Floorspace (square feet)											
1,001 to 5,000	2,681	1,733	1,020	961	28	35	721	699	Q	Q	12.4
5,001 to 10,000	975	787	453	400	36	Q	350	336	13	Q	10.0
10,001 to 25,000	647	539	285	255	13	19	264	254	9	Q	12.4
25,001 to 50,000	280	240	126	102	11	13	118	109	Q	Q	13.2
50,001 to 100,000	116	108	61	48	5	9	53	49	Q	Q	13.5
100,001 to 200,000	71	62	29	20	5	4	34	30	3	Q	16.5
200,001 to 500,000	26	25	16	9	3	4	10	8	2	1	18.6
Over 500,000	9	9	5	Q	1	1	6	4	Q	(*)	29.7
Principal Building Activity											
Education	301	230	140	122	8	13	95	88	Q	Q	15.6
Food Sales	130	124	68	61	Q	Q	56	55	Q	Q	25.0
Food Service	260	259	174	162	Q	Q	90	89	Q	Q	16.1
Health Care	63	62	28	25	2	2	36	33	Q	Q	26.7
Lodging	154	152	90	76	5	12	67	61	Q	Q	20.0
Mercantile and Service	1,272	923	517	465	32	23	414	399	14	Q	12.7
Office	749	705	390	348	29	14	325	312	14	4	13.3
Parking Garage	24	13	8	6	Q	Q	5	5	Q	Q	57.5
Public Assembly	278	235	153	143	5	7	86	80	Q	Q	16.7
Public Order and Safety	60	58	37	27	Q	Q	23	19	Q	Q	33.7
Religious Worship	366	265	145	136	Q	Q	124	122	Q	Q	17.7
Warehouse and Storage	761	311	162	157	Q	Q	152	149	Q	Q	14.7
Other	69	43	29	24	Q	Q	14	12	Q	Q	32.5
Vacant	319	121	54	49	Q	Q	68	66	Q	Q	20.9
Year Constructed											
1899 or Before	169	126	86	77	Q	Q	44	41	Q	Q	22.7
1900 to 1919	255	202	125	110	Q	Q	81	79	Q	Q	20.2
1920 to 1945	724	507	295	253	20	23	220	216	Q	Q	13.4
1946 to 1959	880	638	381	348	16	19	265	255	Q	Q	12.7
1960 to 1969	783	580	316	282	15	22	267	261	4	3	14.9
1970 to 1979	982	721	401	368	20	15	327	306	17	4	13.4
1980 to 1989	884	649	342	318	10	15	322	303	19	4	13.9
1990 to 1992	128	79	47	43	Q	Q	31	27	4	Q	27.3
Census Region											
Northeast	771	625	448	364	55	34	183	169	13	3	15.0
Midwest	1,202	906	565	523	20	25	359	342	10	9	16.2
South	1,963	1,307	667	619	19	34	655	634	18	6	15.3
West	870	664	313	293	9	13	361	343	17	5	18.8
Energy Sources (more than one may apply)											
Electricity	4,616	3,502	1,994	1,799	103	106	1,557	1,489	56	24	7.8
Natural Gas	2,665	2,333	1,325	1,205	57	68	1,046	998	41	19	9.2
Fuel Oil	559	435	300	231	48	28	142	131	11	3	16.6
District Heat	95	82	57	35	7	18	26	22	1	4	20.6
District Chilled Water	28	22	17	12	Q	4	5	5	Q	Q	32.5
Propane	337	244	146	130	Q	Q	103	100	Q	Q	26.0
Any Other	163	96	62	55	Q	Q	39	38	Q	Q	28.0

See footnotes at end of table.

Table A53. Water-Heating Equipment, Number of Buildings, 1992 (Continued)
(Thousand)

Building Characteristics	All Buildings	All Buildings With Water Heating	Water-Heating Equipment (more than one may apply)								RSE Row Factor
			Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.8	1.6	0.8	0.8	2.0	2.1	
Energy End Uses (more than one may apply)											
Heated Buildings	4,178	3,436	1,958	1,766	103	103	1,527	1,459	56	24	7.8
Air-Conditioned Buildings	3,502	3,016	1,686	1,519	89	87	1,372	1,307	54	22	8.1
Buildings with Water Heating	3,502	3,502	1,994	1,799	103	106	1,557	1,489	56	24	7.8
Buildings with Cooking	734	728	428	379	23	28	316	293	19	10	11.2
Buildings with Manufacturing	121	102	62	54	Q	Q	43	40	Q	Q	25.0
Workers (main shift)											
Less than 5	2,718	1,609	930	858	30	47	693	672	18	Q	12.4
5 to 9	895	777	448	406	28	17	340	324	Q	Q	11.6
10 to 19	561	512	297	275	11	11	221	213	Q	Q	13.6
20 to 49	405	384	198	168	19	13	196	183	8	8	12.6
50 to 99	130	126	71	58	5	10	61	56	4	Q	15.3
100 to 249	64	62	31	22	4	5	34	30	4	Q	15.4
250 or More	31	31	19	13	4	3	12	10	2	1	16.4
Weekly Operating Hours											
39 or Fewer	1,039	507	316	294	Q	Q	196	190	Q	Q	13.6
40 to 48	1,278	979	523	479	23	25	467	448	16	Q	11.6
49 to 60	1,004	764	434	389	31	14	338	329	7	4	13.3
61 to 84	645	518	287	267	14	11	237	225	12	2	13.6
85 to 167	478	435	267	228	13	25	181	173	Q	Q	14.3
Open Continuously	362	300	168	141	10	20	140	124	11	8	14.7
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation	735	729	428	379	23	28	316	295	17	10	11.0
Computer Room	223	211	125	95	17	15	89	78	10	Q	16.4
Rooms with Special Ventilation	236	219	131	107	10	15	92	85	4	4	17.1
Activities with Large Amounts of Hot Water	203	202	124	100	5	21	86	76	9	4	15.3
Multibuilding Facility											
Part of Multibuilding Facility	1,667	1,070	583	504	39	46	504	470	21	17	10.8
with Central Physical Plant	223	175	108	80	11	22	70	58	6	8	18.3
No Central Physical Plant	1,444	895	475	424	28	25	433	411	15	9	12.8
Not on Multibuilding Facility	3,139	2,432	1,411	1,295	64	59	1,054	1,019	35	7	9.4
Water-Heating Energy Sources (more than one may apply)											
Electricity	1,696	1,696	891	851	17	30	822	792	28	7	11.8
Natural Gas	1,647	1,647	961	869	42	55	719	687	26	15	10.7
Fuel Oil	126	126	105	56	37	15	21	18	Q	Q	29.1
District Heat	38	38	31	15	7	12	7	Q	1	3	24.0
Propane	80	80	52	48	Q	Q	31	31	Q	Q	41.2

See footnotes at end of table.

Table A53. Water-Heating Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Buildings With Water Heating	Water-Heating Equipment (more than one may apply)								RSE Row Factor
			Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.8	1.6	0.8	0.8	2.0	2.1	
Water-Heating Equipment (more than one may apply)											
Centralized System	1,994	1,994	1,994	1,799	103	106	50	39	10	Q	13.9
Self-Heating Tank	1,799	1,799	1,799	1,799	7	Q	38	30	8	Q	18.3
Heated by Space-Heating Equipment	103	103	103	7	103	Q	Q	Q	Q	Q	23.7
Other	106	106	106	Q	Q	106	9	Q	Q	Q	22.4
Distributed System	1,557	1,557	50	38	Q	9	1,557	1,489	56	24	12.9
Residential-Type Storage Tank	1,489	1,489	39	30	Q	Q	1,489	1,489	9	Q	15.0
Point-of-Use Heaters	56	56	10	8	Q	Q	56	9	56	Q	26.4
Other	24	24	Q	Q	Q	Q	24	Q	Q	24	16.4
Off-Hour Equipment Reduction (more than one may apply)											
Heating	3,400	2,745	1,550	1,405	84	69	1,233	1,188	42	12	8.7
Cooling	2,872	2,425	1,345	1,215	72	63	1,111	1,069	41	10	9.0
Hot Water	578	578	332	292	18	26	258	246	11	2	13.6
Lighting	4,089	3,125	1,788	1,623	92	82	1,379	1,327	45	16	8.3
Other	547	452	299	277	19	4	157	153	7	Q	19.0

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

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A54. Water-Heating Equipment, Floorspace, 1992
(Million Square Feet)

Building Characteristics	Water-Heating Equipment (more than one may apply)										RSE Row Factor
	All Buildings	All Buildings With Water Heating	Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.7	1.3	0.8	0.8	2.3	2.0	
All Buildings	67,876	58,479	31,599	24,464	3,722	4,032	29,502	25,809	3,367	1,259	8.6
Building Floorspace (square feet)											
1,001 to 5,000	7,327	4,928	2,918	2,755	78	99	2,033	1,964	Q	Q	12.9
5,001 to 10,000	7,199	5,834	3,337	2,968	253	Q	2,618	2,511	99	Q	9.7
10,001 to 25,000	10,375	8,724	4,638	4,143	207	335	4,252	4,071	159	Q	12.3
25,001 to 50,000	10,069	8,637	4,566	3,688	430	457	4,256	3,928	Q	Q	14.0
50,001 to 100,000	8,062	7,489	4,243	3,356	326	624	3,686	3,430	Q	Q	13.8
100,001 to 200,000	9,678	8,492	3,968	2,778	715	634	4,681	4,076	430	Q	15.9
200,001 to 500,000	7,889	7,466	4,725	2,643	969	1,263	3,104	2,661	468	226	18.5
Over 500,000	7,278	6,910	3,204	Q	745	484	4,871	3,168	Q	337	27.8
Principal Building Activity											
Education	8,470	8,036	5,536	3,970	929	846	2,764	2,596	Q	Q	14.1
Food Sales	757	739	413	357	Q	Q	326	319	Q	Q	27.3
Food Service	1,491	1,490	983	811	Q	Q	545	507	Q	Q	20.2
Health Care	1,763	1,760	1,235	664	273	331	596	402	Q	Q	22.6
Lodging	2,891	2,869	2,032	1,332	194	553	957	678	Q	Q	21.9
Mercantile and Service	12,402	10,809	4,630	4,042	298	315	6,351	5,555	909	Q	16.5
Office	12,319	12,030	6,717	4,626	1,066	1,069	5,880	5,189	629	332	12.2
Parking Garage	1,652	933	361	348	Q	Q	Q	Q	Q	Q	57.8
Public Assembly	4,556	4,346	3,056	2,677	243	255	2,404	1,370	Q	Q	38.9
Public Order and Safety	820	804	626	342	Q	Q	208	124	Q	Q	40.4
Religious Worship	3,747	3,384	1,790	1,518	Q	Q	1,635	1,615	Q	Q	21.2
Warehouse and Storage	11,484	7,887	2,753	2,569	Q	Q	5,249	5,121	Q	Q	17.2
Other	1,130	1,001	497	381	Q	Q	515	493	Q	Q	28.2
Vacant	4,396	2,391	971	828	Q	Q	1,491	1,287	Q	Q	33.9
Year Constructed											
1899 or Before	1,721	1,457	967	745	Q	Q	620	593	Q	Q	25.9
1900 to 1919	3,608	3,126	1,880	1,463	Q	Q	1,313	1,245	Q	Q	29.5
1920 to 1945	8,712	7,004	4,074	3,088	396	661	3,078	2,949	Q	Q	18.0
1946 to 1959	10,421	8,784	5,153	4,057	502	614	3,874	3,686	Q	Q	14.4
1960 to 1969	12,612	11,006	5,523	3,855	1,136	667	5,627	4,867	Q	179	14.6
1970 to 1979	14,014	12,369	6,893	5,243	760	1,064	6,046	5,350	594	277	13.1
1980 to 1989	14,287	12,565	6,014	5,160	427	594	7,833	6,172	Q	362	19.3
1990 to 1992	2,502	2,167	1,095	853	Q	103	1,110	947	227	Q	21.7
Census Region											
Northeast	13,400	12,410	7,854	5,376	1,478	1,217	4,792	3,825	1,043	311	13.7
Midwest	17,280	15,460	9,002	6,922	995	1,196	7,009	6,369	271	440	14.5
South	24,577	19,592	9,298	7,966	663	825	11,836	10,315	Q	299	16.0
West	12,619	11,017	5,445	4,200	587	793	5,866	5,299	510	209	14.6
Energy Sources (more than one may apply)											
Electricity	66,549	58,479	31,599	24,464	3,722	4,032	29,502	25,809	3,367	1,259	8.7
Natural Gas	45,097	43,151	22,563	17,504	2,658	2,928	22,057	19,793	2,105	1,001	8.5
Fuel Oil	13,218	12,605	8,217	5,091	1,858	1,659	5,066	4,242	836	520	12.0
District Heat	5,339	5,177	3,840	1,555	864	1,457	1,492	1,043	283	439	19.3
District Chilled Water	2,066	1,978	1,654	911	210	546	364	264	Q	Q	28.9
Propane	3,393	2,961	1,767	1,424	352	Q	1,352	1,244	Q	Q	22.2
Any Other	1,551	1,287	735	568	Q	Q	643	601	Q	Q	37.5

See footnotes at end of table.

Table A54. Water-Heating Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Water-Heating Equipment (more than one may apply)										RSE Row Factor
	All Buildings	All Buildings With Water Heating	Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.7	1.3	0.8	0.8	2.3	2.0	
Energy End Uses (more than one may apply)											
Heated Buildings	61,996	57,708	31,163	24,052	3,722	4,007	29,166	25,478	3,364	1,259	8.7
Air-Conditioned Buildings	57,041	53,839	28,896	22,235	3,586	3,649	27,509	23,914	3,332	1,198	9.0
Buildings with Water Heating	58,479	58,479	31,599	24,464	3,722	4,032	29,502	25,809	3,367	1,259	8.7
Buildings with Cooking	23,065	22,993	13,455	9,266	2,165	2,412	11,484	8,740	2,504	802	13.1
Buildings with Manufacturing	3,174	2,976	1,250	1,000	Q	Q	1,829	1,699	Q	Q	23.2
Workers (main shift)											
Less than 5	17,944	11,207	6,452	5,923	239	320	5,740	4,678	Q	Q	20.5
5 to 9	7,524	6,432	3,656	3,111	298	275	2,890	2,780	Q	Q	13.8
10 to 19	8,077	7,089	3,982	3,626	148	208	3,182	3,070	Q	Q	14.9
20 to 49	10,556	10,215	4,868	3,821	517	574	5,571	5,154	286	232	13.5
50 to 99	7,763	7,644	3,922	2,843	535	705	4,101	3,726	299	Q	16.8
100 to 249	7,378	7,278	3,725	2,403	727	761	3,869	3,374	449	Q	18.7
250 or More	8,633	8,613	4,995	2,737	1,259	1,189	4,148	3,027	1,145	512	15.7
Weekly Operating Hours											
39 or Fewer	8,246	5,005	2,981	2,537	Q	Q	2,117	2,031	Q	Q	17.3
40 to 48	14,998	12,613	6,552	5,425	646	543	6,489	6,081	422	Q	12.6
49 to 60	14,046	12,405	6,404	5,035	584	833	6,263	5,964	293	146	12.1
61 to 84	12,062	11,308	5,310	4,286	648	487	6,277	5,765	560	165	14.8
85 to 167	8,467	8,020	4,154	2,994	504	657	4,095	3,275	Q	Q	17.3
Open Continuously	10,057	9,128	6,199	4,186	1,144	1,244	4,261	2,693	Q	492	21.6
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation	22,166	22,095	12,560	8,370	2,165	2,412	10,582	8,737	1,605	802	10.6
Computer Room	14,199	13,947	7,891	4,783	1,846	1,557	6,723	5,717	1,023	511	12.1
Rooms with Special Ventilation	8,042	7,890	5,146	3,191	1,151	962	3,115	2,667	449	363	14.4
Activities with Large Amounts of Hot Water	6,862	6,857	4,482	2,764	743	1,080	2,792	2,187	511	330	16.3
Multibuilding Facility											
Part of Multibuilding Facility	31,564	26,766	14,041	9,819	2,200	2,440	14,372	11,519	2,518	910	12.8
with Central Physical Plant	8,395	7,895	5,004	2,486	1,111	1,493	3,083	2,058	796	543	17.9
No Central Physical Plant	23,170	18,872	9,037	7,333	1,089	948	11,289	9,461	Q	367	15.8
Not on Multibuilding Facility	36,312	31,713	17,559	14,645	1,522	1,591	15,130	14,289	849	350	8.6
Water-Heating Energy Sources (more than one may apply)											
Electricity	25,482	25,482	11,504	10,388	514	773	15,671	14,008	Q	439	14.8
Natural Gas	29,962	29,962	16,228	12,906	1,706	2,130	14,816	13,174	1,467	757	9.8
Fuel Oil	2,470	2,470	2,127	1,062	984	257	397	273	Q	Q	27.3
District Heat	3,308	3,308	2,889	915	841	1,170	528	155	138	257	21.4
Propane	659	659	467	425	Q	Q	245	241	Q	Q	41.6

See footnotes at end of table.

Table A54. Water-Heating Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	All Buildings	All Buildings With Water Heating	Water-Heating Equipment (more than one may apply)								RSE Row Factor
			Centralized System				Distributed System				
			Total	with Self-Heating Storage Tank	with Tank Heated by Space-Heating Equipment	Other	Total	Residential-Type Storage System	Point-of-Use Heaters	Other	
RSE Column Factor:	0.5	0.5	0.7	0.8	1.7	1.3	0.8	0.8	2.3	2.0	
Water-Heating Equipment (more than one may apply)											
Centralized System	31,599	31,599	31,599	24,464	3,722	4,032	2,622	1,380	Q	Q	13.0
Self-Heating Tank	24,464	24,464	24,464	24,464	500	Q	2,314	1,186	Q	Q	17.7
Heated by Space-Heating Equipment	3,722	3,722	3,722	500	3,722	Q	Q	Q	Q	Q	21.9
Other	4,032	4,032	4,032	Q	Q	4,032	164	Q	Q	Q	18.3
Distributed System	29,502	29,502	2,622	2,314	Q	164	29,502	25,809	3,367	1,259	17.0
Residential-Type Storage Tank	25,809	25,809	1,380	1,186	Q	Q	25,809	25,809	727	Q	12.5
Point-of-Use Heaters	3,367	3,367	Q	Q	Q	Q	3,367	727	3,367	Q	37.0
Other	1,259	1,259	Q	Q	Q	Q	1,259	Q	Q	1,259	21.6
Off-Hour Equipment Reduction (more than one may apply)											
Heating	46,248	42,817	21,660	16,996	2,410	2,435	22,288	20,255	1,932	723	8.7
Cooling	42,768	40,185	20,206	15,694	2,303	2,379	21,047	19,122	1,849	688	8.8
Hot Water	9,966	9,966	5,736	4,453	604	754	4,556	4,167	332	151	12.1
Lighting	54,944	48,476	25,008	19,951	2,577	2,723	24,757	22,633	2,009	767	8.2
Other	7,996	7,424	4,100	3,368	484	264	3,618	3,312	Q	Q	20.4

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A55. Lighting Equipment, Number of Buildings, 1992
(Thousand)

Building Characteristics	All Buildings	All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.6	0.8	0.6	1.6	1.2	2.9	
All Buildings	4,806	4,452	2,509	4,065	206	354	78	5.5
Building Floorspace (square feet)								
1,001 to 5,000	2,681	2,429	1,342	2,145	68	95	37	9.1
5,001 to 10,000	975	920	523	866	50	61	Q	7.9
10,001 to 25,000	647	618	347	591	31	66	16	8.8
25,001 to 50,000	280	268	167	257	24	56	Q	10.2
50,001 to 100,000	116	113	66	110	16	35	Q	10.4
100,001 to 200,000	71	70	43	64	10	22	Q	12.2
200,001 to 500,000	26	25	17	25	6	14	Q	12.7
Over 500,000	9	9	5	9	2	5	Q	26.5
Principal Building Activity								
Education	301	301	128	291	21	34	Q	12.6
Food Sales	130	130	51	130	Q	Q	Q	21.9
Food Service	260	260	213	240	Q	Q	Q	12.3
Health Care	63	63	46	60	6	5	Q	25.4
Lodging	154	153	142	124	21	5	Q	18.5
Mercantile and Service	1,272	1,262	566	1,211	40	91	23	8.5
Office	749	749	415	727	51	38	20	10.0
Parking Garage	24	22	7	19	Q	6	Q	39.5
Public Assembly	278	277	198	245	18	28	Q	10.9
Public Order and Safety	60	59	29	57	Q	Q	Q	28.3
Religious Worship	366	366	315	289	Q	14	Q	16.1
Warehouse and Storage	761	628	311	509	13	90	11	11.3
Other	69	63	32	52	Q	12	Q	26.6
Vacant	319	121	58	110	Q	6	Q	17.2
Year Constructed								
1899 or Before	169	161	136	140	Q	Q	Q	18.5
1900 to 1919	255	232	165	219	9	13	Q	18.2
1920 to 1945	724	659	436	588	27	37	Q	11.2
1946 to 1959	880	813	494	740	26	52	Q	10.5
1960 to 1969	783	735	399	665	36	49	Q	10.2
1970 to 1979	982	909	461	843	44	77	12	10.4
1980 to 1989	884	826	358	770	42	102	34	9.0
1990 to 1992	128	118	59	101	11	20	Q	21.5
Census Region								
Northeast	771	735	435	687	57	53	Q	12.1
Midwest	1,202	1,082	662	995	41	107	9	11.1
South	1,963	1,811	939	1,607	51	142	31	9.9
West	870	824	473	776	57	52	31	13.3
Energy Sources (more than one may apply)								
Electricity	4,616	4,452	2,509	4,065	206	354	78	5.5
Natural Gas	2,665	2,632	1,555	2,486	141	219	54	6.6
Fuel Oil	559	549	311	522	36	53	8	13.9
District Heat	95	95	45	94	13	17	Q	16.9
District Chilled Water	28	28	14	28	2	4	Q	25.6
Propane	337	325	194	292	18	25	Q	19.5
Any Other	163	156	92	133	Q	Q	Q	17.9
Energy End Uses (more than one may apply)								
Heated Buildings	4,178	4,107	2,324	3,850	202	322	72	5.6
Air-Conditioned Buildings	3,502	3,467	1,934	3,281	179	287	67	5.7
Buildings with Water Heating	3,502	3,457	2,040	3,283	186	290	67	5.7
Buildings with Cooking	734	730	546	694	65	72	20	8.1
Buildings with Manufacturing	121	117	63	112	8	25	Q	20.6

See footnotes at end of table.

Table A55. Lighting Equipment, Number of Buildings, 1992 (Continued)
(Thousand)

Building Characteristics	All Buildings	All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.6	0.8	0.6	1.6	1.2	2.9	
Percent Window Glass								
25 or Less	4,193	3,857	2,111	3,506	163	300	68	5.9
26 to 50	490	478	318	444	35	46	8	9.6
51 to 75	94	91	64	89	6	6	Q	19.5
76 to 100	29	26	15	26	2	2	Q	28.0
Workers (main shift)								
Less than 5	2,718	2,368	1,323	2,066	79	122	31	8.3
5 to 9	895	895	491	848	34	62	15	8.3
10 to 19	561	557	339	530	25	55	Q	10.0
20 to 49	405	405	217	400	28	52	Q	9.6
50 to 99	130	130	78	126	16	34	Q	11.7
100 to 249	64	64	40	64	15	19	Q	12.0
250 or More	31	31	21	31	10	9	2	11.8
Weekly Operating Hours								
39 or Fewer	1,039	765	496	618	13	30	Q	12.4
40 to 48	1,278	1,265	633	1,182	45	109	26	9.0
49 to 60	1,004	974	489	942	46	88	22	8.2
61 to 84	645	633	334	597	44	50	11	8.8
85 to 167	478	471	322	437	29	43	11	11.3
Open Continuously	362	344	234	290	30	33	Q	11.7
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	735	731	547	695	65	72	20	8.1
Computer Room	223	222	120	221	29	45	4	11.7
Rooms with Special Ventilation	236	236	138	227	21	40	Q	13.9
Activity with Large Amounts of Hot Water	203	203	151	196	24	25	Q	11.8
Multibuilding Facility								
Part of Multibuilding Facility	1,667	1,517	809	1,315	71	165	21	8.6
with Central Physical Plant	223	214	95	206	19	35	Q	16.0
No Central Physical Plant	1,444	1,303	713	1,109	52	130	18	9.2
Not on Multibuilding Facility	3,139	2,934	1,700	2,750	135	188	57	6.0
Percent Lit when Open								
Not Lit	413	59	26	48	Q	Q	Q	23.5
1 to 50	881	881	567	780	25	47	17	10.2
51 to 99	813	813	509	771	65	65	14	8.6
100	2,699	2,699	1,408	2,467	117	239	47	7.0
Percent Lit when Closed								
Not Lit	2,987	2,633	1,467	2,315	94	174	45	7.3
1 to 50	1,689	1,689	977	1,632	107	167	33	7.0
51 to 99	43	43	25	43	Q	5	Q	27.9
100	87	87	39	76	Q	Q	Q	26.6
Lighting Equipment Types (more than one may apply)								
Incandescent	2,509	2,509	2,509	2,162	132	161	48	6.6
Standard Fluorescent	4,065	4,065	2,162	4,065	183	312	73	5.2
Compact Fluorescent	206	206	132	183	206	39	7	12.1
High-Intensity Discharge	354	354	161	312	39	354	11	8.7
Other	78	78	48	73	7	11	78	20.9

See footnotes at end of table.

Table A55. Lighting Equipment, Number of Buildings, 1992 (Continued)

(Thousand)

Building Characteristics	All Buildings	All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.6	0.8	0.6	1.6	1.2	2.9	
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	574	574	326	533	60	119	14	10.0
Natural Lighting Control								
Sensors	74	74	55	69	13	18	Q	19.2
Occupancy Sensors	59	59	25	58	11	10	Q	17.3
Time Clock	339	339	224	323	33	42	7	12.0
Manual Dimmer Switches	413	413	358	383	52	41	14	10.9
Other	78	78	42	76	13	13	Q	21.4
Off-Hour Equipment Reduction (more than one may apply)								
Heating	3,400	3,358	1,862	3,144	157	258	66	6.1
Cooling	2,872	2,850	1,559	2,696	139	229	61	6.1
Hot Water	578	558	331	520	36	43	8	11.4
Lighting	4,089	4,034	2,231	3,709	174	316	76	5.7
Other	547	543	334	522	42	53	21	13.0

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.

Table A56. Lighting Equipment, Floorspace, 1992
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.7	0.8	0.7	1.4	1.2	2.8	
All Buildings	67,876	65,354	39,221	62,074	8,336	17,570	1,612	5.8
Building Floorspace (square feet)								
1,001 to 5,000	7,327	6,693	3,763	5,927	195	289	113	9.4
5,001 to 10,000	7,199	6,816	3,835	6,422	380	487	Q	7.9
10,001 to 25,000	10,375	9,939	5,550	9,562	507	1,123	227	8.7
25,001 to 50,000	10,069	9,620	6,045	9,191	925	2,089	Q	10.8
50,001 to 100,000	8,062	7,845	4,604	7,594	1,185	2,447	Q	10.2
100,001 to 200,000	9,678	9,627	5,898	8,740	1,375	3,118	Q	12.2
200,001 to 500,000	7,889	7,663	5,226	7,528	1,745	3,932	Q	13.3
Over 500,000	7,278	7,151	4,300	7,110	2,024	4,085	407	22.7
Principal Building Activity								
Education	8,470	8,470	5,368	8,379	846	3,186	Q	10.5
Food Sales	757	757	331	757	Q	Q	Q	24.7
Food Service	1,491	1,491	1,284	1,430	Q	Q	Q	14.5
Health Care	1,763	1,763	1,446	1,754	647	551	Q	18.1
Lodging	2,891	2,889	2,698	2,768	815	328	Q	21.5
Mercantile and Service	12,402	12,368	6,516	12,059	1,432	3,075	274	14.5
Office	12,319	12,319	7,946	12,167	2,719	2,359	507	9.0
Parking Garage	1,652	1,649	310	1,424	Q	1,094	Q	40.5
Public Assembly	4,556	4,553	2,780	4,406	578	1,177	Q	23.8
Public Order and Safety	820	809	388	803	Q	Q	Q	36.3
Religious Worship	3,747	3,747	3,427	3,424	Q	188	Q	19.8
Warehouse and Storage	11,484	10,893	4,760	9,255	414	4,365	260	15.5
Other	1,130	1,113	638	1,070	Q	370	Q	23.2
Vacant	4,396	2,534	1,329	2,379	Q	445	Q	26.0
Year Constructed								
1899 or Before	1,721	1,665	1,303	1,515	Q	Q	Q	18.8
1900 to 1919	3,608	3,299	2,412	3,227	349	504	Q	23.2
1920 to 1945	8,712	8,226	5,674	7,697	837	1,798	Q	16.0
1946 to 1959	10,421	9,959	6,729	9,166	639	2,116	Q	13.2
1960 to 1969	12,612	12,279	7,220	11,720	1,764	3,382	Q	13.5
1970 to 1979	14,014	13,609	7,853	13,070	1,958	3,734	293	9.7
1980 to 1989	14,287	13,857	6,724	13,434	1,933	4,682	582	11.9
1990 to 1992	2,502	2,461	1,305	2,244	719	1,217	110	15.1
Census Region								
Northeast	13,400	13,076	8,905	12,733	2,990	4,623	Q	12.8
Midwest	17,280	16,531	10,724	15,946	1,847	5,841	263	9.4
South	24,577	23,671	12,240	21,658	1,607	4,686	553	10.5
West	12,619	12,076	7,351	11,737	1,891	2,419	437	9.3
Energy Sources (more than one may apply)								
Electricity	66,549	65,354	39,221	62,074	8,336	17,570	1,612	5.9
Natural Gas	45,097	44,847	28,989	43,913	6,297	13,140	1,262	6.7
Fuel Oil	13,218	13,113	9,692	12,959	3,668	5,383	550	9.9
District Heat	5,339	5,318	3,434	5,265	1,168	1,874	Q	14.3
District Chilled Water	2,066	2,066	1,619	2,060	434	572	Q	23.1
Propane	3,393	3,344	2,239	3,253	624	1,110	Q	17.1
Any Other	1,551	1,514	854	1,439	Q	Q	Q	27.9
Energy End Uses (more than one may apply)								
Heated Buildings	61,996	61,448	37,268	59,873	8,215	16,581	1,529	6.0
Air-Conditioned Buildings	57,041	56,642	34,240	55,594	7,950	15,956	1,463	6.3
Buildings with Water Heating	58,479	58,095	36,008	56,893	8,080	16,337	1,484	6.1
Buildings with Cooking	23,065	23,024	17,061	22,821	5,206	7,952	866	9.7
Buildings with Manufacturing	3,174	3,144	1,708	3,093	327	1,437	Q	19.8

See footnotes at end of table.

Table A56. Lighting Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.7	0.8	0.7	1.4	1.2	2.8	
Percent Window Glass								
25 or Less	51,356	49,184	27,146	46,188	4,412	12,920	1,205	6.5
26 to 50	11,815	11,509	8,723	11,284	2,570	3,698	295	11.2
51 to 75	3,206	3,179	2,382	3,127	904	655	Q	14.7
76 to 100	1,499	1,482	969	1,474	450	296	Q	22.0
Workers (main shift)								
Less than 5	17,944	15,476	8,540	13,520	714	1,777	270	14.4
5 to 9	7,524	7,524	4,231	7,100	381	1,174	251	11.8
10 to 19	8,077	8,022	4,618	7,490	376	1,624	Q	12.9
20 to 49	10,556	10,556	5,703	10,414	886	2,685	Q	9.9
50 to 99	7,763	7,763	4,648	7,646	1,089	2,920	Q	12.4
100 to 249	7,378	7,378	4,910	7,334	1,405	3,280	Q	15.3
250 or More	8,633	8,633	6,571	8,570	3,485	4,111	512	13.5
Weekly Operating Hours								
39 or Fewer	8,246	6,145	3,940	5,447	290	936	Q	14.1
40 to 48	14,998	14,895	8,138	13,833	1,126	2,914	320	9.1
49 to 60	14,046	13,917	8,364	13,398	1,626	3,545	318	8.3
61 to 84	12,062	11,996	7,105	11,710	1,795	3,559	367	10.7
85 to 167	8,467	8,433	5,692	8,266	1,556	3,148	Q	15.4
Open Continuously	10,057	9,969	5,981	9,421	1,943	3,468	Q	15.2
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	22,166	22,126	17,061	21,923	5,206	7,952	866	8.9
Computer Room	14,199	14,183	9,094	14,066	3,658	5,883	592	9.7
Rooms with Special Ventilation	8,042	8,036	5,370	7,976	1,509	3,153	Q	10.7
Activity with Large Amounts of Hot Water	6,862	6,862	5,572	6,819	1,767	2,578	Q	12.8
Multibuilding Facility								
Part of Multibuilding Facility	31,564	30,480	17,558	28,305	4,290	10,181	720	9.4
with Central Physical Plant	8,395	8,288	5,167	8,078	1,925	3,287	Q	15.9
No Central Physical Plant	23,170	22,193	12,392	20,227	2,365	6,894	509	10.5
Not on Multibuilding Facility	36,312	34,874	21,662	33,769	4,046	7,388	892	5.8
Percent Lit when Open								
Not Lit	3,280	757	391	675	Q	Q	Q	33.4
1 to 50	9,980	9,980	6,575	8,848	547	1,410	295	13.5
51 to 99	14,224	14,224	9,350	13,892	2,410	3,782	418	11.1
100	40,393	40,393	22,906	38,658	5,378	12,324	900	7.1
Percent Lit when Closed								
Not Lit	34,486	31,963	18,367	29,325	3,314	7,394	923	8.1
1 to 50	31,482	31,482	19,880	30,950	4,791	9,658	639	7.3
51 to 99	1,021	1,021	667	1,021	Q	355	Q	26.6
100	887	887	306	777	Q	Q	Q	29.9
Lighting Equipment Types (more than one may apply)								
Incandescent	39,221	39,221	39,221	36,935	6,590	10,037	1,157	6.4
Standard Fluorescent	62,074	62,074	36,935	62,074	8,111	16,557	1,493	6.0
Compact Fluorescent	8,336	8,336	6,590	8,111	8,336	3,746	368	11.6
High-Intensity Discharge	17,570	17,570	10,037	16,557	3,746	17,570	673	9.8
Other	1,612	1,612	1,157	1,493	368	673	1,612	22.3

See footnotes at end of table.

Table A56. Lighting Equipment, Floorspace, 1992 (Continued)
(Million Square Feet)

Building Characteristics	Total Floorspace of All Buildings	Total Floorspace of All Lit Buildings	Lighting Equipment Types (more than one may apply)					RSE Row Factor
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Other	
RSE Column Factor:	0.6	0.7	0.8	0.7	1.4	1.2	2.8	
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	15,241	15,241	10,321	14,714	4,117	6,900	664	10.6
Natural Lighting Control								
Sensors	3,072	3,072	2,394	3,004	1,090	1,635	Q	15.2
Occupancy Sensors	3,629	3,629	2,288	3,601	1,263	1,474	Q	13.5
Time Clock	12,104	12,104	8,318	11,853	3,413	4,488	398	14.5
Manual Dimmer Switches	12,329	12,329	10,505	12,139	4,058	4,313	586	11.2
Other	2,596	2,596	1,461	2,552	893	904	Q	14.1
Off-Hour Equipment Reduction (more than one may apply)								
Heating	46,248	45,960	27,823	44,726	5,812	12,443	1,208	6.2
Cooling	42,768	42,619	25,769	41,757	5,617	11,986	1,150	6.4
Hot Water	9,966	9,807	6,665	9,483	1,659	3,081	158	10.1
Lighting	54,944	54,489	32,756	51,840	6,317	14,013	1,325	5.5
Other	7,996	7,961	4,989	7,831	1,170	2,170	228	14.9

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

Notes: • To obtain a RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, "Building Questionnaire," 1992 Commercial Buildings Energy Consumption Survey.