

Table B34. Cooling Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)									
	All Buildings	All Cooled Buildings	Cooling Equipment (more than one may apply)							
			Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
All Buildings	4,657	3,560	676	485	799	50	130	1,953	136	49
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	1,680	319	240	356	Q	Q	857	79	Q
5,001 to 10,000	1,110	828	211	95	184	Q	Q	423	25	Q
10,001 to 25,000	708	611	96	80	149	Q	17	387	13	Q
25,001 to 50,000	257	223	24	35	60	7	25	141	9	4
50,001 to 100,000	145	134	17	22	29	7	28	89	7	Q
100,001 to 200,000	59	55	7	9	13	5	16	37	2	Q
200,001 to 500,000	23	21	2	4	7	2	9	14	Q	Q
Over 500,000	7	7	1	1	1	1	4	4	Q	Q
Principal Building Activity										
Education	327	274	23	39	79	Q	31	164	Q	Q
Food Sales	174	166	Q	Q	Q	N	Q	99	Q	Q
Food Service	349	324	66	Q	71	Q	Q	218	Q	Q
Health Care	127	127	Q	29	15	2	9	77	Q	Q
Inpatient	11	11	1	1	Q	2	6	4	Q	Q
Outpatient	116	116	Q	Q	Q	Q	4	73	Q	Q
Lodging	153	126	17	26	64	Q	10	47	Q	Q
Mercantile	667	632	87	54	164	Q	4	370	26	Q
Retail (Other Than Mall)	534	499	77	30	154	Q	Q	264	Q	Q
Enclosed and Strip Malls	133	132	Q	24	Q	Q	2	107	Q	Q
Office	739	716	137	141	90	6	31	385	5	14
Public Assembly	305	232	61	30	39	Q	16	126	Q	Q
Public Order and Safety	72	32	Q	Q	11	Q	6	14	Q	Q
Religious Worship	307	232	50	19	69	Q	Q	123	Q	Q
Service	478	289	70	33	70	Q	Q	139	Q	Q
Warehouse and Storage	603	308	82	42	85	Q	Q	140	Q	Q
Other	102	76	Q	Q	Q	Q	Q	28	Q	Q
Vacant	253	27	Q	Q	Q	N	Q	Q	Q	Q
Year Constructed										
1919 or Before	419	260	78	Q	101	Q	Q	92	Q	Q
1920 to 1945	499	313	75	24	124	2	8	143	Q	Q
1946 to 1959	763	589	129	89	178	5	13	275	29	Q
1960 to 1969	665	496	39	39	102	7	32	332	25	Q
1970 to 1979	774	649	105	106	112	Q	17	398	33	Q
1980 to 1989	846	702	143	121	96	Q	22	421	19	Q
1990 to 1999	690	549	107	91	86	4	29	291	6	Q
Census Region										
Northeast	686	473	72	19	172	2	17	265	Q	Q
Midwest	1,188	861	285	27	214	14	25	403	Q	Q
South	1,762	1,506	258	329	312	Q	57	841	Q	Q
West	1,021	720	62	110	100	13	31	443	109	Q
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	525	366	82	4	137	Q	10	170	Q	Q
5,500-7,000 HDD	986	711	175	18	177	6	22	391	Q	Q
4,000-5,499 HDD	1,085	766	178	173	207	Q	38	306	Q	Q
Fewer than 4,000 HDD	1,134	913	97	174	141	7	27	596	50	Q
2,000 CDD or More and --										
Fewer than 4,000 HDD	926	803	144	116	137	23	32	490	Q	Q

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Workers (main shift)										
Fewer than 5	2,376	1,513	339	169	350	Q	28	724	69	Q
5 to 9	807	681	133	68	163	Q	9	354	26	Q
10 to 19	683	636	101	122	146	Q	11	383	Q	Q
20 to 49	487	433	69	79	61	3	22	295	13	7
50 to 99	174	169	18	29	44	10	18	118	5	Q
100 to 249	90	88	14	10	27	4	21	54	4	3
250 or More	39	39	3	8	7	5	20	24	1	1
Weekly Operating Hours										
39 or Fewer	978	439	112	42	109	Q	4	229	Q	Q
40 to 48	1,156	968	205	180	214	Q	27	482	22	6
49 to 60	986	850	114	113	185	13	42	458	25	Q
61 to 84	664	563	137	49	125	6	18	317	42	Q
85 to 167	474	436	72	67	78	4	9	292	15	Q
Open Continuously	398	304	36	34	88	11	30	174	8	4
Multibuilding Facility Activity										
Not Part of a Multibuilding										
Facility	3,295	2,567	510	310	574	3	60	1,435	95	24
College or University	70	46	Q	Q	9	13	9	12	Q	Q
Primary or Secondary School	224	171	4	23	50	Q	17	123	Q	Q
Office Complex	134	115	Q	33	8	Q	Q	43	Q	Q
Retail Complex	181	163	Q	27	34	Q	Q	117	Q	Q
Religious Campus or Complex	186	146	Q	Q	38	Q	Q	91	Q	Q
Health Care Complex	72	61	Q	21	5	3	6	35	Q	Q
Government Complex	61	46	Q	Q	Q	Q	6	6	Q	Q
Other	434	244	85	31	65	Q	10	91	Q	Q
Energy Sources (more than one may apply)										
Electricity	4,395	3,560	676	485	799	50	130	1,953	136	49
Natural Gas	2,670	2,335	503	195	507	21	103	1,356	121	20
Fuel Oil	434	302	37	49	163	3	29	102	4	3
District Heat	117	97	4	Q	21	43	16	43	Q	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Propane	451	318	64	34	107	Q	6	165	12	Q
Other	153	107	45	Q	31	Q	3	51	Q	Q
Cooling Energy Sources (more than one may apply)										
Electricity	3,450	3,450	676	485	799	24	127	1,870	135	48
Natural Gas	142	142	Q	17	18	Q	2	111	Q	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	3,400	645	481	771	49	126	1,859	126	48
Buildings with Cooling	3,560	3,560	676	485	799	50	130	1,953	136	49
Buildings with Water Heating	3,239	2,915	532	401	650	37	124	1,646	120	34
Buildings with Cooking	857	792	114	97	216	6	49	519	44	5
Buildings with Manufacturing	151	129	28	Q	54	Q	3	57	Q	Q
Buildings with Electricity Generation	172	149	26	30	30	5	42	88	4	4
Percent of Floorspace Cooled										
Not Cooled	1,097	N	N	N	N	N	N	N	N	N
1 to 50	1,012	1,012	241	84	414	Q	Q	390	39	Q
51 to 99	751	751	156	92	161	8	45	445	32	19
100	1,796	1,796	280	310	224	40	66	1,118	65	Q

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Heating Equipment (more than one may apply)										
Heat Pumps	492	478	46	447	84	3	12	130	9	Q
Furnaces	1,460	1,193	508	76	262	Q	12	470	72	12
Individual Space Heaters	894	670	104	89	294	9	26	327	47	4
District Heat	96	77	3	4	16	39	15	35	Q	Q
Boilers	581	474	58	39	211	3	96	223	18	14
Packaged Heating Units	1,347	1,304	75	84	167	Q	26	1,219	48	4
Other	185	143	38	22	47	1	8	49	Q	Q
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	676	676	45	91	Q	8	85	Q	Q
Heat Pumps	485	485	45	485	94	4	14	112	6	Q
Individual Air Conditioners	799	799	91	94	799	Q	18	186	13	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Central Chillers	130	130	8	14	18	1	130	39	2	Q
Packaged Air Conditioning Units	1,953	1,953	85	112	186	Q	39	1,953	56	12
Swamp Coolers	136	136	Q	6	13	Q	2	56	136	Q
Other	49	49	Q	Q	Q	Q	Q	12	Q	49
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	984	862	182	127	205	Q	17	490	39	Q
Cooling	1,085	1,085	208	173	308	Q	27	575	58	Q
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	1,835	386	291	425	24	86	931	38	35
Tinted, Reflective, or Shading Glass	1,283	1,180	208	169	158	26	74	770	61	11
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	535	111	57	49	19	70	352	9	8
Economizer Cycle	567	567	49	52	51	21	63	444	33	15
HVAC Maintenance	2,786	2,520	451	372	445	48	126	1,524	101	30
Energy Management and Control System (EMCS)	460	423	37	45	71	26	60	288	15	11
Off-Hour Equipment Reduction (more than one may apply)										
Heating	2,862	2,449	489	357	506	37	85	1,346	95	31
Cooling	2,622	2,622	512	347	562	36	88	1,469	93	33
Lighting	3,675	3,110	605	435	694	39	93	1,692	119	45
Office Equipment	184	175	12	27	40	4	26	125	4	Q

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

N=No responding cases in sample.

Note: Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A of the 1999 Commercial Buildings Energy Consumption Survey.