1999 Commercial Buildings Energy Consumption Survey Detailed Tables

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Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
All Buildings	4,657	67,338	81,852	14.5	823	60
Building Floorspace						
(Square Feet)						
1,001 to 5,000	2.348	6,774	11,125	2.9	609	57
5,001 to 10,000		8,238	10,968	7.4	751	53
10,001 to 25,000		11,153	11,378	15.7	980	65
25,001 to 50,000		9,311	9,243	36.2	1,007	78
50,001 to 100,000				69.9	791	80
		10,112	12,777			
100,001 to 200,000		8,271	8,856	139.4	934	90
200,001 to 500,000 Over 500,000		6,851 6,628	8,798 8,707	296.3 929.0	779 761	101 110
Principal Building Activity						
Education	327	8,651	8,927	26.4	969	50
Food Sales	174	994	980	5.7	1,014	118
Food Service	349	1,851	4,031	5.3	459	84
Health Care		2,918	6,219	22.9	469	66
Inpatient		1,865	3,350	168.2	557	165
Outpatient		1,053	2,869	9.1	367	56
Lodging		4,521	2,356	29.5	1,919	150
Mercantile		10,398	11,384	15.6	913	65
Retail (Other Than Mall)		4,766	4,668	8.9	1,021	62
Enclosed and Strip Malls		5,631	6,716	42.2	838	77
Office		12,044	28,969	16.3	416	53
Public Assembly	305	4,393	3,147	14.4	1,396	54
Public Order and Safety	72	1,168	1,702	16.2	686	95
Religious Worship	307	3,405	1,654	11.1	2,059	29
Service	478	3,388	4,554	7.1	744	63
Warehouse and Storage	603	10,477	6,216	17.4	1,685	49
Other	. 102	1,222	1,453	12.0	841	49
Vacant	253	1,908	261	7.6	Q	Q
Year Constructed						
1919 or Before	419	4,034	3,911	9.6	1,031	46
1920 to 1945	. 499	6,445	5,925	12.9	1,088	52
1946 to 1959	. 763	9,127	9,832	12.0	928	52
1960 to 1969	. 665	10,866	12,886	16.3	843	63
1970 to 1979	. 774	11,840	15,842	15.3	747	64
1980 to 1989		13,931	19,828	16.5	703	69
1990 to 1999		11,094	13,628	16.1	814	64
Floors						
One	2,879	26,800	29,908	9.3	896	58
Two	1,168	16,985	18,749	14.5	906	61
Three	420	8,928	9,545	21.3	935	60
Four to Nine	178	10,180	15,069	57.2	676	85
Ten or More		4,445	8,582	386.9	518	97
Census Region and Division						
Northeast	686	12,360	14,407	18.0	858	66
New England	208	3,735	3,889	18.0	960	59
Middle Atlantic	479	8,625	10,518	18.0	820	69
Midwest	1,188	16,761	18,279	14.1	917	56
East North Central	782	11,205	11,668	14.3	960	56
West North Central	406	5,556	6,611	13.7	840	56
South	1,762	23,485	29,186	13.3	805	58
South Atlantic	748	11,001	14,051	14.7	783	57
East South Central	396	5,220	5,908	13.2	884	65
West South Central		7,264	9,226	11.8	787	56
						62
West	1 1171	74 / 31	Tu ux i	14 /	/ 4 /	
West Mountain		14,731 4,579	19,981 5,201	14.4 14.5	737 880	54

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Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Climate Zone: 45-Year Average						
_						
Under 2,000 CDD and	505	5.000	5.057	44.0	4.000	00
More than 7000 HDD		5,890	5,857	11.2	,	62
5500-7000 HDD		17,083	18,323	17.3		60
4000-5499 HDD		16,243	22,136	15.0		60
Fewer than 4000 HDD	1,134	16,333	21,145	14.4	772	60
2,000 CDD or More and						
Fewer than 4000 HDD	926	11,788	14,393	12.7	819	57
Workers (main shift)						
Fewer than 5	2,376	14,321	4,240	6.0	3,377	52
5 to 9	807	6,325	5,313	7.8	1,190	60
10 to 19	683	8,028	8,588	11.8	935	65
20 to 49		10.814	14,098	22.2	767	74
50 to 99		8,898	11,427	51.1	779	81
100 to 249		8,356	12,617	92.4		80
250 or More		10,595	25,569	270.0	414	96
Weekly Operating Hours						
39 or Fewer		6,596	3,517	6.7	,	11
40 to 48		13,105	15,619	11.3		43
49 to 60	986	14,200	20,714	14.4	686	55
61 to 84	664	12,458	16,147	18.7	772	74
85 to 167	474	9,116	10,796	19.2	844	104
Open Continuously	398	11,863	15,060	29.8	788	168
Ownership and Occupancy						
Nongovernment Owned	4,135	54,994	67,787	13.3	811	60
Owner Occupied		37,785	46,555	13.5	812	63
Nonowner Occupied		15,596	21,233	14.2		66
Unoccupied		1,613	0	6.8		0
Government Owned	521	12,343	14,065	23.7		57
Vacancy Status						
Completely Vacant	140	953	0	6.8	0	0
Mostly Vacant		956	261	8.5		Q
•						
Partially Vacant		15,520	20,518	22.3		53
Not At All Vacant	3,707	49,910	61,073	13.5	817	65
Number of Establishments						
One		43,343	48,677	12.3	890	63
2 to 5	688	10,582	12,379	15.4	855	61
6 to 10	114	3,574	6,580	31.4	543	73
11 to 20	48	3,260	5,965	68.0	547	76
More than 20	27	4,811	8,251	175.2	583	77
Currently Unoccupied	251	1,769	0	7.0	0	0
Energy Sources (more than						
one may apply)						
Electricity	4,395	65,716	81,768	15.0	804	62
Natural Gas	,	45,525	56,264	17.1	809	65
Fuel Oil	,			30.6		68
		13,285	19,583			
District Heat		5,891	8,654	50.2		83
District Chilled Water		2,750	4,637	55.4		81
Propane		6,290	6,349	14.0		59
Wood		570	578	7.2		69
Coal	Q	Q	Q	Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	69	1,563	2,578	22.7	606	56

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

Space-Heating Energy Sources (more than one may apply)	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per	Mean Hours
			((tilousaliu)	Worker	per Week
Electricity	1,880	32,291	43,236	17.2	747	65
Natural Gas		37,902	45,992	15.9	824	63
Fuel Oil	,	5,611	6,542	14.9	858	61
District Heat		5,534	8,116	57.7	682	79
Propane		2,728	,	8.9	1,123	51
Wood		377	,	5.7	1,115	70
Coal	Q	Q		Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	26	409	760	15.8	538	50
Primary Space-Heating						
Energy Source						
Electricity		17,627	25,423	15.6	693	70
Natural Gas		32,729	39,164	15.0	836	62
Fuel Oil		3,719	4,247	12.3	875	60
District Heat		5,077	7,008	66.0	724	85
Propane		2,107	1,907	7.5	1,105	49
Wood		Q	Q	Q	Q	Q
Coal		Q	Q	Q	Q	Q
Solar Other		N Q	N Q	N Q	N Q	N Q
Cooling Energy Sources (more than one may apply) Electricity Natural Gas District Chilled Water	142	55,545 1,914 2,750	72,764 2,846 4,637	16.1 13.5 55.4	763 672 593	65 75 81
Water-Heating Energy Sources (more than one may apply)						
Electricity	1,546	24,171	33.505	15.6	721	62
Natural Gas		29,196	,	19.2	813	72
Fuel Oil	,	2,218		20.2	763	75
District Heat		4,182	,	67.5	712	102
Propane	130	1,371	1,465	10.5	936	77
Cooking Energy Sources						
(more than one may apply) Electricity	437	13,733	18,369	31.4	748	89
Natural Gas		16,785		33.2	746	81
Propane		1,754		14.9	802	72
Energy End Uses (more than						
one may apply)						
Buildings with Space Heating		61,602		15.3	789	63
Buildings with Cooling		58,474	77,367	16.4	756	66
Buildings with Water Heating		56,115		17.3	765	68
Buildings with Cooking		24,681	31,603	28.8	781	81
Buildings with Manufacturing	151	3,126	4,351	20.7	718	56
Buildings with Electricity Generation	172	11,882	18,904	69.3	629	93
Ochoration						
Percent of Floorspace Heated	. 641	5.736	3.770	8.9	1.521	38
Percent of Floorspace Heated Not Heated		5,736 7,593	3,770 5,239	8.9 13.2	1,521 1,449	38 57
Percent of Floorspace Heated	576	5,736 7,593 10,745	5,239	8.9 13.2 17.1	1,521 1,449 823	

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Percent of Floorspace Cooled						
Not Cooled	1,097	8,864	4,485	8.1	1,976	41
1 to 50		16,846	,			61
51 to 99		16,966		22.6	,	73
100		24,662		13.7	626	65
Percent Lit When Open						
Zero	34	173	Q	5.1	3,151	92
1 to 50	. 835	9,187	4,917	11.0	1,868	58
51 to 99	. 1,228	20,665	28,668	16.8	721	67
100	2,096	34,233	47,951	16.3	714	67
Building Never Open/						
Electricity Not Used	464	3,080	261	6.6	11,787	10
Percent Lit When Closed	o 1=1	00 ==4	04.000		0.50	
Zero		20,771	21,669	9.6		43
1 to 50		30,950		18.3		61
51 to 100	. 143	2,160	3,096	15.1	698	73
Building Never Closed/ Electricity Not Used	652	13,457	15,143	20.7	889	108
Heating Equipment (many						
Heating Equipment (more						
than one may apply)	400	0.000	40.040	40.4	707	00
Heat Pumps		8,923	,	18.1	707	63
Furnaces		14,449		9.9		54
Individual Space Heaters		17,349	19,140	19.4		61
District Heat		5,534		57.7		79
Boilers		19,522		33.6	801	72
Packaged Heating Units Other		25,743 4,073		19.1 22.1	799 581	70 75
Cooling Equipment (more than one may apply) Residential-Type Central Air Conditioners	676	8,329	10,136	12.3	822	59
Heat Pumps		9,147	,	18.8		64
Individual Air Conditioners		14,276	,	17.9	857	66
District Chilled Water		2,750	4.637	55.4		81
Central Chillers	130	12,909	21,586	99.7		84
Packaged Air Conditioning		.2,000	2.,000	00	000	
Units	1,953	36,527	48,283	18.7	757	68
Swamp Coolers	,	2,219		16.3		63
Other		1,312		26.7		61
Main Equipment Replaced Since 1995 (more than one may apply)	204	40.000	40.040	40.4	700	0.0
Heating Cooling		13,220 17,390	16,913 23,164	13.4 16.0	782 751	64 67
Lighting Equipment Types (more than one may apply)						
Incandescent		38,156		17.4		67
Standard Fluorescent	,	60,344		16.0	775	65
Compact Fluorescent		20,666		34.1	687	76
High Intensity Discharge		19,223		44.8		73
Halogen		17,926		31.3		73
Other	. 58	1,004	1,393	17.5	720	73
Water Heating Equipment						
Centralized System		35,579		14.4		68
Distributed System	566	10,899	14,348	19.3	760	64
Combination of Centralized						
and Distributed System	200	9,637	13,902	48.1	693	84

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Personal Computers						
None	1,617	9,583	4,785	5.9	2,003	48
1 to 4	. 1,636	13,853	12,711	8.5	1,090	65
5 to 9	. 542	6,528	7,485	12.0	872	62
10 to 19	. 403	7,514	9,200	18.7	817	64
20 to 49	. 247	8,087	9,668	32.7	836	76
50 to 99	. 105	5,867	7,268	55.9	807	68
100 to 249		6,818	9,574	96.0	712	77
250 or More		9,088		252.4	429	89
Photocopiers						
None	2,825	21,631	18,897	7.7	1,145	57
One		12,928		11.6	997	62
2 to 4	,	15,620		28.9	931	68
5 to 9		5,384	16,785	52.6		68
		,	8,217		655	79
10 or More	75	11,774	24,991	156.7	471	19
Other Electronic Equipment						
(more than one may apply)	4.040	40.507	00.070	00.0	205	20
Laser Printers	,	46,567	66,979	23.9	695	66
FAX Machines	,	54,764	74,706	19.5	733	68
Medical Diagnostic Equipment	86	2,493	5,625	29.1	443	61
Energy-Related Space Functions						
(more than one may apply)						
Commercial Food Preparation	767	23,328	30,350	30.4	769	82
Activities with Large						
Amounts of Hot Water	698	21,793	25,850	31.2	843	91
Building Shell Conservation						
Features (more than one						
may apply)						
Multipaned Windows	2,130	38,193	49,935	17.9	765	64
Tinted, Reflective, or						
Shading Glass	1,283	29,915	43,137	23.3	694	65
HVAC Conservation Features						
(more than one may apply)						
Variable Air-Volume System	550	19,387	30,546	35.3	635	75
Economizer Cycle		21,256	,	37.5	646	77
HVAC Maintenance		53,395		19.2	749	68
Energy Management and	2,700	33,333	7 1,230	19.2	143	00
Control System (EMCS)	460	21,613	31,767	47.0	680	76
Lighting Conservation Features						
(more than one may apply)	0.40	10.004	00.707	00.7	205	70
Specular Reflectors		19,994		23.7	695	
Electronic Ballasts		42,035 18,286		19.4 31.5	752 864	68 62
		,	,			
Off-Hour Equipment Reduction (more than one may apply)						
Heating	2,862	39,969	50,855	14.0	786	52
Cooling		39,161	52,130	14.9	751	55
Lighting		51,083		13.9	785	54
Office Equipment		9,063		49.2		56
Omos Equipment	. 104	9,003	12,473	49.2	121	50

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.

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
All Buildings	4,657	67,338	81,852	5.0	909	50	30.5
Building Floorspace							
(Square Feet)							
1,001 to 5,000	2,348	6,774	11.125	2.5	667	50	30.5
5,001 to 10,000		8,238	10,968	7.0	1,000	50	34.5
10,001 to 25,000		11,153		15.0	1,354		28.5
25,001 to 50,000		9,311	9,243	35.0	1,500		29.5
		10,112					
50,001 to 100,000				65.0	1,214		
100,001 to 200,000		8,271	8,856	130.0	1,400		
200,001 to 500,000 Over 500,000		6,851 6,628	8,798 8,707	275.0 800.0	1,500 1,286		27.5 24.5
Principal Building Activity							
Education	327	8,651	8,927	8.0	1,000	45	35.5
Food Sales	174	994	980	2.5	833		
Food Service	349			3.8	500		
		1,851	4,031				
Health Care	127	2,918	6,219	5.0	501	50	23.5
Inpatient	11	1,865		65.0	563		
Outpatient	116	1,053	2,869	4.5	501	45	22.5
Lodging	153	4,521	2,356	10.0	2,031	168	28.5
Mercantile	667	10,398	11,384	6.0	1,125	54	36.5
Retail (Other Than Mall)	534	4,766	4,668	4.0	1,250	53	40.5
Enclosed and Strip Malls	133	5,631	6,716	13.8	650	73	24.5
Office	739	12,044	28,969	4.5	500		
Public Assembly	305	4,393	3,147	6.5	2,500		32.5
•	72		,		425		24.5
Public Order and Safety		1,168		10.0			
Religious Worship	307	3,405	1,654	8.0	3,000		38.5
Service	478	3,388	4,554	4.3	1,111	50	31.5
Warehouse and Storage	603	10,477	6,216	6.0	1,417	48	24.5
Other Vacant	102 253	1,222 1,908	1,453 261	5.0 4.5	769 1,583		30.5 49.5
V Ottd		,			,		
Year Constructed			2 2 4 4		4.050		
1919 or Before	419	4,034	3,911	4.5	1,250		99.5
1920 to 1945		6,445	5,925	4.8	1,161	50	67.5
1946 to 1959	763	9,127	9,832	5.5	944	48	46.5
1960 to 1969	665	10,866	12,886	5.0	758	55	35.5
1970 to 1979	774	11,840	15,842	5.0	875	51	24.5
1980 to 1989	846	13,931	19,828	5.5	833	50	14.5
1990 to 1999	690	11,094	13,628	4.8	708	50	6.5
Floors							
One	2,879	26,800	29,908	4.0	833	50	25.5
Two	1,168	16,985	18,749	6.0	1,000	54	35.5
Three	420	8,928	9,545	9.5	1,250	53	59.5
Four to Nine	178	10,180	15,069	17.5	1,000	60	63.5
Ten or More	11	4,445	8,582	225.0	563	70	30.5
Census Region and Division							
Northeast	686	12,360	14,407	6.0	813	54	39.5
New England	208	3,735	3,889	5.5	750	54	35.5
Middle Atlantic	479	8,625	10,518	6.5	833		40.5
Midwest	1,188	16,761	18,279	5.0	1,125		37.5
East North Central	782	11,205		5.5	1,125		43.5
West North Central	406	5,556	6,611	4.5	1,125		29.5
South Atlantia	1,762	23,485	29,186	5.0	875		24.5
South Atlantic	748	11,001	14,051	5.5	700		24.5
East South Central	396	5,220	5,908	6.5	813		
West South Central	618	7,264	9,226	4.0	1,167	50	23.5
West	1,021	14,731	19,981	5.0	750	50	29.5
Mountain	315	4,579	5,201	5.0	950	50	33.5
Pacific	705	10,152		5.0	735	50	29.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

<u> </u>						<u> </u>	
	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours	Median Age of Buildings (years)
	(- cquare recey	((par manua	P 22 22 22 22 22 22 22 22 22 22 22 22 22	() = == -
Climate Zone: 45-Year Average							
Under 2,000 CDD and							
•	505	5,000	5.057	4.0	000	50	24.5
More than 7,000 HDD		5,890	5,857	4.3	900	50	
5,500-7,000 HDD	986	17,083	18,323	5.5	1,000	50	
4,000-5,499 HDD	1,085	16,243	22,136	5.5	944	50	
Fewer than 4,000 HDD	1,134	16,333	21,145	5.0	750	50	27.5
2,000 CDD or More and							
Fewer than 4,000 HDD	926	11,788	14,393	5.0	1,125	50	27.5
Workers (main shift)							
Fewer than 5	2,376	14,321	4,240	3.5	1,625	49	35.5
5 to 9		6,325	5,313	4.5	667	50	
10 to 19		8,028	8,588	6.5	550	51	27.5
20 to 49		10,814	14,098	12.5	469	58	
50 to 99		8,898	11,427	35.0	542	65	
100 to 249		8,356	12,617	65.0	433	56	
250 or More	39	10,595	25,569	150.0	333	72	21.5
Weekly Operating Hours							
39 or Fewer	978	6,596	3,517	4.0	1,500	38	38.5
40 to 48		13,105	15,619	5.5	875	45	
	,		20.714				
49 to 60		14,200	- /	5.5	800	50	
61 to 84		12,458	16,147	6.0	833	65	
85 to 167		9,116	10,796	5.0	792	98	
Open Continuously	398	11,863	15,060	6.0	1,023	168	27.5
Ownership and Occupancy							
Nongovernment Owned	4,135	54,994	67,787	5.0	917	50	30.5
Owner Occupied		37,785	46,555	5.0	938	50	
Nonowner Occupied		15,596	21,233	5.0	889	50	
Unoccupied	236	1,613	0	3.8	0	70	
Government Owned	521	12,343	14,065	6.5	750	45	
		,-	,				
Vacancy Status							
Completely Vacant	140	953	0	4.0	0	76	47.5
Mostly Vacant	113	956	261	4.8	1,583	40	54.5
Partially Vacant	697	15,520	20,518	6.0	1,053	50	25.5
Not At All Vacant	3,707	49,910	61,073	5.0	857	50	29.5
Number of Establishments							
One	3,528	43,343	48,677	5.0	1,000	50	30.5
2 to 5		10,582	12,379	6.5	694	50	
6 to 10							
11 to 20		3,574 3,260	6,580 5,065	15.0 35.0	600 476	64 60	
			5,965				
More than 20 Currently Unoccupied		4,811 1,769	8,251 0	60.0 3.8	650 0	60 67	
Carrottaly Chicocapica		.,. 00	· ·	0.0	· ·	0.	00.0
Energy Sources (more than							
one may apply)							
Electricity	4,395	65,716	81,768	5.0	889	50	29.5
Natural Gas	2,670	45,525	56,264	6.0	917	50	34.5
Fuel Oil	434	13,285	19,583	5.0	926	52	39.5
District Heat	117	5,891	8,654	15.0	1,375	80	35.5
District Chilled Water	50	2,750	4,637	18.7	1,375	84	27.5
Propane	451	6,290	6,349	6.0	1,000	55	26.5
Wood		570	578	4.5	1,500	60	
Coal		Q	Q	4.5	2,250	45	
Solar		Q	Q	6.0	385	53	
Other		1,563	2,578	5.0	1,250	50	
	09	1,505	2,570	5.0	1,230	30	24.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

								т —	Π
	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)		
Space-Heating Energy Sources (more than one may apply)									
Electricity	1,880	32,291	43,236	5.0	750	50	25.5		
Natural Gas	2,380	37,902	45,992	6.0	917	50	34.5		
Fuel Oil	377	5,611	6,542	4.3	944	50	43.5		
District Heat	96	5,534	8,116	18.7	1,500	70	40.5		
Propane	307	2,728	2,428	5.0	1,333	49	21.5		
Wood	66	377	338	3.8	1,500	60	28.5		
Coal	Q	Q	Q	4.5	2,250	45	35.5		
Solar	Q	Q	Q	42.5	390	45	31.5		
Other	26	409	760	5.0	1,146	44	24.5		
Primary Space-Heating									
Energy Source									
Electricity	1,128	17,627	25,423	5.0	677	50	21.5		
Natural Gas	2,189	32,729	39,164	5.5	921	50	35.5		
Fuel Oil	302	3,719	4,247	4.8	944	50	43.5		
District Heat	77	5,077	7,008	25.0	1,900		42.5		
Propane	282	2,107	1,907	5.0	1,250	48	20.5		
Wood	Q	Q	Q	2.8	1,500		19.5		
Coal	Q	Q	Q	37.5	938	40	40.5		
Solar	N	N	N	N	N		N		
Other	Q	Q	Q	12.5	1,250		24.5		
Cooling Energy Sources									
	3,450 142 50	55,545 1,914 2,750	72,764 2,846 4,637	5.5 8.0 18.7	833 769 1,375	50 60 84	28.5 25.5 27.5		
Cooling Energy Sources (more than one may apply) Electricity	142	1,914	2,846	8.0	769	60	25.5		
Cooling Energy Sources (more than one may apply) Electricity	142 50	1,914 2,750	2,846 4,637	8.0 18.7	769 1,375	60 84	25.5 27.5		
Cooling Energy Sources (more than one may apply) Electricity	142 50 1,546	1,914 2,750 24,171	2,846 4,637 33,505	8.0 18.7 5.0	769 1,375 735	60 84 50	25.5 27.5 24.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520	1,914 2,750 24,171 29,196	2,846 4,637 33,505 35,930	8.0 18.7 5.0 7.0	769 1,375 735 938	60 84 50 60	25.5 27.5 24.5 32.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110	1,914 2,750 24,171 29,196 2,218	2,846 4,637 33,505 35,930 2,905	8.0 18.7 5.0 7.0 4.8	769 1,375 735 938 531	60 84 50 60 75	25.5 27.5 24.5 32.5 43.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520	1,914 2,750 24,171 29,196 2,218 4,182	2,846 4,637 33,505 35,930 2,905 5,870	8.0 18.7 5.0 7.0	769 1,375 735 938	60 84 50 60 75	25.5 27.5 24.5 32.5 43.5 33.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62	1,914 2,750 24,171 29,196 2,218	2,846 4,637 33,505 35,930 2,905	5.0 7.0 4.8 25.0	769 1,375 735 938 531 1,452	50 60 75 98	25.5 27.5 24.5 32.5 43.5 33.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62	1,914 2,750 24,171 29,196 2,218 4,182	2,846 4,637 33,505 35,930 2,905 5,870	5.0 7.0 4.8 25.0	769 1,375 735 938 531 1,452	50 60 75 98	25.5 27.5 24.5 32.5 43.5 33.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62	1,914 2,750 24,171 29,196 2,218 4,182	2,846 4,637 33,505 35,930 2,905 5,870	5.0 7.0 4.8 25.0	769 1,375 735 938 531 1,452	50 60 75 98 86	25.5 27.5 24.5 32.5 43.5 33.5 23.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130	1,914 2,750 24,171 29,196 2,218 4,182 1,371	2,846 4,637 33,505 35,930 2,905 5,870 1,465	5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700	50 60 75 98 86	25.5 27.5 24.5 32.5 43.5 23.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130	1,914 2,750 24,171 29,196 2,218 4,182 1,371	2,846 4,637 33,505 35,930 2,905 5,870 1,465	8.0 18.7 5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700	50 60 75 98 86	25.5 27.5 24.5 32.5 43.5 23.5 24.5 31.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352	8.0 18.7 5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700	50 60 75 98 86	25.5 27.5 24.5 32.5 43.5 23.5 24.5 31.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352	8.0 18.7 5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700	50 60 75 98 86	25.5 27.5 24.5 32.5 43.5 23.5 24.5 31.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352	8.0 18.7 5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700	50 60 75 98 86	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187	8.0 18.7 5.0 7.0 4.8 25.0 6.0	769 1,375 735 938 531 1,452 700 833 750 583	50 60 75 98 86 84 70 86	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813	50 60 75 98 86 84 70 86	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 29.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803	50 60 75 98 86 84 70 86 50 50 54 75	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 29.5 28.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813	50 60 75 98 86 84 70 86	24.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 28.5 28.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857 151	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681 3,126	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603 4,351	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8 5.0 6.5 6.0 6.5	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803 1,111	50 60 75 98 86 84 70 86 50 50 54 75 45	24.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 29.5 29.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803	50 60 75 98 86 84 70 86 50 50 54 75 45	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 29.5 29.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857 151	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681 3,126 11,882	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603 4,351 18,904	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8 5.0 6.5 6.0 6.5 8.0	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803 1,111	50 60 75 98 86 84 70 86 50 54 75 45	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 28.5 29.5 29.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857 151 172	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681 3,126 11,882	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603 4,351 18,904	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8 5.0 6.5 6.0 6.5 8.0	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803 1,111 694	50 60 75 98 86 84 70 86 50 54 75 45	24.5 27.5 24.5 32.5 43.5 23.5 24.5 24.5 29.5 29.5 29.5 26.5		
Cooling Energy Sources (more than one may apply) Electricity	1,546 1,520 110 62 130 437 505 118 4,016 3,560 3,239 857 151 172	1,914 2,750 24,171 29,196 2,218 4,182 1,371 13,733 16,785 1,754 61,602 58,474 56,115 24,681 3,126 11,882	2,846 4,637 33,505 35,930 2,905 5,870 1,465 18,369 21,352 2,187 78,082 77,367 73,385 31,603 4,351 18,904	8.0 18.7 5.0 7.0 4.8 25.0 6.0 6.5 7.0 3.8 5.0 6.5 6.0 6.5 8.0	769 1,375 735 938 531 1,452 700 833 750 583 857 833 813 803 1,111	50 60 75 98 86 84 70 86 50 54 75 45 60	25.5		

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings	Total Floorspace (million	Total Workers in All Buildings	Median Square Feet per Building	Median Square Feet	Median Hours	Median Age of Buildings
	(thousand)	square feet)	(thousand)	(thousand)	per Worker	per Week	(years)
Percent of Floorspace Cooled							
Not Cooled	1,097	8,864	4,485	4.0	1,500	48	39.5
1 to 50	,	16,846	14,146	7.5	1,143		
51 to 99	,	16,966		7.0	1,000		
100		24,662		4.5	650		
Percent Lit When Open							
Zero	34	173	Q	2.0	500	91	16.5
1 to 50		9,187	4,917	6.0	1,833		
51 to 99	, -	20,665	28,668	6.5	780		
100	2,096	34,233	47,951	4.8	750	50	24.5
Building Never Open/							
Electricity Not Used	464	3,080	261	4.0	1,250	50	39.5
Percent Lit When Closed							
Zero	,	20,771	21,669	4.8	1,000		
1 to 50	,	30,950	41,943	6.5	769		
51 to 100	143	2,160	3,096	4.5	833	68	23.5
Building Never Closed/ Electricity Not Used	652	13,457	15,143	5.0	1,063	168	30.5
Heating Equipment (more							
than one may apply)							
Heat Pumps	492	8,923	12,616	5.0	625	50	21.5
Furnaces		14,449	15,845	5.0	1,000		
Individual Space Heaters	894	17,349	19,140	6.0	1,196		
District Heat		5,534	8,116	18.7	1,190		
Boilers	581	19,522	24,374	10.0	1,053		
		25,743	32,224	6.0	750		
Packaged Heating Units Other		4,073	7,008	4.5	1,000		
Cooling Equipment (more							
than one may apply)							
Residential-Type Central	070	0.000	10 100		4.405	50	20.5
Air Conditioners		8,329	10,136	5.5	1,125		
Heat Pumps		9,147	13,463	5.0	648		
Individual Air Conditioners		14,276	16,652	6.0	833		
District Chilled Water		2,750	4,637	18.7	1,375 938		
Central Chillers	130	12,909	21,586	40.0	938	56	27.5
Packaged Air Conditioning	4.050	20 507	40.000	0.0	750	50	00.5
Units	1,953	36,527	48,283	6.0	750		
Swamp Coolers Other		2,219 1,312	2,425 1,838	4.8 7.0	1,167 1,250		
Main Equipment Replaced Since							
1995 (more than one may apply)							
Heating	984	13,220	16,913	5.5	800	50	33.5
Cooling	1,085	17,390	23,164	6.0	833	53	31.5
Lighting Equipment Types							
(more than one may apply)							
Incandescent	2,193	38,156	49,616	6.0	950	50	32.5
Standard Fluorescent	3,778	60,344	77,862	5.5	850	50	29.5
Compact Fluorescent	607	20,666	30,075	8.5	833	60	27.5
High Intensity Discharge	430	19,223	21,658	13.8	1,286	55	24.5
Halogen	572	17,926	25,668	8.0	813	56	27.5
Other	58	1,004	1,393	4.0	500	64	23.5
Water Heating Equipment							
Centralized System	2,472	35,579	45,136	5.5	857		
Distributed System	566	10,899	14,348	6.0	667	50	26.5
Combination of Centralized							
and Distributed System	200	9,637	13,902	15.0	833	62	24.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

		Total Floorspace	Total Workers	Median Square Feet	Median		Median Age of
	All Buildings (thousand)	(million square feet)	Buildings (thousand)	per Building (thousand)	Square Feet per Worker	Median Hours per Week	
Personal Computers							
-	1,617	9,583	4,785	3.8	1,500	50	35.5
None	,				,		
1 to 4	,	13,853	12,711	4.8	1,000		
5 to 9		6,528	7,485	5.0	571		23.5
10 to 19		7,514	9,200	9.0	563		19.5
20 to 49		8,087	9,668	16.2	600		28.5
50 to 99		5,867	7,268	35.0	707		23.5
100 to 249		6,818	9,574	65.0	606		25.5
250 or More	36	9,088	21,162	150.0	389	72	25.5
Photocopiers							
None	2,825	21,631	18,897	4.0	1,143	50	34.5
One		12,928	12,963	6.0	818		28.5
2 to 4	,	15,620	16,785	12.5	650		25.5
5 to 9		5,384	8,217	23.7	432		
10 or More	75	11,774		75.0	429		
Other Flestonic Fouriers							
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	66,979	7.5	667	50	27.5
FAX Machines	,	54,764	74.706	6.0	750		27.5
Medical Diagnostic Equipment	,	2,493	5,625	5.0	500		
Energy-Related Space Functions (more than one may apply) Commercial Food Preparation	767 698	23,328 21,793	30,350 25,850	6.5 9.5	750 921		28.5 29.5
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	2,130	38,193	49,935	6.0	833	50	26.5
Tinted, Reflective, or Shading Glass	1,283	29,915	43,137	6.5	800	50	24.5
HVAC Conservation Features (more than one may apply)	.,		,				
Variable Air-Volume System	550	19,387	30,546	9.0	804	61	22.5
Economizer Cycle	567	21,256	32,923	8.5	667	60	23.5
HVAC Maintenance	2,786	53,395	71,290	6.0	833	52	28.5
Energy Management and							
Control System (EMCS)	460	21,613	31,767	13.8	846	56	28.5
Lighting Conservation Features (more than one may apply)	242	40.004					
Specular Reflectors		19,994	28,787	6.0	750		
Electronic Ballasts	,	42,035 18,286	55,879 21,158	6.0 8.5	857 833		
	330	10,200	21,100	3.0	200	00	20.0
Off-Hour Equipment Reduction (more than one may apply)	0.000	00.000	50.055		000	40	20.5
Heating		39,969	50,855	5.5	833		
Cooling		39,161	52,130	5.5	792		
Lighting		51,083		5.0	875		29.5
Office Equipment	184	9,063	12,473	27.5	667	50	30.5

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.

Table B3. Census Region, Number of Buildings and Floorspace, 1999

	n	Number of	Buildings (th	nousand)		To:	tal Floorsp	ace (million s	square feet	:)
	All Buildings	North- east	Midwest	South	West	All Buildings	North- east	Midwest	South	West
All Buildings	4,657	686	1,188	1,762	1,021	67,338	12,360	16,761	23,485	14,731
Building Floorspace										
(Square Feet)										
1,001 to 5,000	2,348	305	620	916	506	6,774	901	1,835	2,536	1,503
5,001 to 10,000	1,110	169	273	413	255	8,238	1,302	2,045	3,058	1,834
10,001 to 25,000	708	130	188	260	130	11,153	1,954	2,881	4,194	2,124
25,001 to 50,000		39	48	93	76	9,311	1,407	1,773	3,384	2,746
50,001 to 100,000		26	35	49	35	10,112	1,771	2,436	3,450	2,455
100,001 to 200,000		10	16	20	13	8,271	1,461	2,279	2,864	1,666
200,001 to 500,000		5	7	8	4	6,851	1,362		2,273	1,222
Over 500,000		2	2	2	1	6,628	2,202	1,993 1,519	1,726	1,180
Principal Building Activity										
Education	327	31	42	121	134	8,651	1,714	2,250	2,348	2,338
Food Sales	174	Q	Q	76	29	994	Q	Q	392	208
Food Service	349	Q	95	124	89	1,851	Q	558	676	396
Health Care	127	14	33	59	21	2,918	448	750	1,085	635
Inpatient		Q	1	3	3	1,865	377	512	630	346
•		Q	32	56			3// Q	239	454	289
Outpatient					18	1,053				
Lodging		13	27	54	59	4,521	484	940	1,595	1,501
Mercantile		117	182	257	111	10,398	1,885	2,591	4,080	1,842
Retail (Other Than Mall)		100	157	205	71	4,766	974	1,600	1,566	627
Enclosed and Strip Malls	133	17	25	52	40	5,631	912	991	2,513	1,215
Office	739	102	172	315	150	12,044	2,389	2,820	4,162	2,672
Public Assembly	305	43	88	126	48	4,393	882	1,142	1,511	859
Public Order and Safety	72	31	13	17	Q	1,168	530	216	286	Q
Religious Worship	307	38	74	101	93	3,405	440	923	1,146	896
Service	478	73	140	198	68	3,388	740	818	1,387	443
Warehouse and Storage	603	84	192	215	113	10,477	1,743	2,764	3,957	2,012
Other		Q	Q	39	29	1,222	1,743 Q	283	305	338
Vacant	253	33	91	61	68	1,908	367	533	554	455
Year Constructed										
1919 or Before	419	126	172	69	52	4,034	1,392	1,576	549	518
1920 to 1945	499	65	206	155	73	6,445	1,619	2,423	1,704	699
1946 to 1959		138	174	289	162	9,127	2,030	2,152	2,910	2,035
1960 to 1969		97	155	199	215	10.866	2,050	2,602	3,318	2,896
1970 to 1979		77	141	338	219	11,840	1,823	2,347	4,278	3,391
1980 to 1989										
1990 to 1999		122 62	165 175	408 304	151 149	13,931 11,094	2,070 1,376	2,828 2,834	6,263 4,464	2,771 2,420
Floors										
One	2,879	291	624	1,302	662	26,800	3,131	5,800	11,826	6,044
Two	•	230	331	346	262	16,985	2,944	4,405	5,687	3,948
Three		108	172	76	64	8,928	2,261	2,725	2,106	1,836
Four to Nine Ten or More		54 3	60 2	33 4	30 2	10,180 4,445	2,598 1,426	3,080 752	2,540 1,327	1,962 940
Workers (main shift)										
Fewer than 5	2,376	271	668	970	468	14,321	1,906	4,033	5,579	2,802
5 to 9		163	224	220	199	6,325	1,372	1,689	1,730	1,533
								*		
10 to 19		114	136	273	160	8,028	1,472	1,930	2,935	1,690
20 to 49		87	95	204	101	10,814	1,574	2,575	4,174	2,492
50 to 99		30	32	51	61	8,898	1,814	1,876	2,876	2,332
100 to 249		16 5	24 9	32 12	19 12	8,356 10,595	1,702 2,519	2,228 2,430	2,856 3,335	1,570 2,312
Weekly Operating Hours										
39 or Fewer	978	115	286	380	196	6,596	900	1,851	2,532	1,313
40 to 48				486						
		156 135	280		235	13,105	1,879	2,989 3,577	5,265	2,972
49 to 60		135	250	346	255	14,200	2,792	3,577	4,617	3,214
61 to 84		130	184	207	143	12,458	2,482	3,088	4,198	2,689
85 to 167		65	102	211	96	9,116	1,813	2,531	2,978	1,794
Open Continuously	398	86	86	132	95	11,863	2,494	2,725	3,896	2,748

Table B3. Census Region, Number of Buildings and Floorspace, 1999

		Number of	Buildings (th	nousand)		Tot	al Floorsp	ace (million s	square feet	:)
	All Buildings	North- east	Midwest	South	West	All Buildings	North- east	Midwest	South	West
Ownership and Occurrence										
Ownership and Occupancy			4 40=			=	0 = 10	40.000	40 = 4=	
Nongovernment Owned	4,135	607	1,105	1,585	839	54,994	9,542	13,896	19,745	11,810
Owner Occupied		455	747	1,083	516	37,785	7,143	9,990	13,228	7,424
Nonowner Occupied	1,099	142	256	431	270	15,596	2,286	3,427	5,881	4,001
Unoccupied	236	Q	102	71	53	1,613	Q	479	636	385
Government Owned	521	80	83	177	182	12,343	2,818	2,865	3,740	2,921
Vacancy Status										
Completely Vacant	140	Q	57	Q	36	953	Q	298	Q	287
Mostly Vacant	113	Q	34	Q	Q	956	Q	235	Q	C
Partially Vacant		78	189	266	165	15,520	2,693	4,031	5,548	3,248
Not At All Vacant	3,707	576	908	1,436	787	49,910	9,301	12,197	17,383	11,029
Number of Establishments										
One	3,528	531	860	1,392	745	43,343	7,665	11,299	14,723	9,655
2 to 5	688	113	190	231	154	10,582	2,186	2,900	3,421	2,075
6 to 10	114	15	22	41	36	3,574	494	571	1,440	1,068
11 to 20		8	7	17	16	3,260	705	579	1,239	738
More than 20		4	4	9	Q	4,811	1,159	864	2,000	788
Currently Unoccupied		Q	103	72	60	1,769	Q	548	662	407
Energy Sources (more than										
one may apply)										
Electricity	4,395	639	1,113	1,689	954	65,716	11,964	16,389	23,076	14,287
Natural Gas	2,670	311	874	820	665	45,525	7,305	13,506	14,199	10,515
Fuel Oil		218	48	138	30	13,285	5,414	2,423	3,749	1,699
District Heat		31	25	39	22	5,891	1,898	1,521	1,265	1,207
District Chilled Water		2	14	Q	13	2,750	326	746	939	739
Propane		112	109	167	62	6,290	1,706	1,405	2,389	790
Other		21	37	64	Q	2,322	580	606	579	557
Energy End Uses (more than										
one may apply)										
Buildings with Space Heating	4,016	601	1,049	1,503	863	61,602	11,667	15,916	20,598	13,421
Buildings with Cooling	3,560	473	861	1,506	720	58,474	10,311	14,371	21,549	12,243
Buildings with Water Heating	3,239	515	776	1,179	769	56.115	10,577	13,702	19.014	12,822
Buildings with Cooking		141	221	315	181	24,681	5,245	6,042	8,569	4,825
Buildings with Manufacturing		22	18	87	24	3,126	568	818	1,035	706
Buildings with Electricity	101		10	01	2-7	0,120	000	010	1,000	700
Generation	172	46	39	64	22	11,882	3,108	2,782	4,062	1,930
Percent of Floorspace Heated	044	00	400	050	450	F 700	000	040	0.007	4 040
Not Heated		86	138	259	158	5,736	693	846	2,887	1,310
1 to 50		83	151	182	160	7,593	1,053	1,571	2,538	2,432
51 to 99		82	175	254	117	10,745	1,688	2,323	4,335	2,399
100	2,813	436	724	1,067	586	43,264	8,927	12,022	13,725	8,590
Percent of Floorspace Cooled	4.00=	040	00=	050	201	0.001	0.040	0.000	4 000	0.400
Not Cooled	1,097	213	327	256	301	8,864	2,049	2,390	1,936	2,489
1 to 50	, -	226	330	289	167	16,846	3,914	5,068	4,618	3,246
51 to 99		80	207	320	144	16,966	3,196	4,741	5,801	3,229
100	1,796	168	324	896	409	24,662	3,202	4,562	11,130	5,768
Percent Lit When Open										
Zero		Q	Q	Q	Q	173	Q	Q	Q	C
1 to 50	835	123	273	275	164	9,187	1,620	2,486	3,013	2,068
51 to 99	1,228	194	337	453	245	20,665	4,081	5,814	6,392	4,378
100	2,096	291	422	862	522	34,233	6,077	7,668	12,817	7,671
Duilding Nover Open/										
Building Never Open/										

Table B3. Census Region, Number of Buildings and Floorspace, 1999

	ı	Number of	Buildings (th	ousand)		Tot	al Floorsp	ace (million s	quare feet))
	All	North-				All	North-			
	Buildings	east	Midwest	South	West	Buildings	east	Midwest	South	West
Heating Equipment (more										
than one may apply)										
Heat Pumps	492	24	28	338	102	8,923	1,193	1,015	4,580	2,13
Furnaces		222	632	369	237	14,449	2,257	5,767	3,949	2,13
Individual Space Heaters	894	119	205	370	200	17,349	3,555	4,667		3,65
•				27					5,471	
District Heat		31	22		17	5,534	1,876	1,514	1,022	1,12
Boilers	581	189	175	123	93	19,522	5,469	5,961	4,209	3,88
Packaged Heating Units		135	201	645	366	25,743	4,033	5,081	10,455	6,17
Other	185	22	52	62	49	4,073	769	1,113	1,391	80
Cooling Equipment (more										
than one may apply)										
Residential-Type Central										
Air Conditioners	676	72	285	258	62	8,329	950	2,951	3,272	1,15
Heat Pumps		19	27	329	110	9,147	1,215	1,063	4,604	2,26
Individual Air Conditioners	799	172	214	312	100	14,276	3,897	3,724	4,526	2,13
District Chilled Water	50	2	14	Q	13	2,750	326	746	939	73
Central Chillers	130	17	25	57	31	12,909	2,782	3,149	4,328	2,65
Packaged Air Conditioning										
Units	1,953	265	403	841	443	36,527	6,641	8,198	13,915	7,77
Swamp Coolers	136	Q	Q	Q	109	2,219	Q	Q	339	1,62
Other	49	Q	Q	Q	Q	1,312	Q	328	343	324
Main Equipment Replaced Since										
1995 (more than one may apply)										
Heating	984	134	266	371	213	13,220	1,829	3,244	5,080	3,068
Cooling	1,085	151	231	495	208	17,390	3,080	3,808	7,088	3,41
Building Shell Conservation										
Features (more than one										
may apply)										
Multipaned Windows	2,130	342	698	694	395	38,193	7,564	11,546	11,981	7,10
Tinted, Reflective, or	,					,	,	,-	,	, -
Shading Glass	1,283	127	264	509	383	29,915	4,525	6,364	11,246	7,78
HVAC Conservation Features										
(more than one may apply)										
Variable Air-Volume System	550	93	129	194	133	19,387	3,643	4,858	6,121	4,76
Economizer Cycle		118	130	135	184	21,256	4,634	5,688	5,858	5,07
HVAC Maintenance	2,786	498	675	1.000	613	53,395	10,640	13,025	17,981	11,749
Energy Management and	2,100	700	013	1,000	013	55,555	10,040	10,020	17,301	11,743
Control System (EMCS)	460	81	107	138	135	21,613	4,211	5,296	7,108	4,998
Lighting Conservation Features										
(more than one may apply)										
Specular Reflectors	843	148	155	317	224	19,994	4,874	4,296	6,400	4,42
Electronic Ballasts		370	482	802	514	42,035	8,480	10,287	13,745	9,52
		89	130	203	158					
Skylights or Atriums	560	09	130	203	100	18,286	3,697	4,491	6,116	3,982

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

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

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand)										
		North	neast	Midv	vest		South		Wes	st	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	
All Buildings	4,657	208	479	782	406	748	396	618	315	705	
Building Floorspace											
(Square Feet)											
1,001 to 5,000	2,348	99	206	390	230	368	189	360	155	351	
5,001 to 10,000	1,110	41	128	200	72	194	80	139	80	175	
10,001 to 25,000		38	92	122	66	105	87	69	39	91	
25,001 to 50,000	257	14	25	32	17	43	25	25	25	52	
50,001 to 100,000	145	10	16	22	13	24	9	16	12	23	
100,001 to 200,000		3	7	11	5	11	4	6	4	8	
200,001 to 500,000		1	4	5	2	4	1	2	Q	3	
Over 500,000	7	Q	2	1	1	1	Q	1	Q	1	
Principal Building Activity											
Education	327	8	23	23	18	52	22	48	21	113	
Food Sales	174	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Food Service	349	Q	Q	78	Q	41	Q	61	Q	65	
Health Care	127	Q	11	25	Q	37	Q	21	4	16	
Inpatient	11	Q	Q	1	Q	1	Q	2	Q	2	
•											
Outpatient	116	Q	Q	Q	Q	35	Q	Q	Q	15	
Lodging	153	Q	10	15	12	22	20	12	19	41	
Mercantile	667	Q	92	127	55	107	55	95	34	77	
Retail (Other Than Mall)	534	Q	78	107	50	77	44	84	29	42	
Enclosed and Strip Malls	133	Q	14	19	5	29	Q	12	Q	35	
Office	739	47	55	117	56	163	77	75	43	107	
Public Assembly	305	Q	33	50	39	52	36	38	Q	29	
Public Order and Safety	72	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Religious Worship	307	Q	29	43	32	23	Q	49	Q	62	
Service	478	Q	53	68	72	72	37	89	18	49	
Warehouse and Storage	603	31	53	122	70	114	50	50	37	76	
· ·											
Other	102 253	Q Q	Q Q	Q 75	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
Year Constructed	440	25	04	440	20	24	0	20	0	0	
1919 or Before	419	35	91	140	32	31	Q	32	Q	Q	
1920 to 1945	499	28	37	147	59	58	45	51	35	38	
1946 to 1959	763	24	114	123	51	123	65	102	52	110	
1960 to 1969	665	33	64	97	57	85	38	76	66	149	
1970 to 1979	774	38	39	95	46	117	65	156	45	173	
1980 to 1989	846	34	88	73	92	152	120	136	61	90	
1990 to 1999	690	Q	47	107	68	183	Q	65	36	113	
Floors											
One	2,879	83	208	384	240	525	259	517	208	455	
Two	1,168	86	143	214	117	159	110	77	74	188	
Three	420			141	31	36			23		
		23	85				Q	18		41	
Ten or More	178 11	15 Q	40 3	42 1	18 Q	25 3	Q Q	4	11 Q	19 2	
Workers (main shift) Fewer than 5	2,376	81	189	440	228	380	193	397	172	295	
	,										
5 to 9		52	111	144	80	92	54	75 54	48	151	
10 to 19		40	74	90	45	151	68	54	43	117	
20 to 49	487	18	68	68	27	78	65	61	27	74	
50 to 99		9	21	16	15	26	10	15	14	47	
100 to 249	90	6	10	18	6	15	5	12	7	12	
250 or More	39	1	4	5	4	7	2	4	3	9	

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand)									
		North	neast	Midv		90 (0	South		Wes	st
	All	New	Middle	East North	West North	South	East South	West South		D. If
	Buildings	England	Atlantic	Central	Central	Atlantic	Central	Central	Mountain	Pacific
Weekly Operating Hours										
39 or Fewer	978	Q	72	193	93	161	85	135	90	106
40 to 48	1,156	45	111	168	112	203	108	174	85	150
49 to 60		52	82	167	83	164	55	128	54	202
61 to 84		35	95	123	61	95	44	69	22	121
85 to 167		13	52	80	22	76	60	75	35	61
Open Continuously		20	66	51	35	49	45	38	30	65
Ownership and Occupancy										
Nongovernment Owned	4,135	181	426	752	353	671	360	554	284	555
Owner Occupied	2,801	123	331	522	225	478	241	363	153	363
Nonowner Occupied	1,099	56	87	169	87	151	112	168	92	178
Unoccupied	236	Q	Q	61	Q	Q	Q	Q	Q	Q
Government Owned	521	27	52	30	52	77	36	64	31	150
Vacancy Status	440	^	^	^	^	^	^	^	^	^
Completely Vacant	140	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant		Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant		32	46	124	65	119	54	93	40	125
Not At All Vacant	3,707	165	411	583	325	599	336	501	233	555
Number of Establishments										
One	3,528	169	362	570	291	563	328	501	213	532
2 to 5		22	90	133	58	109	42	80	40	114
6 to 10		Q	12	11	Q	19	Q	6	6	30
11 to 20		4	3	3	4	10	Q	4	Q	13
More than 20		Q	Q	3		6	Q	3	Q	3
Currently Unoccupied		Q	Q	61	Q Q	Q	Q	Q	Q	Q
currently crossapies		~	~	0.	~	~	~	~	~	~
Energy Sources (more than										
one may apply)										
Electricity	4,395	190	449	730	383	711	383	595	275	679
Natural Gas	2,670	45	266	611	263	231	224	365	230	435
Fuel Oil	434	90	128	28	20	98	12	28	Q	Q
District Heat	117	2	29	11	Q	Q	Q	21	9	13
District Chilled Water	50	Q	2	2	Q	3	Q	Q	Q	7
Propane	451	62	51	63	46	87	Q	30	Q	Q
Other	153	Q	20	23	Q	Q	Q	Q	Q	Q
Energy End Hees (mays then										
Energy End Uses (more than one may apply)										
	4.046	170	424	600	264	610	266	524	271	500
Buildings with Space Heating		170	431	688	361	612	366			592
Buildings with Cooling		136	337	563	298	631	353	522	239	481
Buildings with Water Heating	3,239	151	364	515	261	492	283	404	244	525
Buildings with Cooking		36	106	162	59	134	79	101	57	124
Buildings with Manufacturing	151	Q	Q	Q	Q	30	Q	37	Q	19
Buildings with Electricity										
Generation	172	8	38	27	13	44	6	14	11	11
Percent of Floorspace Heated										
Not Heated	641	Q	48	94	Q	136	29	94	44	114
1 to 50		Q	65	116	35	56	56	70	40	121
51 to 99		22	59	114	61	119	63	70 72	39	77
100		130	307	459	266	437	247	383	193	393
	-,						,			
Percent of Floorspace Cooled				215	100			2-		20:
Not Cooled	1,097	71	142	219	108	117	43	96	77	224
1 to 50	,	65	161	221	109	126	70	93	55	112
51 to 99		30	49	137	70	140	66	114	69	76
100	1,796	41	126	205	119	364	217	315	116	293

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand) Northeast Midwest South Wes										
		North	neast	Midy	vest		South		We	st	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	
Percent Lit When Open											
Zero	34	Q	Q	Q	N	Q	Q	Q	Q	Q	
1 to 50	835	35	89	200	73	132	56	88	53	110	
51 to 99	1,228	51	143	201	136	180	75	198	93	152	
100	2,096	93	198	278	144	331	247	284	118	404	
Building Never Open/											
Electricity Not Used	464	Q	Q	101	53	90	Q	47	50	Q	
Heating Equipment (more than one may apply)											
Heat Pumps	492	6	18	10	18	190	104	44	15	86	
Furnaces	1,460	66	156	429	203	115	105	149	116	121	
Individual Space Heaters	894	33	86	130	75	132	109	129	81	119	
District Heat	96	2	29	8	Q	5	Q	20	5	12	
Boilers	581	80	109	123	52	76	18	29	30	63	
Packaged Heating Units	1,347	29	107	129	72	229	149	267	96	270	
Other	185	Q	20	35	Q	17	Q	27	15	34	
Cooling Equipment (more than one may apply) Residential-Type Central											
Air Conditioners	676	Q	63	174	111	79	63	116	29	32	
Heat Pumps	485	4	15	8	19	187	99	43	19	91	
Individual Air Conditioners	799	61	111	147	68	140	89	83	27	74	
District Chilled Water	50	Q	2	2	Q	3	Q	Q	Q	7	
Central Chillers	130	5	12	15	10	34	5	18	13	18	
Packaged Air Conditioning	4.050	70	400	004	440	240	200	202	440	204	
Units	1,953	76	189	284	119	318	200	323	142	301	
Swamp Coolers Other	136 49	Q Q	Q Q	Q Q	Q Q	Q 3	Q Q	Q Q	73 Q	36 Q	
Main Equipment Replaced Since 1995 (more than one may apply) Heating	984 1,085	Q 51	98 100	192 183	74 47	164 202	62 90	146 203	54 69	159 139	
Building Shell Conservation Features (more than one may apply)											
Multipaned Windows	2,130	107	235	465	233	331	189	174	131	265	
Tinted, Reflective, or	2,130	107	200	+00	200	331	103	1/7	131	200	
Shading Glass	1,283	30	97	168	96	195	114	199	138	245	
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System	550	11	82	94	36	106	26	63	44	89	
Economizer Cycle	567	38	80	63	67	55	32	47	57	127	
HVAC Maintenance	2,786	149	349	414	260	419	32 254	327	209	404	
	2,700	149	349	414	200	419	234	321	209	404	
Energy Management and Control System (EMCS)	460	17	63	59	47	66	30	42	31	103	
Lighting Conservation Features (more than one may apply)											
Specular Reflectors	843	48	100	107	48	148	60	108	48	175	
Electronic Ballasts	2,167	109	262	333	149	328	189	284	129	385	
	۷,۱۰/	109	202	333	43	90	109	70	55	300	

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.

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		North	east	Midw	est /		South		Wes	st
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All Buildings	67,338	3,735	8,625	11,205	5,556	11,001	5,220	7,264	4,579	10,152
Building Floorspace										
(Square Feet)										
1,001 to 5,000	6,774	287	614	1,186	648	1,006	514	1,015	493	1,009
5,001 to 10,000	8,238	287	1,015	1,480	566	1,430	644	983	612	1,222
10,001 to 25,000	11,153	569	1,384	1,855	1,026	1,707	1,343	1,145	632	1,492
25,001 to 50,000		506	902	1,181	592	1,597	875	912	865	1,881
50,001 to 100,000		709	1,062	1,544	892	1,679	654	1,116	817	1,638
100,001 to 200,000		506	956	1,549	730	1,621	508	735	552	1,114
						*		670		,
200,001 to 500,000 Over 500,000		176 Q	1,187 1,507	1,434 976	560 543	1,261 698	342 Q	687	Q 358	971 823
Over 300,000	0,020	Q	1,507	310	040	030	Q	007	330	023
Principal Building Activity	0.054		4 400	4 500	744	207	400	040	750	4 500
Education	8,651	575	1,139	1,506	744	997	438	913	758	1,580
Food Sales	994	Q	Q	Q	Q	Q	Q	135	Q	Q
Food Service	1,851	Q	Q	463	Q	302	Q	207	Q	292
Health Care	2,918	Q	335	502	248	585	132	367	201	434
Inpatient	1,865	Q	291	336	Q	312	Q	215	Q	233
Outpatient	1,053	Q	Q	Q	Q	273	Q	Q	Q	201
Lodging	4,521	Q	315	725	215	825	467	303	545	956
Mercantile		612	1,273	1,780	811	2,007	937	1,135	418	1,423
Retail (Other Than Mall)		Q	725	1,158	442	625	430	512	169	458
Enclosed and Strip Malls		Q	548	622	369	1,383	507	623	Q	966
Office		849	1,540	1,777	1,043	2,311	696	1,155	760	1,913
	,		,						373	
Public Assembly		Q	574	635	507	539	431	541		486
Public Order and Safety	1,168	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	3,405	Q	370	566	357	309	Q	487	Q	588
Service	3,388	Q	527	403	415	604	351	433	168	275
Warehouse and Storage	10,477	429	1,314	1,983	782	1,909	963	1,085	520	1,493
Other	1,222	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	1,908	Q	Q	412	Q	Q	Q	Q	Q	198
Year Constructed										
1919 or Before	4,034	458	933	1,215	360	346	Q	159	267	251
1920 to 1945	6,445	423	1,196	1,849	574	603	335	765	287	412
1946 to 1959		434	1,596	1,417	735	1,106	659	1,146	713	1,322
1960 to 1969	10,866	670	1,380	1,605	997	1,613	639	1,065	807	2,089
1970 to 1979	-,	746	1,078	1,564	784	2,060	754	1,464	676	2,715
1980 to 1989		570	1,500	1,673	1,155	2,966	1,739	1,557	1,126	1,645
1990 to 1999	,	433	943	1,882	952	2,306	1,050	1,107	704	1,716
Floors	00.05-		0 00=			=	0.04:			
One		835	2,295	3,976	1,824	5,249	2,611	3,965	1,958	4,086
Two		1,018	1,926	2,658	1,748	2,485	1,639	1,564	1,167	2,781
Three	8,928	674	1,587	2,049	675	1,043	417	646	631	1,205
Four to Nine	10,180	867	1,732	1,931	1,149	1,491	Q	636	659	1,302
Ten or More	4,445	Q	1,085	591	Q	733	Q	452	Q	777
Workers (main shift)										
Fewer than 5	14,321	521	1,385	2,847	1,186	2,314	1,158	2,108	1,118	1,685
5 to 9		450	923	1,146	544	705	454	571	465	1,069
10 to 19	,									
		425	1,048	1,315	615	1,447	856	632	470	1,220
20 to 49		479	1,096	1,820	755	1,745	1,167	1,261	812	1,680
50 to 99		715	1,099	1,014	862	1,508	537	831	587	1,745
100 to 249		579	1,123	1,605	623	1,575	526	756	573	997
250 or More	10,595	567	1,952	1,459	971	1,708	522	1,105	555	1,757

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		North	east	Midw	est /		South		Wes	st
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Weekly Operating Hours										
39 or Fewer	6,596	249	651	1,305	546	1,053	594	884	689	625
40 to 48	,	527	1,352	1,680	1,309	1,943	1,370	1,952	1,242	1,730
49 to 60	-,	1,085	1,707	2,455	1,122	2,549	681	1,387	788	2,426
61 to 84	,	846	1,637	2,149	939	2,201	743	1,254	496	2,193
85 to 167	,	464	1,349	1,848	683	1,267	951	759	574	1,220
Open Continuously	-,	565	1,930	1,768	957	1,987	882	1,027	790	1,958
Ownership and Occupancy										
Nongovernment Owned	54,994	2,976	6,567	9,640	4,257	9,162	4,486	6,097	3,443	8,367
Owner Occupied		2,129	5,014	6,933	3,057	6,072	3,019	4,136	2,064	5,360
Nonowner Occupied		810	1,476	2,373	1,054	2,716	1,389	1,776	1,124	2,877
Unoccupied	1,613	Q	1, 17 Q	334	1,00 T	2,7 10 Q	,,000 Q	1,770 Q	Q	2,377 Q
Government Owned	12,343	759	2,059	1,565	1,300	1,839	734	1,167	1,136	1,785
Vacancy Status										
Completely Vacant	953	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	956	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	15,520	1,003	1,689	2,890	1,141	2,656	992	1,900	1,022	2,226
Not At All Vacant	49,910	2,619	6,682	7,903	4,294	8,124	4,172	5,086	3,301	7,728
Number of Establishments										
One		2,225	5,440	7,546	3,753	6,407	3,558	4,758	3,066	6,588
2 to 5	10,582	610	1,575	2,042	858	1,659	751	1,012	538	1,537
6 to 10	3,574	Q	366	306	266	701	Q	353	262	806
11 to 20	3,260	376	329	319	260	826	Q	252	Q	499
More than 20	4,811	Q	830	606	Q	1,026	Q	686	Q	587
Currently Unoccupied	1,769	Q	Q	386	Q	Q	Q	Q	Q	Q
Energy Sources (more than										
one may apply)	0==10			10010	=	40.04=		= 440		
Electricity	65,716	3,615	8,349	10,940	5,449	10,817	5,149	7,110	4,292	9,995
Natural Gas	45,525	1,590	5,714	9,383	4,123	5,517	3,508	5,174	3,183	7,332
Fuel Oil	13,285	2,254	3,160	1,299	1,123	2,457	546	747	379	1,321
District Heat		180	1,718	799	722	504	Q	524	410	797
District Chilled Water		Q	252	282	464	359	Q	488	Q	494
Propane	6,290	858	848	752	653	1,455	694	239	Q	693
Other	2,322	Q	539	360	Q	268	Q	Q	Q	439
Energy End Uses (more than										
one may apply) Buildings with Space Heating	64 600	2 554	9 116	10 520	E 200	0.242	1 051	6 504	4 204	9,218
		3,551	8,116	10,530	5,386	9,243	4,854	6,501	4,204	
Buildings with Water Heating		3,034	7,278	9,374	4,997 4,571	10,140	4,793	6,616 5,867	3,845	8,398
Buildings with Water Heating	56,115	3,187	7,390	9,131	4,571	8,900	4,247	5,867	3,993	8,828
Buildings with Many footuning	,	1,487	3,758	4,088	1,953	4,531	1,552	2,486	1,533	3,292
Buildings with Manufacturing	3,126	Q	392	493	Q	388	Q	340	Q	568
Buildings with Electricity Generation	11,882	988	2,121	1,728	1,054	2,530	659	873	532	1,398
Percent of Floorspace Heated										
Not Heated	5,736	Q	510	675	Q	1,757	366	763	376	934
1 to 50		Q	810	1,177	393	981	697	860	471	1,960
51 to 99		446	1,242	1,665	657	2,030	1,123	1,182	465	1,935
100	,	2,863	6,064	7,687	4,335	6,232	3,034	4,460	3,268	5,322
Percent of Floorspace Cooled										
	0.004	701	1,348	1,831	550	861	427	648	735	1,754
Not Cooled	8.864	701	1.340	1,001	ออด	001			1 (1.1	1.7 50
Not Cooled	8,864 16,846	701 1,105			559 1,578				871	
	16,846	1,105 917	2,808 2,279	3,490 3,015	1,578 1,726	2,070 2,970	1,136 1,220	1,412 1,610		2,375 2,200

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		North	east	Midw	vest		South		Wes	st
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Percent Lit When Open										
Zero	173	Q	Q	Q	N	Q	Q	Q	Q	
1 to 50	9,187	479	1,140	1,866	620	1,436	728	849	572	1,49
51 to 99		1,259	2,822	3,830	1,983	2,973	1,248	2,171	1,373	3,00
100		1,832	4,245	4,927	2,741	5,916	3,080	3,821	2,273	5,39
Building Never Open/	0.,200	.,002	.,	.,02.	_,	0,0.0	0,000	0,02.	_, 0	0,00
Electricity Not Used	3,080	Q	Q	569	212	624	Q	410	337	24
Heating Equipment (more										
than one may apply)	0.000			470	500	0.50	4 000	20.1		4 50
Heat Pumps		387	807	476	539	2,594	1,382	604	571	1,56
Furnaces	,	775	1,482	3,908	1,859	1,310	1,253	1,387	1,232	1,24
Individual Space Heaters		937	2,618	2,812	1,854	2,293	1,579	1,599	1,250	2,40
District Heat		180	1,696	792	722	423	Q	486	Q	75
Boilers	19,522	2,170	3,299	4,010	1,951	2,243	771	1,195	1,329	2,55
Packaged Heating Units	25,743	1,086	2,946	3,302	1,778	4,695	2,401	3,359	1,592	4,58
Other	4,073	Q	595	825	289	578	Q	576	311	48
Cooling Equipment (more than one may apply)										
Residential-Type Central										
Air Conditioners	8,329	Q	790	1,766	1,186	1,281	898	1,093	646	510
Heat Pumps	9,147	346	870	490	573	2,642	1,316	646	649	1,61
Individual Air Conditioners	14,276	1,316	2,581	2,525	1,200	1,940	1,386	1,200	642	1,48
District Chilled Water	2,750	Q	252	282	464	359	Q	488	Q	49
Central Chillers	12,909	719	2,063	2,013	1,136	2,269	591	1,468	753	1,89
Packaged Air Conditioning										
Units	36,527	1,796	4,844	5,463	2,735	6,575	3,147	4,193	2,206	5,56
Swamp Coolers		Q	Q	Q	2,: 30 Q	Q	Q,	Q	986	63
Other		Q	Q	Q	Q	154	Q	Q	Q	(
Main Equipment Replaced Since										
1995 (more than one may apply)										
Heating		551	1,277	2,335	909	2,032	1,348	1,700	840	2,22
Cooling	17,390	972	2,108	2,891	917	3,237	1,576	2,276	1,009	2,40
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	38,193	2,534	5,029	7,421	4,125	5,989	2,820	3,171	2,478	4,62
Tinted, Reflective, or	00,.00	_,00.	0,020	.,	.,.20	0,000	_,0_0	0,	_,	.,02
Shading Glass	29,915	1,347	3,178	4,234	2,130	5,279	2,330	3,637	2,337	5,44
HVAC Conservation Features										
(more than one may apply)										
Variable Air-Volume System		988	2,655	3,333	1,524	3,163	998	1,960	1,401	3,36
Economizer Cycle		1,419	3,215	3,305	2,384	3,025	1,015	1,818	1,586	3,48
HVAC Maintenance	53,395	3,266	7,374	8,461	4,564	8,699	4,107	5,176	3,772	7,97
Energy Management and										
Control System (EMCS)	21,613	1,404	2,806	3,591	1,705	3,694	1,036	2,378	1,564	3,43
Lighting Conservation Features										
(more than one may apply)				a						
Specular Reflectors		1,624	3,251	2,978	1,318	3,386	1,117	1,897	1,232	3,19
Electronic Ballasts		2,398	6,082	6,991	3,297	6,646	2,835	4,265	2,650	6,87
Skylights or Atriums	18,286	1,221	2,476	3,006	1,485	2,860	1,359	1,897	1,326	2,65

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.

Table B6. Building Size, Number of Buildings, 1999

	<u> </u>								
	1			Number of	Buildings (t	housand)			
					Buildir	ng Size			
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
All Buildings	4,657	2,348	1,110	708	257	145	59	23	7
Principal Building Activity									
Education	327	119	61	52	49	30	10	5	C
Food Sales	174	138	Q	Q	Q	Q	Q	N	
Food Service	349	251	71	23	Q	Q	Q	N	١
Health Care	127	64	Q	10	8	4		2	
Inpatient	11	N	N	Q	Q	Q	2	2	
Outpatient	116	64	Q	Q	7	Q	Q	Q	
Lodging	153	Q	38	27	32	11	4	3	
Mercantile	667	316	146	141	28	20	13	2	
Retail (Other Than Mall)	534	308	103	100	11	6	5	Q	0
Enclosed and Strip Malls	133	Q 433	43	41	17	14		1	
Office	739	422	141	95	33	29	13	5	2
Public Assembly	305	124	88	64	15	11	2	1	C
Public Order and Safety	72	Q	Q	24	5	Q	Q	Q	C
Religious Worship	307	92	102	92	15	Q	Q	N	C
Service	478	291	131	41	11	Q	Q	Q	G
Warehouse and Storage	603	266	157	97	46	22		4	1
Other	102	Q	Q	14	Q	Q	Q	Q	C
Vacant	253	153	73	17	7	Q	Q	Q	C
Year Constructed									
1919 or Before	419	227	107	63	13	7	Q	Q	C
1920 to 1945	499	270	102	90	20	9	5	2	1
1946 to 1959	763	359	240	97	39	19	5	3	1
1960 to 1969	665	321	166	84	53	24	12	4	1
1970 to 1979	774	367	193	130	44	26	8	4	2
1980 to 1989	846	413	156	179	43	33	15	4	2
1990 to 1999	690	390	145	65	44	27	12	4	1
Floors									
One	2,879	1,751	633	311	109	48	22	5	1
Two	1,168	475	317	238	81	40	12	4	1
Three	420	101	121	119	41	26	8	3	C
Four to Nine	178	Q	39	40	26	28	15	7	2
Ten or More	11	N	N	Q	Q	Q	3	4	3
Census Region									
Northeast	686	305	169	130	39	26	10	5	2
Midwest	1,188	620	273	188	48	35	16	7	2
South	1,762	916	413	260	93	49	20	8	2
West	1,021	506	255	130	76	35	13	4	1
Workers (main shift)									
Fewer than 5	2,376	1,567	511	250	37	7	2	Q	C
5 to 9	807	482	180	105	32	6	3	Q	N
10 to 19	683	226	249	146	47	12	Q	Q	C
20 to 49	487	66	144	157	75	36	7	2	C
50 to 99	174	Q	Q	46	46	45	15	2	C
100 to 249 250 or More	90 39	Q N	Q N	Q Q	18 Q	29 10	18 12	7 10	1
200 OF WORD	39	IN	IN.	Q	Q	10	12	10	
Weekly Operating Hours	070	605	044	405	47	4	^	^	_
39 or Fewer	978	605	244	105	17	4		Q	C
40 to 48		557	342	153	58	36		2	C
49 to 60		471	225	177	63	34		4	1
61 to 84		292	163	121	45	26	12		2
85 to 167		240	76	91	27	21	13	4	1
Open Continuously	398	183	60	62	47	24	12	7	;

Table B6. Building Size, Number of Buildings, 1999

				Number of	Buildings (t	housand)			
				Number of		ng Size			
		1,001 to 5,000	5,001 to 10,000	10,001 to 25,000	25,001 to 50,000	50,001 to 100,000	100,001 to 200,000	200,001 to 500,000	Over 500,000
	All Buildings	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet
Ownership and Occupancy									
Nongovernment Owned	4,135	2,131	1,006	618	202	109	47	18	
Owner Occupied	2,801	1,433	693	431	129	69	29	13	
Nonowner Occupied	1,099	548	250	172	68	39	17	4	
Unoccupied	236	151	Q	15	Q	Q	Q	Q	(
Government Owned	521	216	104	91	55	36	13	5	2
Vacancy Status									
Completely Vacant	140	Q	Q	8	Q	Q	Q	Q	١
Mostly Vacant		Q	Q	Q	Q	Q	Q		
Partially Vacant		282	200	107	51	33			;
Not At All Vacant	3,707	1,913	837	584	198	110			2
Number of Establishments									
One	3,528	1,897	802	506	184	88	34	14	;
2 to 5	688	272	222	121	33	26	10	3	
6 to 10	114	Q	17	51	15	12	4	2	(
11 to 20	48	Q	Q	12	15	12	6	2	(
More than 20	27	Q	Q	Q	Q	6	5	2	;
Currently Unoccupied	251	164	Q	17	Q	Q	Q	Q	C
Energy Sources (more than									
one may apply)									
Electricity	4,395	2,186	1,036	688	253	143	59	23	-
Natural Gas	2,670	1,193	684	448	176	103			
Fuel Oil	434	220	74	65	28	22			
District Heat	117	Q	Q	24	19	13			:
District Chilled Water	50	Q	Q	Q	7	7			
Propane	451	215	124	74	17	13			
Other	153	93	Q	19	7	5			(
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016	1,982	946	629	237	137	57	22	
Buildings with Cooling	3,560	1,680	828	611	223	134			-
Buildings with Water Heating	3,239	1,456	778	574	222	127		21	
Buildings with Cooking	857	357	176	150	72	54			
Buildings with Manufacturing		Q	36	28	11	9			(
Buildings with Electricity									
Generation	172	Q	Q	24	22	26	13	9	4
Percent of Floorspace Heated									
Not Heated	641	366	164	79	20	8	3	1	C
1 to 50	576	230	194	102	29	12	5	2	
51 to 99		272	149	128	45	20	7	4	2
100	2,813	1,479	603	399	162	105	45	16	ţ
Percent of Floorspace Cooled									
Not Cooled	1,097	668	282	98	34	10	4	2	(
1 to 50	1,012	352	292	242	69	37	13	7	
51 to 99		294	188	146 222	58	37			;
100	1,796	1,034	348	222	96	60	21	,	•
Percent Lit When Open Zero	34	Q	Q	Q	Q	N	Q	N	١
1 to 50		351	279	147	40	13			
51 to 99		517	351	198	84	52			
100	,	1,156	367	316	124	77			2
Building Never Open/	2,000	1,100	331	0.10		**	33	10	
Electricity Not Used	464	294	113	45	8	Q	Q	Q	(
Liouriotty (401 0000	704	234	113	73	O	Q	Q	Q	

Table B6. Building Size, Number of Buildings, 1999

				Number of	Buildings (t	housand)			
						ng Size			
		1,001 to 5,000	5,001 to 10,000	10,001 to 25,000	25,001 to 50,000	50,001 to 100,000	100,001 to 200,000	200,001 to 500,000	Over 500,000
	All Buildings	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet	Square Feet
Heating Equipment (more									
than one may apply)									
Heat Pumps	492	240	100	81	37	20	8	3	
Furnaces	1,460	783	387	206	47	25	9	3	
Individual Space Heaters	894	397	183	191	62	35	18	6	
•	96	Q	Q	19	17	13	7	3	
District Heat							24		
Boilers	581	146	144	128	72	52		11	
Packaged Heating Units Other	1,347 185	589 98	302 Q	253 22	101 14	62 8	27 3	10 2	;
Cooling Equipment (more									
than one may apply)									
Residential-Type Central									
Air Conditioners	676	319	211	96	24	17	7	2	
Heat Pumps	485	240	95	80	35	22	9	4	
Individual Air Conditioners	799	356	184	149	60	29	13	7	
District Chilled Water	50	Q	Q	Q	7	7	5	2	
Central Chillers	130	Q	Q	17	25	28	16	9	
Packaged Air Conditioning									
Units	1,953	857	423	387	141	89	37	14	
Swamp Coolers	136	79	25	13	9	7	2	Q	(
Other	49	Q	23 Q	Q	4	Q	Q	Q	(
00101	40	Q	Q	Q		Q	Q	Q	,
1995 (more than one may apply) Heating Cooling	984 1,085	469 490	250 239	160 224	61 73	32 38	9 13	4 7	:
Lighting Equipment Types (more than one may apply)									
Incandescent	2,193	980	548	391	138	83	33	14	
Standard Fluorescent	3,778	1,795	904	628	230	136	56	22	
Compact Fluorescent	607	198	149	109	62	48	24	12	
High Intensity Discharge	430	80	94	111	60	43	25	11	
Halogen	572	194	136	123	43	41	23	9	
Other	58	Q	Q	Q	Q	Q	Q	Q	(
Personal Computers									
None	1,617	1,056	413	117	23	5	2	1	(
1 to 4	1,636	875	394	288	59	14	6	Q	(
5 to 9	542	280	105	95	41	18	3	Q	(
							6	2	(
10 to 19	403	106	142	93	34	19			
20 to 49	247	Q	53	78	46	26	12		
50 to 99	105	Q	Q	32	34	25	7		
100 to 249 250 or More	71 36	Q N	Q N	Q N	17 Q	30 9	12 11	4 9	
					_	· ·		· ·	
Photocopiers	2 025	4 700	604	200	04	20	-	•	
None	2,825	1,706	691	309	81	29	7	3	(
One	1,114	500	295	217	69	23	8	1	(
2 to 4	540	136	99	148	75	55	19	7	
5 to 9	102	Q	Q	23	18	17	9	4	
10 or More	75	N	N	Q	14	21	17	9	;
Other Electronic Equipment									
(more than one may apply)									
Laser Printers	1,949	732	424	412	181	121	52	20	
FAX Machines	2,807	1,203	661	509	213	136	56	22	
Medical Diagnostic Equipment	86	Q	Q	Q	6	4	2	2	

Table B6. Building Size, Number of Buildings, 1999

				Number of	Buildings (t	housand)			
					Buildir	ng Size			
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Energy-Related Space Functions									
(more than one may apply)									
Commercial Food Preparation	767	320	157	123	68	52	28	14	5
Activities with Large	701	020	101	120	00	02	20	• •	·
Amounts of Hot Water	698	232	142	149	87	47	25	12	4
Autourité di Flot Water	000	202	172	140	01	71	20	12	7
Building Shell Conservation									
Features (more than one									
may apply)									
Multipaned Windows	2,130	1,005	497	344	138	89	36	15	5
Tinted, Reflective, or									
Shading Glass	1,283	507	329	214	110	69	35	13	5
HVAC Conservation Features									
(more than one may apply)									
Variable Air-Volume System	550	188	136	81	57	49	23	10	5
Economizer Cycle	567	218	104	86	61	52	30	11	5
HVAC Maintenance	2,786	1,217	627	521	209	129	55	21	7
Energy Management and									
Control System (EMCS)	460	150	59	81	65	56	31	13	5
Lighting Conservation Features									
(more than one may apply)									
Specular Reflectors	843	389	186	123	64	46	20	10	4
Electronic Ballasts	2,167	952	545	354	149	98	45	17	6
Skylights or Atriums	580	200	128	116	62	39	20	9	4
Off-Hour Equipment Reduction									
(more than one may apply)									
Heating	2,862	1,387	743	432	160	89	36	11	4
Cooling	2,622	1,229	659	442	151	90	35	12	4
Lighting	3,675	1,794	913	592	197	115	45	15	4
Office Equipment	184	Q	Q	50	39	38	14	4	1

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.

Table B7. Building Size, Floorspace, 1999

			To	otal Floorspa	ice (million s	quare feet)			
					Buildir				
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
All Buildings	67,338	6,774	8,238	11,153	9,311	10,112	8,271	6,851	6,628
Principal Building Activity									
Education	8,651	338	444	883	1,803	2,144	1,484	1,311	Q
Food Sales	994	302	Q	Q	Q	Q	Q	N	N
Food Service	1,851	754	541	352	Q	Q	Q	N	N
Health Care	2,918	189	Q	135	274	263	315	756	767
Inpatient	1,865	N	N	Q	Q	Q	243	681	760
Outpatient	1,053	189	Q	Q	235	Q	Q	Q	Q
Lodging	4,521	Q	283	436	1,142	758	530	794	Q
Mercantile	10,398	925	1,047	2,131	1,001	1,498	1,765	427	1,605
Retail (Other Than Mall)	4,766	901	749	1,511	400	464	662	Q	Q
Enclosed and Strip Malls	5,631	Q	298	619	601	1,034	1,103		1,593
Office	12,044	1,212	1,063	1,486	1,191	1,951	1,717		1,864
Public Assembly	4,393	337	646	968	559	740	285		Q
Public Order and Safety	1,168	Q	Q	365	155	Q	Q		Q
Religious Worship	3,405	272	730	1,435	530	Q	Q		Q
Service	3,388	825	962	630	380	Q	Q		Q
Warehouse and Storage	10,477	790	1,242	1,647	1,693	1,525			725
Other	1,222	7 90 Q	1,2 1 2	205	1,095 Q	1,323 Q	1,505 Q	,	723 Q
Vacant	1,908	497	527	278	246	Q	Q		Q
	.,000		02.	2.0	2.0	~	~	~	~
Year Constructed									
1919 or Before	4,034	655	791	972	489	483	Q		Q
1920 to 1945	6,445	798	776	1,504	673	637	727		624
1946 to 1959	9,127	1,025	1,777	1,488	1,343	1,343	789	796	565
1960 to 1969	10,866	928	1,165	1,267	1,987	1,698	1,593	1,243	987
1970 to 1979	11,840	1,056	1,392	2,045	1,587	1,816	1,147	1,206	1,593
1980 to 1989	13,931	1,153	1,150	2,767	1,594	2,273	2,088	1,307	1,599
1990 to 1999	11,094	1,159	1,188	1,110	1,638	1,862	1,662	1,344	1,131
Floors									
One	26,800	4,898	4,726	4,887	3,929	3,377	2,930	1,328	724
Two	16,985	1,528	2,263	3,689	2,922	2,799	1,645	1,059	1,081
Three	8,928	278	942	1,907	1,475	1,776	1,128	942	Q
Four to Nine	10,180	Q	308	666	979	2,015	2,112	2,325	1,704
Ten or More	4,445	N	N	Q	Q	Q	457	1,197	2,638
Census Region									
Northeast	12,360	901	1,302	1,954	1,407	1,771	1,461	1,362	2,202
Midwest	16,761	1,835	2,045	2,881	1,773	2,436			1,519
South	23,485	2,536	3,058	4,194	3,384	3,450			1,726
West	14,731	1,503	1,834	2,124	2,746	2,455			1,180
Montrore (main chiff)									
Workers (main shift)	44.00:	4.00-	0 =	0.000	4.00:		^=-	_	_
Fewer than 5	14,321	4,230	3,748	3,922	1,361	430	356		Q
5 to 9	6,325	1,502	1,331	1,557	1,098	444	350		N
10 to 19	8,028	791	1,792	2,263	1,647	799			Q
20 to 49	10,814	235	1,174	2,510	2,759	2,437			Q
50 to 99	8,898	Q	Q	819	1,690	3,172			Q
100 to 249	8,356 10,595	Q N	Q N	Q Q	692 Q	2,067 762			979 4,977
	-,						,	-,	,
Weekly Operating Hours	6 500	4 740	1 700	4 600	E74	060	^	_	^
39 or Fewer	6,596	1,712	1,790	1,632	571	269	Q 1 151		Q
40 to 48	13,105	1,621	2,595	2,437	2,049	2,483			Q 4.025
49 to 60	14,200	1,384	1,633	2,712	2,291	2,421	1,534		1,025
61 to 84	12,458	859	1,213	1,952	1,673	1,751			2,068
85 to 167	9,116	745	575	1,419	1,037	1,486			859
Open Continuously	11,863	454	432	1,001	1,689	1,702	1,787	2,271	2,528

Table B7. Building Size, Floorspace, 1999

			To	tal Floorspa	ce (million s	quare feet)			
				•	Buildin	ıg Size			
	-	1,001 to	5,001 to	10.001 to	25,001 to	50,001 to	100,001 to	200,001 to	Over
	All Buildings	5,000 Square Feet	10,000 Square Feet	25,000 Square Feet	50,000 Square Feet	100,000 Square Feet	200,000 Square Feet	500,000 Square Feet	500,000 Square Feet
Ownership and Occupancy									
Nongovernment Owned	54,994	6,189	7,466	9,655	7,264	7,571	6,509	5,229	5,112
Owner Occupied		4,040	5,179	6,736	4,577	4,723	4,097	•	4,509
Nonowner Occupied		1,686	1,827	2,656	2,496	2,775			592
Unoccupied	1,613	463	Q	264	Q	Q	•		Q
Government Owned	12,343	585	772	1,498	2,047	2,541	1,762		1,516
Vacancy Status									
Completely Vacant	953	Q	Q	124	Q	Q	Q	Q	N
Mostly Vacant	956	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	15,520	784	1,430	1,824	1,868	2,291	2,067	1,769	3,487
Not At All Vacant	49,910	5,493	6,281	9,051	7,196	7,726	6,127	4,940	3,094
Number of Establishments									
One	43,343	5,358	5,952	7,812	6,720	6,063			2,514
2 to 5		857	1,630	1,982	1,220	1,833	1,453		676
6 to 10	*	Q	137	784	550	845			Q
11 to 20	-,	Q	Q	Q	494	839			416
More than 20	4,811	Q	Q	Q	Q	432			2,771
Currently Unoccupied	1,769	512	Q	296	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	65,716	6,280	7,721	10,843	9,175	10,034	8,246	6,790	6,628
Natural Gas	45,525	3,566	5,088	7,001	6,405	7,165	•	*	5,104
Fuel Oil	13,285	620	583	983	983	1,612			3,645
District Heat	5,891	Q	Q	414	660	933			1,707
District Chilled Water		Q	Q	Q	294	525		,	630
Propane	*	635	986	1,203	568	865			562
Other		292	Q	290	250	350	Q		Q
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	61,602	5,684	7,090	9,865	8,565	9,597	7,893	6,445	6,465
Buildings with Cooling	58,474	4,879	6,212	9,530	8,116	9,401	7,609	6,345	6,382
Buildings with Water Heating	56,115	4,280	5,748	9,000	8,088	8,887	7,527	6,258	6,327
Buildings with Cooking	24,681	1,095	1,272	2,415	2,630	3,901	4,092	4,254	5,020
Buildings with Manufacturing	3,126	Q	318	519	390	600	478	283	Q
Buildings with Electricity									
Generation	11,882	Q	Q	433	813	1,920	1,836	2,778	3,725
Percent of Floorspace Heated									
Not Heated	5,736	1,091	1,148	1,289	746	515			Q
1 to 50	,	707	1,504	1,611	1,078	877			487
51 to 99	10,745	750	1,177	1,936	1,690	1,407	946	1,341	1,498
100	43,264	4,227	4,409	6,317	5,796	7,313	6,207	4,515	4,480
Percent of Floorspace Cooled									
Not Cooled	8,864	1,895	2,026	1,623	1,195	711	662		Q
1 to 50	*	1,084	2,233	3,829	2,517	2,574	1,701		957
51 to 99	*	838 2,957	1,435 2,544	2,224 3,477	2,128 3,470	2,668 4,159			3,053 2,372
Percent Lit When Open	•	•	,	,	, -	, -	•	, -	,
Zero	173	Q	Q	Q	Q	N	Q	N	N
1 to 50	9,187	1,061	2,014	2,320	1,474	925	529	448	415
51 to 99	20,665	1,499	2,614	3,085	3,013	3,657	2,247	2,345	2,206
100	34,233	3,299	2,793	4,953	4,499	5,387	5,407	3,914	3,982
Building Never Open/									
Electricity Not Used	3,080	849	811	762	278	Q	Q	Q	Q

Table B7. Building Size, Floorspace, 1999

			To	otal Floorspa	ce (million s	quare feet)			
				•	Buildir				
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Heating Equipment (more									
than one may apply)									
Heat Pumps	8,923	679	745	1,288	1,376	1,493	1,095	996	1,250
Furnaces	14,449	2,271	2,848	3,047	1,674	1,718	1,283	807	802
Individual Space Heaters	17,349	1,183	1,350	3,021	2,218	2,492	2,467	1,974	2,643
District Heat	5,534	Q	Q	307	617	905	883	963	1,698
Boilers	19,522	463	1,040	2,047	2,591	3,698	3,334	3,268	3,08
Packaged Heating Units	25,743	1,779	2,301	3,994	3,695	4,262	3,811	2,943	2,959
Other	4,073	250	Q	401	510	511	450	782	903
Cooling Equipment (more									
than one may apply)									
Residential-Type Central									
Air Conditioners	8,329	890	1,606	1,420	860	1,221	905	715	712
Heat Pumps	9,147	700	707	1,270	1,304	1,593	1,229	1,126	1,219
Individual Air Conditioners	14,276	962	1,396	2,482	2,140	2,057	1,834	2,032	1,373
District Chilled Water	2,750	Q	Q	Q	294	525	630	470	630
Central Chillers	12,909	Q	Q	307	919	1,989	2,331	2,963	4,223
Packaged Air Conditioning									
Units	36,527	2,613	3,197	6,031	5,120	6,164	5,217	4,106	4,080
Swamp Coolers	2,219	253	181	207	325	477	307	Q	C
Other	1,312	Q	Q	Q	153	Q	Q	Q	C
Main Equipment Replaced Since 1995 (more than one may apply) Heating Cooling	13,220 17,390	1,325 1,399	1,757 1,638	2,472 3,402	2,145 2,614	2,214 2,709	1,359 1,809	1,141 2,032	807 1,787
Lighting Equipment Types (more than one may apply)									
Incandescent	38,156	2,946	4,047	6,055	5,004	5,880	4,685	4,396	5,143
Standard Fluorescent	60,344	5,154	6,722	9,815	8,344	9,525	7,817	6,423	6,544
Compact Fluorescent	20,666	738	1,108	1,759	2,296	3,425	3,429	3,575	4,336
High Intensity Discharge	19,223	245	663	1,701	2,224	3,101	3,633	3,259	4,397
Halogen	17,926	600	991	1,996	1,611	2,929	3,241	2,677	3,882
Other	1,004	Q	Q	Q	Q	Q	Q	Q	C
Personal Computers									
None	9,583	2,987	2,983	1,839	825	310	305	305	C
1 to 4	13,853	2,351	2,964	4,383	2,133	947	807	Q	
5 to 9	6,528	936	752	1,520	1,439	1,240	396	Q	C
10 to 19	7,514	387	1,147	1,432	1,259	1,393	830	730	C
20 to 49	8,087	Q	366	1,303	1,662	1,757	1,657	692	540
50 to 99	5,867	Q	Q	578	1,227	1,708	957	813	557
100 to 249	6,818 9,088	Q N	Q N	Q N	659 Q	2,121 635	1,620 1,698	,	1,289 3,774
250 OF MOTE	9,000	IN	IN	IN	Q	033	1,090	2,074	3,77
Photocopiers	04.604	4 054	E 060	4 0 4 4	0.070	1.074	4.040	704	,
None	21,631	4,851	5,062	4,841	2,878	1,974	1,016		
One	12,928	1,487	2,237	3,430	2,495	1,613	1,090	378	079
2 to 4	15,620	427	737	2,348	2,770	3,819	2,543	,	978
5 to 9	5,384 11,774	Q N	Q N	394 Q	643 526	1,200 1,507	1,234 2,389	1,038 2,733	665 4,479
Other Electronic Equipment									
(more than one may apply)									
Laser Printers	46,567	2,190	3,206	6,508	6,550	8,540	7,183	6,109	6,28
FAX Machines	54,764	3,594	4,931	8,093	7,773	9,563	7,786	6,425	6,599
Medical Diagnostic Equipment	2,493	Q	Q	Q	193	245	296	732	673

Table B7. Building Size, Floorspace, 1999

			To	otal Floorspa	ace (million s	square feet)			
					Buildir	ng Size			
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Energy-Related Space Functions									
(more than one may apply)									
Commercial Food Preparation	23,328	1,005	1,129	2,002	2,472	3,729	3,923	4,104	4,965
Activities with Large									
Amounts of Hot Water	21,793	760	1,063	2,331	3,158	3,346	3,547	3,666	3,922
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	38,193	3,052	3,806	5,506	5,027	6,209	5,064	4,499	5,030
Tinted, Reflective, or		-,	5,555	-,	-,	-,	-,	,,,,,,	2,222
Shading Glass	29,915	1,530	2,423	3,385	3,993	4,866	4,938	4,032	4,746
HVAC Conservation Features									
(more than one may apply)									
Variable Air-Volume System	19,387	634	1,058	1,309	2,115	3,430	3,350	3,077	4,414
Economizer Cycle	21,256	640	798	1,392	2,219	3,679	4,164	3,408	4,955
HVAC Maintenance	53,395	3,690	4,671	8,100	7,560	9,044	7,613	6,207	6,510
Energy Management and									
Control System (EMCS)	21,613	511	475	1,391	2,299	3,953	4,267	3,930	4,787
Lighting Conservation Features									
(more than one may apply)									
Specular Reflectors	19,994	1,171	1,389	1,970	2,384	3,285	2,837	3,087	3,870
Electronic Ballasts	42,035	2,736	4,044	5,620	5,468	6,903	6,366	5,248	5,650
Skylights or Atriums	18,286	556	977	1,949	2,251	2,745	2,765	2,898	4,144
Off-Hour Equipment Reduction									
(more than one may apply)									
Heating	39,969	4,018	5,522	6,731	5,788	6,269	5,007	3,315	3,318
Cooling	39,161	3,703	4,901	6,912	5,484	6,322	4,854	3,438	3,546
Lighting	51,083	5,227	6,819	9,236	7,153	8,069	6,268	4,265	4,046
Office Equipment	9,063	Q	Q	852	1,403	2,625	1,927	1,213	825

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.

Table B8. Year Constructed, Number of Buildings, 1999

			Nu	mber of Buildi	ings (thousan	d)		
1				Yea	ar Constructe	d		
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
All Buildings	4,657	419	499	763	665	774	846	690
Building Floorspace								
(Square Feet)								
1,001 to 5,000	2,348	227	270	359	321	367	413	390
5,001 to 10,000	1,110	107	102	240	166	193	156	145
10,001 to 25,000		63	90	97	84	130	179	65
25,001 to 50,000		13	20	39	53	44	43	44
50,001 to 100,000		7	9	19	24	26	33	27
•		Q	5	5		8		12
100,001 to 200,000					12		15	
200,001 to 500,000		Q	2	3	4	4	4	4
Over 500,000	7	Q	1	1	1	2	2	1
Principal Building Activity								
Education	327	18	32	71	69	53	37	47
Food Sales	174	Q	Q	Q	Q	Q	Q	50
Food Service	349	Q	48	Q	50	70	80	Q
Health Care	127	Q	Q	27	16	38	15	23
Inpatient	11	Q	Q	1	2	2	2	Q
Outpatient	116	Q	Q	Q	Q	36	14	23
Lodging	153	Q	Q	15	33	33	29	24
Mercantile	667	93	61	154	60	112	127	60
Retail (Other Than Mall)	534	92	46	140	44	78	88	46
Enclosed and Strip Malls	133	Q	Q	14	16	35	39	14
Office	739	72	55	96	96	115	169	135
Public Assembly	305	34	37	31	58	42	59	43
Public Order and Safety	72	Q	Q	Q	Q	Q	Q	5
Religious Worship	307	44	Q	76	47	58	27	33
Service	478	Q	78	89	66	89	88	Q
Warehouse and Storage	603	36	66	68	62	91	132	149
Other	102 253	Q 49	Q 57	Q 67	27 45	Q Q	Q Q	Q Q
vacant	200	73	31	07	40	Q	Q	Q
Floors								
One	2,879	88	209	478	461	568	547	529
Two	1,168	141	166	202	155	155	221	127
Three	420	136	81	72	31	38	45	16
Four to Nine	178	52	41	10	17	11	30	17
Ten or More	11	Q	2	1	2	2	3	1
Census Region								
Northeast	686	126	65	138	97	77	122	62
Midwest	1,188	172	206	174	155	141	165	175
South	1,762	69	155	289	199	338	408	304
West	1,021	52	73	162	215	219	151	149
Maulana (main ahiff)								
Workers (main shift) Fewer than 5	2,376	280	331	405	316	344	371	330
5 to 9	,	62	65	135	124	174	126	121
10 to 19		52 52	58	107	95	114	159	102
20 to 49		52 12	58 29	84				102
					78 27	81	116	
50 to 99		3	8	22	27	43	44	27
100 to 249	90 39	Q Q	5 3	7 3	21 5	15 8	19 11	16 7
		_	-	-	_	,		
Weekly Operating Hours	978	132	140	100	120	150	124	111
39 or Fewer				189	130	152		111
40 to 48		116	145	213	154	147	222	158
49 to 60		95	75	152	145	185	150	185
61 to 84		39	68	122	109	111	118	96
85 to 167		20	42	41	50	111	128	82
Open Continuously	398	17	29	46	77	67	104	58

Table B8. Year Constructed, Number of Buildings, 1999

			Nu	mber of Buildi	ings (thousan	d)		
					ar Constructe			
	All Buildings	1919 or Before	1920 to 1945	1946 to	1960 to	1970 to	1980 to 1989	1990 to 1999
	Dullulligs	Delore	1345	1909	1909	1979	1303	1333
Ownership and Occupancy								
Nongovernment Owned	4,135	384	436	670	581	684	761	619
Owner Occupied	2,801	256	291	450	377	465	532	431
Nonowner Occupied	1,099	94	130	159	172	201	195	148
Unoccupied	236	Q	Q	62	Q	Q	Q	Q
Government Owned	521	35	63	93	85	90	85	71
Vacancy Status								
Completely Vacant	140	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	113	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	697	71	64	89	89	104	134	146
Not At All Vacant	3,707	298	379	606	531	652	704	537
Energy Sources (more than								
one may apply)								
Electricity	4,395	363	480	716	628	758	781	669
Natural Gas	2,670	291	329	426	406	481	389	349
Fuel Oil	434	53	55	109	65	37	70	45
District Heat	117	20	9	21	18	Q	16	15
District Chilled Water	50	Q	2	5	7	Q	Q	4
Propane	451	Q	45	65	72	66	89	94
Other		Q	Q	36	12	24	39	Q
Energy End Uses (more than								
one may apply)								
Buildings with Space Heating	4,016	350	430	666	557	691	713	608
Buildings with Cooling	3,560	260	313	589	496	649	702	549
Buildings with Water Heating	3,239	277	311	493	493	592	623	450
Buildings with Cooking	857	69	85	115	131	161	173	124
Buildings with Manufacturing	151	Q	Q	28	19	32	37	Q
Buildings with Electricity								
Generation	172	Q	4	41	25	23	26	44
Percent of Floorspace Heated								
Not Heated	641	69	69	97	108	83	133	82
1 to 50	576	48	79	93	58	107	113	78
51 to 99	627	56	103	86	75	86	111	109
100	2,813	246	248	487	424	498	490	421
Percent of Floorspace Cooled								
Not Cooled	1,097	159	186	174	169	125	144	141
1 to 50	,	105	133	205	126	163	148	131
51 to 99		65 90	94 86	102 282	123 247	118 368	128 426	122 296
	1,700	00	00	202	2.,	000	120	200
Percent Lit When Open Zero	34	N	N	Q	Q	Q	Q	Q
1 to 50		122	152	159	91	113	108	91
51 to 99		121	107	202	218	237	199	144
100		99	175	315	283	374	464	387
Building Never Open/	464	77	65	92	72	43	73	Q
Electricity Not Used	404	77	00	82	12	43	73	Q
Heating Equipment (more than one may apply)								
Heat Pumps	492	6	23	95	39	102	124	103
•		163	23 206	95 251	191	205	237	208
Furnaces								
Individual Space Heaters	894	79 10	107	180	110	172	127	119
District Heat	96 594	19	9	21	16	Q	11	4
Boilers	581	100	83	121	98	63	65	52
Packaged Heating Units		40	110	157	213	304	289	235
Other	185	Q	Q	33	19	35	59	Q

Table B8. Year Constructed, Number of Buildings, 1999

			Nu	mber of Build	ings (thousan	d)		
				Ye	ar Constructe	d		
	All Buildings	1919 or	1920 to	1946 to	1960 to	1970 to	1980 to	1990 to 1999
	Buildings	Before	1945	1959	1969	1979	1989	1999
Cooling Equipment (more								
than one may apply)								
Residential-Type Central								
Air Conditioners	676	78	75	129	39	105	143	107
Heat Pumps	485	Q	24	89	39	106	121	91
Individual Air Conditioners	799	101	124	178	102	112	96	86
District Chilled Water	50	Q	2	5	7	Q	Q	4
Central Chillers	130	Q	8	13	32	17	22	29
Packaged Air Conditioning								
Units	1,953	92	143	275	332	398	421	291
Swamp Coolers		Q	Q	29	25	33	19	6
Other		Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)								
Heating	984	83	116	201	128	211	138	107
Cooling	1,085	83	112	216	157	239	186	93
Lighting Equipment Types								
(more than one may apply)								
Incandescent	2,193	221	283	334	307	391	415	242
Standard Fluorescent	,	307	376	622	525	674	721	552
Compact Fluorescent	607	44	58	56	122	81	123	121
High Intensity Discharge		41	31	54	48	69	94	93
Halogen		55	33	79	86	112	131	77
Other		Q	Q	Q	Q	Q	Q	Q
	00	Q	Q	Q	Q	Q	Q	Q
Personal Computers								
None	1,617	187	222	297	209	243	253	206
1 to 4	,	156	194	274	245	297	272	198
5 to 9		33	28	80	68	117	100	117
10 to 19		27	12	43	66	53	108	94
20 to 49		10	23	49	35	32	57	40
50 to 99	105	Q	14	10	17	15	29	18
100 to 249	71	3	4	6	18	10	18	12
250 or More	36	Q	3	4	6	7	9	5
Photocopiers								
None	2,825	289	338	502	409	446	489	352
One	1,114	88	100	160	178	205	184	198
2 to 4	540	37	53	85	53	89	126	97
5 to 9	102	Q	Q	4	16	21	23	34
10 or More	75	3	5	Q	9	13	24	10
Other Electronic Equipment								
(more than one may apply)								
Laser Printers	1,949	163	153	290	305	300	412	327
FAX Machines	2,807	222	251	430	383	481	564	476
Medical Diagnostic Equipment	86	Q	Q	23	8	28	14	11
Energy-Related Space Functions								
(more than one may apply)								
Commercial Food Preparation	767	53	82	100	127	135	163	108
Activities with Large Amounts of Hot Water	698	46	92	84	120	154	131	70
	000	40	5 <u>2</u>	07	120	10-1	101	, 0
Building Shell Conservation Features (more than one								
may apply)								
Multipaned Windows	2,130	206	182	283	282	301	446	428
Tinted, Reflective, or	۷, ۱۵۵	200	102	203	202	301	440	+20
	1 202	00	74	160	174	202	202	240
Shading Glass	1,283	82	71	163	174	283	302	210

Table B8. Year Constructed, Number of Buildings, 1999

			Nι	ımber of Build	lings (thousan	d)		
				Ye	ar Constructe	d		
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
HVAC Conservation Features								
(more than one may apply)								
Variable Air-Volume System	550	16	31	84	74	100	118	127
Economizer Cycle	567	23	18	40	121	98	138	129
HVAC Maintenance	2,786	233	250	440	405	461	577	420
Energy Management and								
Control System (EMCS)	460	17	35	52	110	55	102	90
Lighting Conservation Features								
(more than one may apply)								
Specular Reflectors	843	48	48	125	132	155	184	151
Electronic Ballasts	2,167	146	201	360	288	428	429	315
Skylights or Atriums	580	40	46	64	68	88	184	89

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.

Table B9. Year Constructed, Floorspace, 1999

			Total	Floorspace (n	nillion square	feet)		
ļ				• •	ar Constructe	•		
	All Buildings	1919 or Before	1920 to 1945	1946 to	1960 to	1970 to 1979	1980 to 1989	1990 to 1999
All Buildings	67,338	4,034	6,445	9,127	10,866	11,840	13,931	11,094
-	,,,,,,	,	-, -	-,	-,	,-	-,	,
Building Floorspace (Square Feet)								
1,001 to 5,000	6,774	655	798	1,025	928	1,056	1,153	1,159
	,	791	796 776	,			,	*
5,001 to 10,000	8,238			1,777	1,165	1,392	1,150	1,188
-,	11,153	972	1,504	1,488	1,267	2,045	2,767	1,110
25,001 to 50,000	9,311	489	673	1,343	1,987	1,587	1,594	1,638
50,001 to 100,000	10,112	483	637	1,343	1,698	1,816	2,273	1,862
100,001 to 200,000	8,271	Q	727	789	1,593	1,147	2,088	1,662
200,001 to 500,000		Q	705	796	1,243	1,206	1,307	1,344
Over 500,000	6,628	Q	624	565	987	1,593	1,599	1,131
Principal Building Activity								
Education	8,651	278	1,138	1,831	2,035	1,411	719	1,239
Food Sales	994	Q	Q	Q	Q	Q	Q	355
Food Service	1,851	Q	265	Q	310	295	347	C
Health Care	2,918	Q	Q	322	487	852	558	473
Inpatient	1,865	Q	Q	232	377	613	287	C
Outpatient	1,053	Q	Q	Q	Q	238	271	319
Lodging	4,521	Q	Q	351	870	838	1,289	716
Mercantile	10,398	818	381	1,384	1,305	1,951	2,529	2,030
Retail (Other Than Mall)	4,766	773	242	886	517	509	700	1,139
Enclosed and Strip Malls	5,631	Q	Q	497	788	1,442	1,829	891
Office	12,044	702	1,051	1,155	1,685	2,036	3,586	1,830
Public Assembly	4,393	292	569	534	868	717	678	736
Public Order and Safety	1,168	Q	Q	Q	Q	Q	Q	227
Religious Worship	3,405	385	Q	641	612	718	418	357
Service	3,388	Q	629	541	608	645	515	336
		380	1,092			1,793	2,620	2,079
Warehouse and Storage	10,477			1,265	1,247			,
Other	1,222 1,908	Q 385	Q 468	Q 501	355 257	Q Q	Q Q	367 Q
Floors								
One	26,800	464	1,455	3,683	4,466	5,156	5,946	5,632
Two	16,985	796	1,569	2,853	2,761	2,860	3,489	2,657
Three	8,928	1,439	1,376	1,328	1,163	1,339	1,309	974
Four to Nine	10,180	1,188	1,457	875	1,707	1,629	2,005	1,319
Ten or More	4,445	Q	589	388	770	857	1,183	512
Census Region								
Northeast	12,360	1,392	1,619	2,030	2,050	1,823	2,070	1,376
Midwest	16,761	1,576	2,423	2,152	2,602	2,347	2,828	2,834
South	23,485	549	1,704	2,910	3,318	4,278	6,263	4,464
West	14,731	518	699	2,035	2,896	3,391	2,771	2,420
Workers (main shift)								
Fewer than 5	14,321	1,863	2,443	2,264	2,015	2,012	2,013	1,712
5 to 9		506	508	1,012	1,181	1,337	952	829
10 to 19	8,028	637	729	1,415	1,128	1,233	1,731	1,153
20 to 49	10,814	316	691	1,947	1,707	1,682	2,383	2,089
50 to 99		219	586	833	1,696	1,803	2,161	1,601
100 to 249	-,	235	658	688	1,561	1,515	1,915	1,786
250 or More	10,595	Q	830	968	1,579	2,259	2,776	1,925
Wookly Operating House								
Weekly Operating Hours 39 or Fewer	6,596	803	1,182	1,292	967	1,035	807	511
40 to 48	,							
	13,105	951	1,896	2,095	2,027	1,853	2,511	1,771
49 to 60	14,200	967	1,209	2,083	2,171	2,586	2,892	2,292
61 to 84	,	565	672	1,613	2,092	2,482	2,847	2,186
85 to 167		274	611	934	1,482	1,812	2,021	1,981
Open Continuously	11,863	474	876	1,110	2,127	2,071	2,853	2,352

Table B9. Year Constructed, Floorspace, 1999

				,				
			lotai	Floorspace (m	•	,		
	All	1919 or	1920 to	1946 to	ar Constructe 1960 to	1970 to	1980 to	1990 to
	Buildings	Before	1945	1959	1969	1979	1989	1999
Ownership and Occupancy								
Nongovernment Owned	54,994	3,456	4,812	7,053	8,122	9,907	12,507	9,138
•				,				,
Owner Occupied		2,479	3,575	4,879	5,495	6,795	8,364	6,198
Nonowner Occupied		728	1,081	1,737	2,419	2,960	3,855	2,817
Unoccupied		Q	Q	437	Q	Q	Q	Q
Government Owned	12,343	579	1,633	2,074	2,745	1,933	1,424	1,956
Vacancy Status								
Completely Vacant	953	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	. 956	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	. 15,520	932	1,360	1,583	2,382	2,646	3,802	2,817
Not At All Vacant	49,910	2,718	4,617	7,043	8,227	9,028	10,057	8,219
Energy Sources (more than								
one may apply)								
Electricity	65,716	3,714	6,281	8,794	10,686	11,750	13,485	11,007
Natural Gas		2,766	4,257	6,040	7,512	8,080	8,794	8,076
	,	,						
Fuel Oil		745	1,060	1,782	2,349	2,446	2,795	2,108
District Heat		486	764	1,088	1,406	788	682	677
District Chilled Water	,	Q	134	406	633	492	424	407
Other		Q Q	473 Q	748 433	1,220 353	1,033 352	1,333 499	1,295 353
	,0	~	~			002	.00	333
Energy End Uses (more than one may apply)								
	64 600	2 502	E EE0	0.400	0.066	10.016	10 566	10.600
Buildings with Space Heating		3,593	5,559	8,402	9,966	10,916	12,566	10,600
Buildings with Cooling		2,911	4,383	7,601	9,325	11,050	12,849	10,355
Buildings with Water Heating		3,130	4,644	7,154	9,421	10,182	12,137	9,446
Buildings with Cooking		1,091	2,232	3,195	4,178	4,551	5,030	4,403
Buildings with Manufacturing	. 3,126	Q	Q	535	409	555	744	485
Buildings with Electricity Generation	. 11,882	267	520	1,205	2,067	2,438	2,644	2,741
Generation	. 11,002	207	520	1,205	2,007	2,430	2,044	2,741
Percent of Floorspace Heated	F 700	444	000	705	004	004	4.000	400
Not Heated	-,	441	886	725	901	924	1,366	493
1 to 50	,	507	834	1,304	1,038	1,458	1,254	1,198
51 to 99	. 10,745	798	1,249	1,178	1,891	1,670	2,181	1,777
100	. 43,264	2,288	3,476	5,920	7,037	7,789	9,131	7,625
Percent of Floorspace Cooled								
Not Cooled	8,864	1,123	2,062	1,526	1,542	790	1,083	739
1 to 50	. 16,846	1,237	1,936	3,068	2,406	2,812	2,833	2,553
51 to 99	. 16,966	1,022	1,234	1,796	3,235	2,998	3,584	3,096
100	. 24,662	653	1,213	2,737	3,683	5,240	6,431	4,706
Percent Lit When Open								
Zero	. 173	N	N	Q	Q	Q	Q	Q
1 to 50		1,130	1,452	1,720	1,162	1,448	1,318	957
51 to 99		1,290	1,879	2,856	3,765	3,832	3,801	3,242
100		1,129	2,523	3,930	5,552	6,276	8,153	6,670
Building Never Open/	. 01,200	1,120	2,020	0,000	0,002	0,270	0,100	0,070
Electricity Not Used	3,080	486	590	605	371	240	609	Q
Heating Equipment (more								
than one may apply)	2 225	^- <i>:</i>		4	4 100	4.0=4	0 =00	. =
Heat Pumps		251	449	1,064	1,129	1,651	2,583	1,796
Furnaces		1,214	1,552	2,082	2,053	2,235	2,927	2,387
Individual Space Heaters		1,042	1,772	2,551	2,496	3,345	3,428	2,715
District Heat	. 5,534	480	764	1,065	1,351	769	606	499
Boilers	19,522	1,397	2,264	2,762	4,231	3,275	3,114	2,479
Packaged Heating Units	. 25,743	428	1,476	2,917	3,961	4,899	6,379	5,684
	. 4,073	Q	Q	563	560	684	1,012	786

Table B9. Year Constructed, Floorspace, 1999

			Total	Floorspace (n	nillion square	feet)		
				Ye	ar Constructe	d		
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
		•	•	•	•	•	•	
Cooling Equipment (more								
than one may apply)								
Residential-Type Central								
Air Conditioners	8,329	677	657	1,239	957	1,621	1,904	1,274
Heat Pumps		284	551	984	1,119	1,793	2,711	1,705
Individual Air Conditioners	14,276	1,206	2,074	2,833	2,296	2,237	2,155	1,476
District Chilled Water	2,750	Q	134	406	633	492	424	407
Central Chillers	12,909	254	984	1,329	2,765	2,766	2,584	2,229
Packaged Air Conditioning								
Units	36,527	1,244	2,367	4,427	5,686	7,001	8,978	6,825
Swamp Coolers	2,219	Q	Q	261	527	499	345	339
Other	1,312	Q	Q	Q	Q	316	348	Q
Main Equipment Replaced Since 1995 (more than one may apply)								
Heating	13,220	756	1,212	2,191	2,164	3,100	3,002	794
Cooling	17,390	1,003	1,602	2,735	3,161	4,254	3,692	943
Lighting Equipment Types								
(more than one may apply)								
Incandescent	38,156	2,533	3,909	4,951	6,268	7,089	8,028	5,377
Standard Fluorescent	60,344	3,246	5,417	8,031	9,939	11,099	12,619	9,993
Compact Fluorescent	20,666	1,040	1,423	2,019	3,445	3,824	4,755	4,160
High Intensity Discharge		682	1,530	1,981	2,986	3,413	4,166	4,464
Halogen	17,926	871	921	1,861	2,916	3,511	4,272	3,574
Other	1,004	Q	Q	Q	Q	Q	Q	392
Personal Computers								
None	9,583	1,097	1,546	1,772	1,191	1,404	1,476	1,098
1 to 4		1,281	1,840	2,174	2,357	2,592	2,040	1,569
5 to 9	6,528	264	334	936	837	1,523	1,443	1,191
10 to 19		484	306	826	1,279	1,112	1,860	1,647
20 to 49	*	258	622	1,223	1,021	1,149	2,014	1,801
50 to 99	,	Q	549	640	1,012	890	1,341	1,276
100 to 249		245	405	566	1,480	1,260	1,616	1,245
250 or More	9,088	2 4 3 Q	843	990	1,690	1,910	2,142	1,243
200 01 141010	3,000	Q	040	550	1,000	1,510	2,172	1,207
Photocopiers								
None	21,631	1,907	2,625	3,747	3,396	3,578	3,689	2,690
One	12,928	918	1,349	1,660	2,163	2,240	2,240	2,358
2 to 4		741	1,116	2,176	2,389	2,707	3,571	2,921
5 to 9		Q	Q	319	1,119	921	1,350	1,373
10 or More	11,774	362	1,159	1,225	1,800	2,394	3,081	1,752
Other Electronic Equipment								
(more than one may apply)								
Laser Printers	46,567	2,181	3,288	5,675	7,867	8,341	10,449	8,765
FAX Machines	54,764	2,786	4,442	6,835	8,827	10,029	11,961	9,883
Medical Diagnostic Equipment	2,493	Q	Q	296	439	786	507	388
Energy-Related Space Functions								
(more than one may apply)								
Commercial Food Preparation	23,328	956	2,138	3,051	4,028	4,209	4,827	4,120
Activities with Large	04 =00		4.0=0					0.740
Amounts of Hot Water	21,793	802	1,858	2,614	4,123	4,123	4,530	3,743
Building Shell Conservation								
Features (more than one								
may apply)								
Multipaned Windows	38,193	2,294	3,049	4,225	5,155	6,395	9,060	8,016
Tinted, Reflective, or	00.04=	20.1	4 40=	0.05:	4.000	0.00-	7.040	0.00=
Shading Glass	29,915	931	1,467	2,854	4,322	6,087	7,919	6,335

Table B9. Year Constructed, Floorspace, 1999

			Total	Floorspace (r	nillion square	feet)		
				Ye	ar Constructe	d		
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
HVAC Conservation Features								
(more than one may apply)								
Variable Air-Volume System	19,387	540	960	1,593	3,238	3,718	4,666	4,672
Economizer Cycle	21,256	628	1,103	1,811	3,718	4,380	5,053	4,563
HVAC Maintenance	53,395	2,669	4,242	6,658	8,749	9,669	11,743	9,665
Energy Management and								
Control System (EMCS)	21,613	509	1,566	2,243	4,020	3,791	4,409	5,074
Lighting Conservation Features								
(more than one may apply)								
Specular Reflectors	19,994	728	1,380	2,339	2,825	3,887	4,724	4,111
Electronic Ballasts	42,035	1,828	3,472	5,236	6,649	8,174	8,862	7,815
Skylights or Atriums	18,286	803	1,211	1,744	2,549	3,062	5,254	3,664

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.

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)										
			Nu								
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers			
All Buildings	4,657	2,376	807	683	487	174	90	39			
Building Floorspace											
(Square Feet)											
1.001 to 5.000	2,348	1,567	482	226	66	Q	Q	N			
,,	,	,									
5,001 to 10,000		511	180	249	144	Q	Q	N			
10,001 to 25,000		250	105	146	157	46	Q	Q			
25,001 to 50,000		37	32	47	75	46	18	Q			
50,001 to 100,000		7	6	12	36	45	29	10			
100,001 to 200,000	59	2	3	Q	7	15	18	12			
200,001 to 500,000	23	Q	Q	Q	2	2	7	10			
Over 500,000	7	Q	N	Q	Q	Q	1	5			
Principal Building Activity											
Education	327	85	59	73	64	32	11	4			
Food Sales	174	147	Q	Q	4	Q	Q	Q			
Food Service	349	111	77	107	46	Q	Q	N			
Health Care	127	Q	Q	Q	13	12	5	4			
Inpatient	11	N	Q	Q	Q	Q	2	3			
Outpatient		Q	Q	Q	10	Q	3	Q			
Lodging		85	20	20	14	10	4	Q			
Mercantile		321	124	99	70	32	18	3			
Retail (Other Than Mall)		319	102	63	35	5	Q	Q			
Enclosed and Strip Malls		Q	Q	36	35	26	9	3			
Office	739	205	183	153	109	36	29	23			
Public Assembly	305	198	48	23	22	6	Q	Q			
Public Order and Safety	72	Q	Q	Q	28	Q	Q	Q			
Religious Worship	307	222	46	19	17	Q	Q	Q			
Service	478	271	107	38	51	9	Q	Q			
Warehouse and Storage	603	389	81	73	32	21	6	2			
Other		46	Q	Q	Q	Q	Q	Q			
Vacant	253	244	Q	Q	Q	Q	N	Q			
Year Constructed											
1919 or Before	419	280	62	52	12	3	Q	Q			
1920 to 1945		331	65	58	29	8	5	3			
1946 to 1959		405	135	107	84	22	7	3			
							•	_			
1960 to 1969		316	124	95	78	27	21	5			
1970 to 1979		344	174	110	81	43	15	8			
1980 to 1989		371 330	126 121	159 102	116 87	44 27	19 16	11 7			
1990 to 1999	090	330	121	102	07	21	10	,			
Floors	2 870	1 501	407	407	271	70	31	5			
One	,	1,591	497	407	271	78 50	31	5			
Two	,	538	220	189	147	50	18	6			
Three	420	194	71	62	42	26	20	4			
Four to Nine Ten or More		52 Q	19 Q	26 Q	27 Q	18 Q	19 2	16 8			
	• •	~	~	~	_	~	_	J			
Census Region Northeast	686	271	163	114	87	30	16	5			
Midwest	1,188	668	224	136	95	32	24	9			
South		970	220	273	204	51	32	12			
West	1,021	468	199	160	101	61	19	12			
Weekly Operating Hours											
39 or Fewer	978	806	93	33	41	Q	Q	Q			
40 to 48		550	219	205	123	36	18	4			
49 to 60		377	229	202	98	43	26	11			
61 to 84		251	152	113	87	36	17	8			
			78				17	5			
85 to 167		183		86	75 63	34					
Open Continuously	398	209	35	43	63	23	14	11			

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)										
					mber of Work						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers			
Ownership and Occupancy											
Nongovernment Owned	4,135	2,187	709	587	413	135	73	33			
Owner Occupied	. 2,801	1,463	489	435	279	64	48	24			
Nonowner Occupied	. 1,099	488	220	152	133	72	25	9			
Unoccupied	236	236	N	N	N	N	N	N			
Government Owned	521	189	99	96	75	39	18	6			
Vacancy Status											
Completely Vacant	140	140	N	N	N	N	N	1			
Mostly Vacant	. 113	104	Q	Q	Q	Q	N	C			
Partially Vacant	. 697	351	121	73	78	35	26	14			
Not At All Vacant	3,707	1,781	686	609	404	138	64	26			
Number of Establishments											
One	. 3,528	1,891	610	520	344	89	54	19			
2 to 5	. 688	208	193	149	92	30	12	;			
6 to 10	. 114	Q	Q	13	41	27	9	;			
11 to 20	. 48	Q	Q	Q	10	22	10	4			
More than 20	. 27	Q	Q	Q	Q	6	5	:			
Currently Unoccupied	. 251	251	N	N	N	N	N	١			
Energy Sources (more than											
one may apply)											
Electricity	4,395	2,121	800	683	487	174	90	39			
Natural Gas	2,670	1,151	560	424	321	118	67	28			
Fuel Oil	. 434	182	95	54	54	17	18	15			
District Heat	. 117	38	18	15	12	19	9	7			
District Chilled Water	. 50	Q	Q	Q	3	10	4				
Propane	. 451	215	71	74	73	11	6	:			
Other	. 153	83	Q	Q	23	5	Q	•			
Energy End Uses (more than											
one may apply)											
Buildings with Space Heating		1,835	773	667	456	166	81	38			
Buildings with Cooling		1,513	681	636	433	169	88	39			
Buildings with Water Heating	,	1,312	643	586	417	159	85	36			
Buildings with Cooking		287	131	172	154	65	30	18			
Buildings with Manufacturing	. 151	Q	24	31	29	12	3	2			
Buildings with Electricity Generation	. 172	Q	11	19	49	19	23	16			
Percent of Floorspace Heated Not Heated	641	541	34	16	32	8	Q	C			
1 to 50		326	155	57	21	14	2				
51 to 99		332	77	95	86	21	10	-			
100		1,176	541	515	349	132	69	3			
Percent of Floorspace Cooled											
Not Cooled	1,097	862	126	47	54	5	Q	C			
1 to 50	,	416	270	170	99	36	19	3			
51 to 99		314	89	152	106	50	28	13			
100		784	322	314	228	83	42	23			
Percent Lit When Open											
Zero	. 34	Q	Q	Q	N	N	N	1			
1 to 50	. 835	558	135	102	32	7	Q				
51 to 99		487	216	210	190	78	35	1:			
100		865	442	354	264	90	54	2			
Building Never Open/											
Electricity Not Used	. 464	441	Q	Q	N	N	N	١			

Table B10. Employment Size Category, Number of Buildings, 1999

			Nu	ımber of Build	dings (thousar	nd)		
				Nui	mber of Work	ers		
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Heating Equipment (more								
than one may apply)								
Heat Pumps	492	162	73	131	81	28	11	6
Furnaces	1,460	742	370	164	141	24	17	
Individual Space Heaters	894	419	188	125	86	46	20	10
District Heat	96	30	14	10	12	15	8	7
Boilers	581	191	108	109	83	41	31	18
Packaged Heating Units	1,347	504	204	290	210	84	40	15
Other	185	105	25	12	18	14	5	
Cooling Equipment (more								
than one may apply)								
Residential-Type Central								
Air Conditioners	676	339	133	101	69	18	14	;
Heat Pumps	485	169	68	122	79	29	10	8
Individual Air Conditioners	799	350	163	146	61	44	27	7
District Chilled Water	50	Q	Q	Q	3	10	4	Ę
Central Chillers	130	28	9	11	22	18	21	20
Packaged Air Conditioning								
Units	1,953	724	354	383	295	118	54	24
Swamp Coolers	136	69	26	Q	13	5	4	
Other	49	Q	Q	Q	7	Q	3	
Lighting Equipment Types (more than one may apply)								
Incandescent	2,193	986	391	373	258	102	56	26
Standard Fluorescent	3,778	1,681	737	627	442	165	88	39
Compact Fluorescent	607	159	105	112	133	43	32	23
High Intensity Discharge	430	153	57	61	76	45	22	14
Halogen	572	176	105	84	120	40	31	17
Other	58	Q	Q	Q	Q	Q	Q	C
Personal Computers								
None	1,617	1,326	190	72	Q	Q	Q	C
1 to 4	1,636	941	338	218	111	15	Q	C
5 to 9	542	59	207	171	91	12	Q	C
10 to 19	403	Q	63	174	89	36	6	
20 to 49	247	Q	Q	38	134	40	12	2
50 to 99	105	Q	Q	Q	33	42	16	2
100 to 249	71	Q	Q	Q	6	22	32	7
250 or More	36	Q	N	Q	Q	3	6	26
Photocopiers								
None	2,825	1,881	488	248	157	28	21	2
One	1,114	419	242	281	135	32	3	C
2 to 4	540	69	76	149	152	66	25	4
5 to 9	102	Q	Q	Q	40	25	21	Ę
10 or More	75	Q	Q	Q	Q	23	21	28
Other Electronic Equipment								
(more than one may apply)								
Laser Printers	1,949	511	370	418	373	156	83	38
FAX Machines Medical Diagnostic Equipment	2,807 86	926 Q	591 Q	573 Q	422 10	166 Q	89 5	39
		•	•	•	.3	•	Ü	
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	843	295	150	168	125	53	31	20
Electronic Ballasts	2,167	891	400	390	272	124	57	33
Skylights or Atriums	580	238	70	102	86	49	23	12

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)									
	 -			Nui	nber of Worke	ers				
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers		
Off-Hour Equipment Reduction										
(more than one may apply)										
Heating	2,862	1,270	583	510	312	116	49	23		
Cooling	2,622	1,055	556	507	301	117	62	23		
Lighting	3,675	1,671	740	611	402	148	75	27		
Office Equipment	184	Q	Q	30	73	45	20	8		

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.

Table B11. Employment Size Category, Floorspace, 1999

			Total	Floorspace (n	nillion square	feet)		
				Nur	nber of Worke	ers		
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
All Buildings	67,338	14,321	6,325	8,028	10,814	8,898	8,356	10,595
Building Floorspace								
(Square Feet)								
1,001 to 5,000	6,774	4,230	1,502	791	235	Q	Q	N
5,001 to 10,000	8,238	3,748	1,331	1,792	1,174	Q	Q	N
10,001 to 25,000		3,922	1,557	2,263	2,510	819	Q	Q
25,001 to 50,000	9,311	1,361	1,098	1,647	2,759	1,690	692	Q
50,001 to 100,000		430	444	799	2,437	3,172	2,067	762
100,001 to 200,000	,	356	350	Q	955	2,000	2,552	1,767
200,001 to 500,000		Q	Q	Q	635	598	1,927	3,015
Over 500,000		Q	N	Q	Q	Q	979	4,977
Principal Building Activity								
Education	8,651	420	516	983	2,161	2,258	1,603	710
Food Sales	994	482	Q	Q	159	Q	Q	Q
Food Service	1,851	326	285	718	346	Q	Q	N
Health Care	2,918	Q	Q	Q	212	280	521	1,529
Inpatient		N	Q	Q	Q	Q	334	1,371
Outpatient		Q	Q	Q	150	198	187	Q
Lodging	4,521	897	482	672	973	540	618	Q
Mercantile	-,	1,572	1,035	1,199	1,734	1,666	1,518	1,673
Retail (Other Than Mall)	4,766	1,525	786	826	767	442	320	Q
Enclosed and Strip Malls	5,631	Q	Q	373	967	1,224	1,198	1,572
Office	12,044	744	790	959	1,505	1,312	1,955	4,778
Public Assembly	4,393	1,451	701	360	543	623	407	Q
Public Order and Safety	1,168	Q	Q	Q	329	Q	Q	Q
Religious Worship	3,405	1,962	561	499	279	Q	Q	Q
Service	3,388	1,058	483	415	728	313	Q	Q
Warehouse and Storage	10,477	3,177	1,089	1,485	1,694	1,336	1,004	692
Other	1,222	219	Q	Q	Q	Q	Q	Q
Vacant	1,908	1,723	Q	Q	Q	Q	N	Q
Year Constructed								_
1919 or Before	4,034	1,863	506	637	316	219	235	Q
1920 to 1945		2,443	508	729	691	586	658	830
1946 to 1959	-,	2,264	1,012	1,415	1,947	833	688	968
1960 to 1969		2,015	1,181	1,128	1,707	1,696	1,561	1,579
1970 to 1979	,	2,012	1,337	1,233	1,682	1,803	1,515	2,259
1980 to 1989		2,013	952	1,731	2,383	2,161	1,915	2,776
1990 to 1999	11,094	1,712	829	1,153	2,089	1,601	1,786	1,925
Floors	20,000	7.740	2.404	2.007	4.000	2.020	0.404	000
One		7,746	3,164	3,867	4,996	3,639	2,481	908
Two		3,820	1,890	2,205	3,287	2,472	1,818	1,493
Three		1,798	953	1,200	1,369	1,265	1,430	912
Four to Nine Ten or More	,	867 Q	305 Q	730 Q	1,140 Q	1,385 Q	2,044 583	3,708 3,575
Census Region								
Northeast	12,360	1,906	1,372	1,472	1,574	1,814	1,702	2,519
Midwest	16,761	4,033	1,689	1,930	2,575	1,876	2,228	2,430
South	23,485	5,579	1,730	2,935	4,174	2,876	2,856	3,335
West	14,731	2,802	1,533	1,690	2,492	2,332	1,570	2,312
Weekly Operating Hours								
39 or Fewer	6,596	5,132	367	215	511	Q	Q	Q
40 to 48	13,105	3,477	1,676	1,973	2,721	1,729	863	666
49 to 60	14,200	1,920	1,838	2,379	2,189	2,079	1,719	2,075
61 to 84	12,458	1,344	1,117	1,334	2,124	1,945	1,930	2,663
85 to 167	9,116	1,128	723	1,043	1,586	1,592	1,783	1,261
Open Continuously	11,863	1,319	604	1,084	1,684	1,334	1,920	3,918

Table B11. Employment Size Category, Floorspace, 1999

			Total	Floorspace (r	nillion square	feet)		
				•	nber of Worke	•		
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Ownership and Occupancy								
Nongovernment Owned	54,994	12,950	5,432	6,947	8,480	6,431	6,358	8,398
Owner Occupied		8,848	3,765	5,172	5,390	3,470	4,375	6,766
Nonowner Occupied		2,488	1,667	1,774	3,090	2,961	1,983	1,632
Unoccupied	1,613	1,613	N	N	N	N	N	N
Government Owned	12,343	1,371	893	1,081	2,334	2,467	1,998	2,198
Vacancy Status								
Completely Vacant	953	953	N	N	N	N	N	N
Mostly Vacant	956	770	Q	Q	Q	Q	N	Q
Partially Vacant		2,520	1,059	1,102	2,153	1,811	2,297	4,577
Not At All Vacant	49,910	10,078	5,233	6,858	8,605	7,064	6,060	6,012
Number of Establishments								
One	43,343	10,723	4,718	6,063	7,280	5,111	4,796	4,651
2 to 5	10,582	1,619	1,459	1,701	2,204	1,554	1,053	992
6 to 10	3,574	Q	Q	216	918	773	752	683
11 to 20	3,260	Q	Q	Q	389	1,021	992	789
More than 20	4,811	Q	Q	Q	Q	440	764	3,480
Currently Unoccupied	1,769	1,769	N	N	N	N	N	N
Energy Sources (more than								
one may apply)								
Electricity	65,716	12,750	6,274	8,028	10,814	8,898	8,356	10,595
Natural Gas	45,525	7,108	4,633	5,589	7,737	6,278	6,146	8,035
Fuel Oil	13,285	964	796	676	1,294	1,593	2,482	5,480
District Heat	5,891	390	304	475	544	696	1,052	2,431
District Chilled Water	2,750	Q	Q	Q	162	478	484	1,234
Propane	6,290	1,451	646	688	1,189	839	787	691
Other	2,322	345	Q	Q	317	364	417	527
Energy End Uses (more than								
one may apply)								
Buildings with Space Heating	61,602	10,552	6,020	7,762	10,347	8,536	8,053	10,333
Buildings with Cooling	58,474	8,704	5,291	7,409	9,930	8,519	8,129	10,491
Buildings with Water Heating	56,115	8,401	5,145	7,000	9,445	8,166	7,760	10,199
Buildings with Cooking	24,681	1,651	1,341	2,021	3,871	4,354	4,305	7,138
Buildings with Manufacturing	3,126	Q	230	477	645	544	436	544
Buildings with Electricity Generation	11,882	Q	237	487	1,299	1,559	2,386	5,659
Generation	11,002	Q	201	401	1,200	1,000	2,000	0,000
Percent of Floorspace Heated Not Heated	5,736	3,769	305	265	468	362	Q	Q
1 to 50	,	2,323	1,426	1,249	958	776	357	504
51 to 99		2,323 2,174	732	1,304	1,848	1,137	1,206	2,344
100	,	6,055	3,862	5,209	7,541	6,622	6,490	7,485
Percent of Floorspace Cooled								
Not Cooled	8,864	5,617	1,034	618	884	379	Q	Q
1 to 50		3,288	2,477	2,799	3,152	2,173	1,910	1,048
51 to 99		1,843	734	1,977	2,714	2,510	2,639	4,550
100		3,573	2,080	2,634	4,065	3,837	3,580	4,893
Percent Lit When Open								
Zero	173	Q	Q	Q	N	N	N	N
1 to 50	9,187	3,999	1,649	1,679	996	405	Q	Q
51 to 99	20,665	2,822	1,733	2,336	3,974	3,562	2,485	3,752
100	34,233	4,404	2,869	3,930	5,844	4,931	5,526	6,729
Building Never Open/								
Electricity Not Used	3,080	2,983	Q	Q	N	N	N	N

Table B11. Employment Size Category, Floorspace, 1999

			Total	Floorspace (n	nillion square	feet)		
					mber of Worke	•		
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Heating Equipment (more								
than one may apply)								
Heat Pumps	8,923	707	655	1,340	1,761	1,401	1,105	1,954
Furnaces	14,449	3,874	2,510	1,953	2,631	1,221	1,164	1,095
Individual Space Heaters	17,349	2,913	1,680	1,973	2,538	2,531	2,376	3,339
District Heat	5,534	289	292	372	534	645	1,031	2,371
Boilers	19,522	1,840	1,285	1,771	2,739	3,234	3,706	4,948
Packaged Heating Units Other	25,743 4,073	3,005 673	1,788 178	3,002 219	4,935 451	4,416 300	4,172 608	4,426 1,644
Cooling Equipment (more								
than one may apply)								
Residential-Type Central								
Air Conditioners	8,329	2,041	921	1,187	1,341	791	868	1,180
	,							,
Heat Pumps	9,147	753	677	1,267	1,688	1,493	1,027	2,243
Individual Air Conditioners	14,276	2,568	1,226	2,037	2,138	2,046	1,940	2,322
District Chilled Water	2,750	Q	Q	Q	162	478	484	1,234
Central Chillers	12,909	297	223	277	1,054	1,646	2,597	6,815
Packaged Air Conditioning								
Units	36,527	4,264	2,933	4,334	6,776	5,963	5,507	6,751
Swamp Coolers	2,219	315	317	Q	394	365	360	335
Other	1,312	Q	Q	Q	210	Q	341	381
Lighting Equipment Types (more than one may apply)	00.450	0.500						
Incandescent	38,156	6,532	3,289	4,437	5,841	5,330	5,082	7,644
Standard Fluorescent	60,344	9,890	5,796	7,439	10,106	8,474	8,164	10,475
Compact Fluorescent	20,666	1,388	1,118	1,682	3,032	2,781	3,573	7,093
High Intensity Discharge	19,223	1,348	990	1,233	2,984	3,306	3,551	5,812
Halogen	17,926	1,448	880	1,482	2,585	2,539	3,003	5,989
Other	1,004	Q	Q	Q	Q	Q	Q	Q
Personal Computers								
None	9,583	7,539	1,073	622	193	Q	Q	Q
1 to 4	13,853	5,870	2,877	2,418	1,842	609	Q	Q
5 to 9	6,528	329	1,662	1,850	1,811	639	Q	Q
10 to 19	7,514	Q	416	2,246	2,408	1,140	678	Q
20 to 49	8,087	Q	Q	584	2,949	2,408	1,541	281
50 to 99		Q	Q	Q	1,103	2,240	1,563	626
100 to 249	6,818	Q	Q	Q	370	1,434	3,130	1,733
250 or More	9,088	Q	N	Q	Q	321	1,034	7,554
Photocopiers								
None	21,631	10,918	3,493	2,574	2,309	1,176	844	316
One	12,928	2,797	2,060	3,138	2,987	1,407	347	Q
2 to 4	15,620	567	746	2,215	4,616	3,863	2,800	812
5 to 9	5,384	307 Q	7 4 0 Q		782	1,352	1,940	1,187
10 or More	11,774	Q	Q	Q Q	762 Q	1,100	2,426	8,086
Other Electronic Equipment								
(more than one may apply)								
Laser Printers	46,567	3,246	3,323	5,128	8,881	8,004	7,714	10,271
FAX Machines	54,764	5,336	4,881	6,981	10,031	8,696	8,259	10,580
Medical Diagnostic Equipment	2,493	Q	Q	Q	148	220	412	1,502
Lighting Conservation Features								
(more than one may apply)								
Specular Reflectors	19,994	1,386	1,450	1,959	2,813	2,860	3,629	5,897
Electronic Ballasts	42,035	5,143	3,536	4,587	6,666	6,415	6,220	9,468
Skylights or Atriums	18,286	1,891	934	1,676	2,509	3,136	3,092	5,050

Table B11. Employment Size Category, Floorspace, 1999

			Total	Floorspace (n	nillion square	feet)		
				Nur	nber of Worke	rs		
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Off-Hour Equipment Reduction								
(more than one may apply)								
Heating	39,969	7,086	4,313	5,451	7,017	5,890	4,819	5,394
Cooling	39,161	6,141	4,058	5,609	6,887	5,729	5,011	5,726
Lighting	51,083	9,745	5,555	6,640	8,834	7,390	6,343	6,576
Office Equipment	9,063	Q	Q	529	2,132	2,435	2,153	1,668

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.

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

				Number of Bu	ildings (thousan	d)			
		Nor	ngovernment	-Owned Buildi	nas	Govern	nment-Owr	ned Buildir	nas
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local
All Buildings	4,657	4,135	2,801	1,099	236	521	63	83	375
Building Floorspace									
(Square Feet)									
1,001 to 5,000	2,348	2,131	1,433	548	151	216	Q	Q	175
5,001 to 10,000	1,110	1,006	693	250	Q	104	Q	Q	70
10,001 to 25,000	708	618	431	172	15	91	Q	14	64
25,001 to 50,000	257	202	129	68	Q	55	Q	19	33
50,001 to 100,000	145	109	69	39	Q	36	Q	11	21
100,001 to 200,000	. 59	47	29	17	Q	13	2	3	8
200,001 to 500,000	. 23	18	13	4	Q	5	Q	2	3
Over 500,000	7	5	5	1	Q	2	1	Q	C
Principal Building Activity									
Education	327	133	107	25	N	195	Q	43	151
Food Sales	174	174	132	42	N	Q	N	N	C
Food Service	349	336	242	94	N	Q	Q	Q	C
Health Care	127	119	77	42	N	Q	Q	Q	C
Inpatient	11	9	6	Q	N	2	Q	Q	Q
Outpatient	116	110	71	39	N	Q	Q	Q	Q
Lodging	153	142	125	17	N	Q	Q	Q	Q
Mercantile	667	667	377	283	Q	Q	N	Q	Q
Retail (Other Than Mall)	534	533	330	196	Q	Q	N	N	Q
Enclosed and Strip Malls	133	133	47	87	N	Q	N	Q	N
Office	739	685	476	209	N	54	Q	6	37
Public Assembly	305	240	203	31	Q	65	Q	5	52
Public Order and Safety	72	Q	Q	Q	N	49	Q	5	43
Religious Worship	307	307	294	Q	N	N	N	N	N
Service	478	421	275	146	N	57	6	Q	48
Warehouse and Storage	603	564	371	131	Q	40	Q	Q	Q
Other	102	89	63	25	N	Q	Q	Q	Q
Vacant	253	235	Q	Q	161	Q	Q	Q	Q
Year Constructed									
1919 or Before	419	384	256	94	Q	35	Q	Q	21
1920 to 1945	499	436	291	130	Q	63	Q	6	51
1946 to 1959	763	670	450	159	62	93	Q	24	54
1960 to 1969	665	581	377	172	Q	85	4	11	69
1970 to 1979	. 774	684	465	201	Q	90	Q	19	60
1980 to 1989		761	532	195	Q	85	Q	10	73
1990 to 1999	690	619	431	148	Q	71	Q	14	48
Floors	0.0=0	0.500	4.500	700	4=4	2:2		5 ^	050
One	,	2,530	1,598	760	171	349	41	50	258
Two	,	1,068	805	222	41	100	Q	16	70
Three		379	270	88	Q	41	4	9	28
Four to Nine Ten or More		148 10	119 8	27 2	Q Q	30 1	0	1	19 Q
Census Region									
_	686	607	AEF	142	^	00	^	9	60
Northeast			455 747		Q 102	80	Q		60 59
Midwest	1,188 1,762	1,105 1,585	747 1,083	256 431	102 71	83 177	Q 25	14 32	58 120
South									

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

				Number of Bu	ldings (thousar	nd)			
		Noi	ngovernment	-Owned Buildii	ngs	Govern	nment-Own	ed Buildir	ngs
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local
rkers (main shift)									
ver than 5	2,376	2,187	1,463	488	236	189	Q	14	141
9	,	709	489	220	N	99	Q	11	86
to 19		587	435	152	N	96	Q	26	62
to 49		413	279	133	N	75	Q	13	51
to 99		135	64	72	N	39	Q	13	23
to 249		73	48	25	N	18	3	5	9
or More		33	24	9	N	6	2	2	3
ekly Operating Hours									
or Fewer	978	863	527	100	236	115	Q	Q	97
to 48	1,156	967	662	305	N	189	Q	39	137
to 60		887	639	248	N	99	24	13	62
to 84		624	400	224	N	40	4	8	27
to 167	474	442	295	147	N	33	Q	7	24
en Continuously		352	278	74	N	46	4	15	28
cancy Status									
npletely Vacant	140	139	N	N	139	Q	N	N	Q
stly Vacant	113	96	Q	Q	22	Q	Q	Q	Q
tially Vacant	697	620	339	207	Q	77	Q	8	59
At All Vacant		3,280	2,428	852	N	427	45	75	308
mber of Establishments									
e	3,528	3,084	2,317	767	N	444	53	76	316
5	688	631	395	236	N	58	Q	6	42
10	114	111	58	54	N	3	Q	Q	Q
to 20	48	47	14	33	N	Q	Q	Q	Q
re than 20	27	27	18	9	N	Q	Q	Q	Q
rently Unoccupied	251	236	N	N	236	Q	Q	Q	Q
Itibuilding Facility Activity									
Part of a Multibuilding			0.050		400	400	_		40=
cility	•	3,097	2,050	854	193	198	7	24	167
lege or University		53	48	Q	Q	17	Q	15	Q
mary or Secondary School		54	47	Q	Q	170	Q	21	148
ce Complex		115	64	45	Q	19	Q	Q	Q
ail Complex		175	74	95	Q	Q	N	Q	Q
igious Campus or Complex		186	181	Q	N	N	N	N	N
alth Care Complex		50	35	Q	Q	22	Q	Q	Q
vernment Complex		Q	Q	Q	N	61	27	Q	25
er	434	405	301	74	Q	29	Q	6	14
ergy Sources (more than									
e may apply)	4 005	0.000	0.747	4 000	22	400		00	201
ctricity		3,898	2,747	1,069	82		54	83	361
ural Gas		2,366	1,605	719	43	304	24	52	228
el Oil		386	311	75	Q	48	4	6	38
									19
									Q
pane									26 Q
trict Heat trict Chilled Water	117 50 451	67 21 415 144	53 13 355 126	Q Q 57 17	N N Q Q		50 29 36 9	50 Q 29 Q 36 Q	50 Q 20 29 Q 6 36 Q 9

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

				Number of Bui	ldings (thousar	ıd)			
		No	ngovernment	-Owned Buildir	nge	Govern	nment-Own	ed Buildin	nae
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016	3,544	2,525	980	40	471	54	79	339
Buildings with Cooling	3,560	3,172	2,246	900	Q	387	46	65	277
Buildings with Water Heating	3,239	2,887	2,039	818	30	352	40	74	238
Buildings with Cooking	857	753	555	196	Q	105	5	19	81
Buildings with Manufacturing	151	141	97	44	N	Q	Q	Q	Q
Buildings with Electricity Generation	172	129	113	15	Q	42	4	13	26
Percent of Floorspace Heated							_	_	
Not Heated		591	276	119	196	50	Q	Q	36
1 to 50		543	385	149	Q	33	Q	Q	24
51 to 99		572 2,430		175 655	Q Q	55 383	Q 40	17 60	31 284
Percent of Floorspace Cooled									
Not Cooled	1,097	963	555	199	209	134	Q	19	99
1 to 50	,	925		239	Q	87	Q	20	57
51 to 99		669		206	Q	82	Q	23	52
100	1,796	1,578	1,103	455	Q	218	28	22	167
Percent Lit When Open Zero	34	34	Q	Q	N	N	N	N	N
1 to 50		772		169	N	63	Q	Q	35
51 to 99		1,090		294	N	138	Q	34	92
100		1,820	1,227	593	N	275	15	40	220
Building Never Open/									
Electricity Not Used	464	419	142	41	236	45	Q	Q	Q
Heating Equipment (more									
than one may apply) Heat Pumps	492	410	266	143	Q	82	Q	19	45
Furnaces		1,391	1,009	366	Q	69	Q	8	53
Individual Space Heaters	894	795	576	211	õ	99	16	14	69
District Heat		53	44	Q	N	43	Q	13	18
Boilers		444	380	63	Q	137	8	27	102
Packaged Heating Units	1,347	1,188	779	390	Q	159	5	18	136
Other	185	161	125	36	Q	24	Q	Q	Q
Cooling Equipment (more									
than one may apply) Residential-Type Central									
Air Conditioners	676	639	483	152	Q	38	Q	4	20
Heat Pumps		413		160	Q	73	Q	18	37
Individual Air Conditioners		682		140	Q	116	5	19	92
District Chilled Water		21	13	Q	N N	29	Q	6	Q
Central Chillers		87	72	14	Q	42	5	12	26
Packaged Air Conditioning		3.		- •	~		-		_0
Units	1,953	1,739	1,206	508	Q	214	9	29	176
Swamp Coolers		127	64	63	N	9	Q	Q	Q
Other		45		4	N	4	Q	Q	Q
Main Equipment Replaced Since									
1995 (more than one may apply)	004	070	040	045	^	440	^	40	00
Heating		872		245	Q	112	Q	13	93
Cooling	1,085	983	651	324	Q	102	Q	17	78

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)											
				Number of Bui	idings (thousan	(a)						
		Nor All	ngovernment	-Owned Buildir	ngs	Govern	nment-Own	ed Buildin	gs			
	All Buildings	Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local			
Lighting Equipment Types												
(more than one may apply) Incandescent	2,193	2,000	1,423	568	Q	193	20	33	140			
Standard Fluorescent	3,778	3,335	2,355	970	Q	443	47	74	322			
Compact Fluorescent	607	533	414	118	Q	74	6	19	49			
High Intensity Discharge	430	342	258	84	N N	87	5	18	64			
Halogen	572	536	402	133	Q	36	2	9	25			
Other	58	56	44	Q	N	Q	Q	Q	C			
Personal Computers	4.04=	4.500	004		242							
None	1,617	1,503	981	304	218	114	Q	Q	92			
1 to 4	1,636	1,506	1,076	428	Q	130	Q	18	93			
5 to 9	542	466	300	163	Q	76	Q	Q 15	57			
10 to 19	403	335	230	93	Q	67	Q	15	50			
20 to 49 50 to 99	247 105	184 74	121 44	63 30	N N	64 31	Q Q	11 9	43 21			
				12			2					
100 to 249	71 36	42 26	29 20	6	N N	29 10	2	12 3	15 5			
Photocopiers												
None	2,825	2,548	1,661	656	231	277	40	31	206			
One	1,114	996	725	267	Q	117	Q	23	81			
2 to 4	540	443	328	115	Q	97	6	18	73			
5 to 9	102	83	47	37	N	19	Q	8	10			
10 or More	75	64	40	24	N	11	3	3	5			
Other Electronic Equipment (more than one may apply)												
Laser Printers	1,949	1,670	1,193	466	Q	280	38	56	185			
FAX Machines	2,807	2,533	1,748	774	Q	274	37	46	190			
Medical Diagnostic Equipment	86	78	57	21	N	Q	Q	Q	C			
Energy-Related Space Functions												
(more than one may apply)	707	000	470	400		00	_	40				
Commercial Food Preparation Activities with Large	767	668	478	190	Q	99	5	19	75			
Amounts of Hot Water	698	585	439	146	Q	113	Q	27	74			
Building Shell Conservation Features (more than one												
may apply) Multipaned Windows	2,130	1,906	1,430	452	24	223	26	40	157			
Tinted, Reflective, or Shading Glass	1,283	1,134	820	304	Q	149	19	20	110			
HVAC Conservation Features												
(more than one may apply)												
Variable Air-Volume System	550	463	330	129	Q	87	5	26	55			
Economizer Cycle		441	314	124	Q	126	18	25	82			
HVAC Maintenance	2,786	2,388	1,728	639	Q	398	46	66	285			
Energy Management and Control System (EMCS)	460	330	244	86	Q	131	16	29	85			
Lighting Conservation Features												
(more than one may apply)												
Specular Reflectors	843	726	489	237	Q	117	Q	16	88			
Electronic Ballasts	2,167	1,880	1,288	591	Q	287	24	48	215			
	580	502										

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

-		Number of Buildings (thousand)										
	Nongovernment-Owned Buildings						Government-Owned Buildings					
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local			
Off-Hour Equipment Reduction												
(more than one may apply)												
Heating	2,862	2,517	1,857	629	32	345	35	38	272			
Cooling	2,622	2,339	1,654	660	Q	282	28	32	222			
Lighting	3,675	3,255	2,309	946	N	420	43	67	310			
Office Equipment	184	115	76	39	N	69	Q	21	47			

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.

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

			To	tal Floorspace	e (million square	feet)			
		No	ngovernment	-Owned Build	inas	Govern	nment-Own	ed Buildi	nas
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local
All Buildings	67,338	54,994	37,785	15,596	1,613	12,343	1,797	3,391	7,156
Building Floorspace									
(Square Feet)									
1,001 to 5,000	6,774	6,189	4,040	1,686	463	585	Q	Q	467
5,001 to 10,000		7,466	5,179	1,827	Q	772	Q	Q	509
10,001 to 25,000		9,655	6,736	2,656	264		177	233	1,088
25,001 to 50,000		7,264	4,577	2,496	Q	2,047	Q	732	1,200
50,001 to 100,000	*		4,723	2,775	Q	2,541	Q	732	1,487
100,001 to 200,000		6,509	4,097	2,773	Q		256	442	1,064
200,001 to 500,000		5,229	3,924	1,190	Q	1,622	230 Q	610	902
Over 500,000		5,229	4,509	592	Q	1,516	641	Q Q	902 Q
000,000	0,020	0,112	4,000	552	Q	1,010	041	Q	Q
Principal Building Activity									
Education	. 8,651	3,207	2,833	373	N	5,444	Q	1,712	3,655
Food Sales	994	990	705	284	N	Q	N	N	Q
Food Service	1,851	1,763	1,362	401	N	Q	Q	Q	Q
Health Care	2,918	2,468	2,087	380	N	450	Q	Q	243
Inpatient	1,865	1,489	1,423	Q	N	376	Q	Q	Q
Outpatient	1,053	979	664	315	N	Q	Q	Q	Q
Lodging	4,521	4,100	3,614	486	N	421	Q	219	Q
Mercantile	10,398	10,380	5,308	5,031	Q	Q	N	Q	Q
Retail (Other Than Mall)	4,766	4,757	2,729	1,986	Q	Q	N	N	Q
Enclosed and Strip Malls	5,631	5,624	2,579	3,045	N	Q	N	Q	N
Office	12,044	10,482	7,435	3,047	N	1,562	600	380	582
Public Assembly		2,775	2,321	411	Q	1,618	Q	461	980
Public Order and Safety		Q	Q	Q	N	,	Q	226	779
Religious Worship			3,349	Q	N	N	N	N	N
Service		2,532	1,710	822	N	856	297	Q	384
Warehouse and Storage		9,901	5,821	3,693	Q		Q	Q	Q
Other			773	310	N		Q	Q	Q
Vacant	*	1,754	Q	Q	1,143		Q	Q	Q
Year Constructed									
1919 or Before	4,034	3,456	2,479	728	Q	579	Q	Q	293
				1,081	_		_		
1920 to 1945		4,812 7,053	3,575 4,879	1,737	Q 437	1,633 2,074	Q 532	447 632	993 910
1960 to 1969							364		
	,		5,495 6,705	2,419	Q			742	1,639
1970 to 1979		9,907	6,795	2,960	Q		Q	599	1,174
1980 to 1989 1990 to 1999		12,507 9,138	8,364 6,198	3,855 2,817	Q Q		Q 243	315 554	990 1,158
Floore									
Floors One	26 000	22 775	12 400	0.200	060	4 DOE	276	OOF	2 654
One			12,499	9,308	969	,	376	995	2,654
Two			10,848	3,256	262		235	538	1,846
Three Four to Nine	- ,		5,387	1,274	Q		207	665	1,154
Ten or More	-,		5,979 3,073	1,134 623	Q Q		640 339	1,039 153	1,300 Q
Conque Begion									
Census Region	40.000	0.540	7.440	0.000	^	0.040	201	000	4 744
Northeast			7,143	2,286	Q 470		394	683	1,741
Midwest		13,896	9,990	3,427	479	,	318	961	1,586
South			13,228	5,881	636	,	549	919	2,273
West	14,731	11,810	7,424	4,001	385	2,921	537	828	1,556

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

			To	tal Floorspace	e (million square	feet)			
		No	ngovernment	-Owned Build	inas	Govern	nment-Own	ed Buildir	nas
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local
Workers (main shift)									
Fewer than 5	14,321	12,950	8,848	2,488	1,613	1,371	Q	263	946
5 to 9	6,325	5,432	3,765	1,667	N	893	Q	257	508
10 to 19	8,028	6,947	5,172	1,774	N	1,081	Q	300	683
20 to 49	10,814	8,480	5,390	3,090	N	2,334	288	573	1,473
50 to 99	8,898	6,431	3,470	2,961	N	2,467	Q	739	1,638
100 to 249		6,358	4,375	1,983	N	1,998	246	701	1,051
250 or More		8,398	6,766	1,632	N		783	556	858
Weekly Operating Hours									
39 or Fewer	6,596	5,563	3,438	512	1,613	1,033	Q	Q	849
40 to 48	13,105	9,889	6,718	3,171	N	3,216	302	863	2,050
49 to 60		11,920	8,103	3,818	N	2,280	372	671	1,236
61 to 84	12,458	10,671	7,204	3,467	N	1,786	210	538	1,039
85 to 167		7,381	4,533	2,849	N		Q	435	1,128
Open Continuously		9,569	7,789	1,780	N	2,294	631	808	855
Vacancy Status									
Completely Vacant	953	922	N	N	922	Q	N	N	Q
Mostly Vacant	956	832	Q	Q	221	Q	Q	Q	Q
Partially Vacant		13,410	8,450	4,490	Q	2,111	277	730	1,103
Not At All Vacant	,	39,831	29,012	10,819	N	10,078	1,444	2,652	5,983
Number of Establishments									
One	43,343	33,290	25,947	7,343	N	10,053	1,373	2,818	5,862
2 to 5	10,582	9,077	5,371	3,706	N	1,505	332	307	865
6 to 10		3,369	1,699	1,670	N		Q	Q	Q
11 to 20		3,097	1,336	1,761	N		Q	Q	Q
More than 20		4,549	3,433	1,116	N		Q	Q	Q
Currently Unoccupied		1,613	N	N	1,613		Q	Q	Q
Multibuilding Facility Activity									
Not Part of a Multibuilding									
Facility	41,289	35,892	24,040	10,524	1,328	5,396	417	1,140	3,839
College or University	,	1,653	1,562	Q	Q		Q	835	Q
Primary or Secondary School		1,091	1,042	Q	Q	2,296	Q	650	1,637
Office Complex		3,014	2,035	958	Q	338	Q	Q	1,007 Q
Retail Complex		3,456	1,547	1,889	Q	Q	N	Q	Q
Religious Campus or Complex		1,907	1,817	1,009 Q	N N		N	N	N
Health Care Complex		1,736	1,571	Q	Q		230	Q	235
Government Complex		1,730 Q	1,37 T Q	Q	Q N		728	Q	630
Other		6,230	4,166	1,855	Q	,	220	424	515
Energy Sources (more than									
one may apply)									
Electricity	65,716	53,640	37,506	15,441	693	12,076	1,711	3,382	6,983
Natural Gas	45,525	37,026	25,597	10,968	461	8,500	997	2,253	5,250
Fuel Oil	13,285	9,893	8,284	1,605	Q	3,392	748	822	1,823
District Heat	5,891	3,333	2,907	426	N	2,559	827	1,187	546
District Chilled Water	2,750	1,560	1,325	Q	N	1,190	368	407	415
Propane	6,290	5,305	4,051	1,244	Q	985	Q	286	629
Other		1,864	1,486	358	Q	458	Q	Q	Q

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

			To	tal Floorspace	e (million square	feet)			
		No		-Owned Buildi			nment-Own	ad Buildii	nae
	All	All Nongovern- ment- Owned	Owner	Nonowner	iiiys	All Govern- ment- Owned	iment-Own	leu Bullull	iys
	Buildings	Buildings	Occupied	Occupied	Unoccupied	Buildings	Federal	State	Local
Energy End Uses (more than one may apply)				•			-	-	
Buildings with Space Heating	61,602	49,916	35,287	14,279	349	11,687	1,715	3,318	6,653
Buildings with Cooling	58,474	47,858	33,473	14,013	Q	10,616	1,525	2,962	6,129
Buildings with Water Heating	56,115	45,444	31,903	13,158	383	10,670	1,477	3,111	6,082
Buildings with Cooking	24,681	18,531	14,039	4,458	Q	6,150	838	1,535	3,778
Buildings with Manufacturing	3,126	2,708	1,619	1,089	N	Q	Q	Q	C
Buildings with Electricity									
Generation	11,882	8,847	7,264	1,558	Q	3,035	758	907	1,370
Percent of Floorspace Heated	5 700	5.070	0.400	4.047	4.004	057		0	50.4
Not Heated	,	5,079	2,498	1,317	1,264		Q	Q	504
1 to 50	,	7,105	4,711	2,314	Q Q		Q 317	Q 584	298 802
100		9,043 33,768	6,527 24,049	2,504 9,461	Q	9,496	1,315	2,628	5,553
100	43,204	33,700	24,049	9,401	Q	9,490	1,515	2,020	3,333
Percent of Floorspace Cooled									
Not Cooled	8,864	7,137	4,313	1,583	1,241	1,727	Q	428	1,027
1 to 50	16,846	13,844	9,562	4,198	Q	3,002	Q	894	1,847
51 to 99	16,966	13,579	9,718	3,828	Q	3,387	514	1,056	1,816
100	24,662	20,435	14,193	5,986	Q	4,227	749	1,012	2,466
Dansont Lit Miles of Ones									
Percent Lit When Open Zero	173	173	Q	Q	N	N	N	N	N
1 to 50		8,569	6,878	1,692	N		Q	Q	315
51 to 99		16,036	11,478	4,558	N	4,629	454	1,441	2,734
100	,	27,659	18,582	9,077	N		1,058	1,827	3,689
Building Never Open/	,	,	-,	-,-		.,.	,	,-	-,
Electricity Not Used	3,080	2,558	708	237	1,613	522	Q	Q	Q
•									
Heating Equipment (more than one may apply)									
Heat Pumps	8,923	7,187	5,195	1,974	Q	1,736	Q	435	1,125
Furnaces	14,449	13,202	9,424	3,681	Q	,	Q	244	844
Individual Space Heaters	17,349	14,235	10,218	3,933	Q	3,114	674	787	1,653
District Heat		3,072	2,695	377	N		827	1,102	534
Boilers	,	13,132	11,042	2,041	Q		588	1,561	4,242
Packaged Heating Units		22,108	13,998	7,945	Q	3,635	249	1,108	2,279
Other	4,073	3,607	2,828	735	Q	466	Q	202	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central									
Air Conditioners	8,329	7,313	5,683	1,623	Q	1,016	Q	173	684
Heat Pumps		7,445	5,284	2,143	Q		Q	354	1,194
Individual Air Conditioners	,	10,593	8,343	2,046	Q		623	646	2,414
District Chilled Water	2,750	1,560	1,325	Q	N	1,190	368	407	415
Central Chillers	12,909	8,984	7,474	1,482	Q	3,926	804	1,260	1,861
Packaged Air Conditioning									
Units		30,779	20,641	9,842	Q		728	1,508	3,511
Swamp Coolers		1,610	945	665	N		Q	Q	Q
Other	1,312	1,145	989	156	N	167	Q	Q	Q
Main Equipment Replaced Since									
1995 (more than one may apply)									
Heating		11,270	7,591	3,617	Q		Q	389	1,483
Cooling	17,390	14,186	9,617	4,491	Q	3,204	387	922	1,895

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

			То	tal Floorspace	e (million square	feet)			
		No	ngovernment	-Owned Build	inas	Govern	nment-Own	ed Buildii	nas
	All	All Nongovern- ment- Owned	Owner	Nonowner		All Govern- ment- Owned			
	Buildings	Buildings	Occupied	Occupied	Unoccupied	Buildings	Federal	State	Local
Lighting Equipment Types (more than one may apply)									
Incandescent	38,156	31,544	23,612	7,849	Q	6,612	937	1,837	3,838
Standard Fluorescent	60,344	48,959	34,331	14,462	Q	11,385	1,653	3,186	6,547
Compact Fluorescent	20,666	16,731	13,325	3,377	Q	3,935	679	1,203	2,054
High Intensity Discharge	19,223	13,702	10,325	3,376	N	5,521	685	1,631	3,206
Halogen	17,926	15,034	11,336	3,668	Q	2,892	411	899	1,582
Other	1,004	823	665	Q	N	Q	Q	Q	Q
Personal Computers									
None	9,583	8,678	5,680	1,643	1,354	906	Q	Q	683
1 to 4		12,564	8,657	3,851	Q	1,288	Q	368	793
5 to 9		5,864	3,670	2,168	Q	664	Q	Q	415
10 to 19		6,527	4,232	2,118	Q	987	Q	333	607
20 to 49	,	6,394	4,173	2,221	N	1,693	Q	389	1,063
50 to 99	,	4,208	2,566	1,642	N	1,659	Q	531	1,058
100 to 249	-,	4,346	3,342	1,004	N	2,472	211	780	1,481
250 or More		6,414	5,467	947	N	2,674	838	780	1,056
Photocopiers None	21,631	18,933	11,799	5,592	1,541	2,698	302	655	1,742
One		11,141	8,151	2,926	1,5 4 1	1,787	Q	524	1,077
2 to 4		11,904	8,583	3,314	Q	3,716	362	948	2,406
5 to 9					Q N			455	971
10 or More	,	3,812 9,204	2,341 6,912	1,471 2,292	N N	1,572 2,570	Q 802	808	960
	,	-, -	- /-	, -		,			
Other Electronic Equipment									
(more than one may apply)									
Laser Printers	46,567	36,966	26,002	10,870	Q	9,601	1,588	2,708	5,305
FAX Machines	54,764	44,675	30,954	13,591	Q	10,088	1,578	2,706	5,805
Medical Diagnostic Equipment	2,493	2,099	1,845	254	N	394	Q	Q	215
Energy-Related Space Functions									
(more than one may apply)	00.000	47.000	40.404	4.470	•	0.000	000	4.540	0.700
Commercial Food Preparation Activities with Large	23,328	17,300	13,104	4,179	Q	6,028	808	1,512	3,708
Amounts of Hot Water	21,793	16,229	12,862	3,350	Q	5,564	644	1,693	3,227
Building Shell Conservation									
Features (more than one									
may apply)									
Multipaned Windows	38,193	31,154	23,284	7,556	314	7,039	987	1,979	4,073
Tinted, Reflective, or Shading Glass	29,915	24,218	17,092	6,985	Q	5,698	860	1,547	3,291
•	2,2.0	-,	, -	,,	~	,,,,,,,		,	-,
HVAC Conservation Features (more than one may apply)									
	19,387	14,961	11,395	3,560	Q	A A9E	759	1,422	2,244
Variable Air-Volume System					Q				,
Economizer Cycle		15,806 42,540	11,650	4,140 12,105	Q	5,450 10,855	1,153	1,738	2,559
HVAC Maintenance	53,395	42,540	30,270	12,105	Q	10,855	1,636	3,135	6,084
Energy Management and Control System (EMCS)	21,613	15,140	11,878	3,252	Q	6,473	1,201	2,060	3,211
	,0	-,	,,=: 0	-, -	~	2,	,	,	-,= - •
Lighting Conservation Features									
(more than one may apply)	10.004	15.640	11 204	4 0 4 7	^	A 0E4	005	1.004	2 450
Specular Reflectors		15,640	11,384	4,247	Q	4,354	805	1,091	2,458
Electronic Ballasts		33,247		9,680	Q	8,789	1,332	2,501	4,957
Skylights or Atriums	18,286	14,429	10,683	3,537	Q	3,857	512	1,254	2,091

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

		Total Floorspace (million square feet)											
	Nongovernment-Owned Buildings						Government-Owned Buildings						
	All Buildings	All Nongovern- ment- Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern- ment- Owned Buildings	Federal	State	Local				
Off-Hour Equipment Reduction													
(more than one may apply)													
Heating	39,969	31,903	22,534	9,112	258	8,066	978	2,012	5,076				
Cooling	39,161	31,707	21,722	9,679	Q	7,454	871	1,825	4,758				
Lighting	51,083	41,690	28,512	13,178	N	9,394	1,069	2,521	5,804				
Office Equipment	9,063	5,637	4,010	1,627	N	3,426	Q	963	2,339				

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.

Table B14. Number of Establishments in Building, Number of Buildings, 1999

[<u>.</u>		Numb	er of Buildings	(thousand)		
	T		N	umber of Estab	lishments in Bu	uilding	
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
All Buildings	4,657	3,528	688	114	48	27	251
Building Floorspace							
(Square Feet)							
1,001 to 5,000	2,348	1,897	272	Q	Q	Q	164
5,001 to 10,000	1,110	802	222	17	Q	Q	Q
10,001 to 25,000	708	506	121	51	12	Q	17
25,001 to 50,000		184	33	15	15	Q	Q
50,001 to 100,000		88	26	12	12	6	Q
100,001 to 200,000		34	10	4	6	5	Q
200,001 to 500,000		14	3	2	2	2	Q
Over 500,000	7	3	1	Q	Q	3	Q
Principal Building Activity							
Education	327	302	24	Q	Q	Q	N
Food Sales	174	161	Q	N	N	Q	N
Food Service	349	315	Q	Q	N	N	N
Health Care	127	94	27	Q	2	Q	N
Inpatient		10	Q	Q	Q	Q	N
Outpatient		84	26	Q	Q	Q	N
•			10	Q	N N	Q	N
Lodging		143					
Mercantile		450	131	53	17	8	Q
Retail (Other Than Mall)	534	449	69	Q	Q	Q	Q
Enclosed and Strip Malls	133	Q	62	46	17	8	N
Office	739	475	206	34	17	8	N
Public Assembly	305	262	27	Q	Q	Q	Q
Public Order and Safety	72	60	Q	Q	Q	N	N
Religious Worship	307	286	20	Q	N	N	N
Service	478	362	110	Q	Q	N	Q
Warehouse and Storage	603	452	69	7	Q	Q	Q
Other		89	Q	Q	Q	Q	N
Vacant	253	77	Q	Q	Q	N N	169
Year Constructed							
1919 or Before	419	312	64	Q	Q	Q	36
1920 to 1945	499	384	84	Q	Q	1	22
1946 to 1959	763	581	100	Q	Q	Q	62
1960 to 1969	665	524	81	9	5	Q	Q
1970 to 1979		591	124	22	15	4	Q
1980 to 1989		605	138	47	15	7	Q
1990 to 1999		531	98	10	7	3	Q
					•	-	_
Floors	0.070	0.004	070	50	0.5	40	470
One	,	2,231	379	52	25	13	179
Two	,	873	191	41	10	6	48
Three	420	308	74	Q	3	Q	Q
Four to Nine	178	112	43	8	7	5	Q
Ten or More	11	4	1	1	2	3	Q
Census Region							
Northeast	686	531	113	15	8	4	Q
Midwest	1,188	860	190	22	7	4	103
South	1,762	1,392	231	41	17	9	72
West	1,021	745	154	36	16	Q	60
Climate Zone: 45-Year Average							
Under 2,000 CDD and							
More than 7,000 HDD		414	82	Q	Q	Q	Q
5,500-7,000 HDD	986	727	158	14	8	6	73
4,000-5,499 HDD	1,085	793	180	32	7	7	66
Fewer than 4,000 HDD	1,134	868	146	48	18	4	Q
2,000 CDD or More and							
Fewer than 4,000 HDD	926	725	123	16	11	Q	39
	320	120	120	10	- 11	Q	5.

Table B14. Number of Establishments in Building, Number of Buildings, 1999

			Numb	er of Buildings	(thousand)		
			Nı	ımber of Estab	lishments in Bı	ıildina	
	F						
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Workers (main shift)	0.070	4 004	000	0	0	•	05.
Fewer than 5	2,376	1,891	208	Q	Q	Q	25′
5 to 9	807	610	193	Q	Q	Q	,
10 to 19	683	520	149	13	Q	Q	N
20 to 49	487	344	92	41	10	Q	N
50 to 99	174	89	30	27	22	6	N
100 to 249	90	54	12	9	10	5	N
250 or More	39	19	5	3	4	8	N
Ownership and Occupancy							
Nongovernment Owned	4,135	3,084	631	111	47	27	236
Owner Occupied	2,801	2,317	395	58	14	18	N
Nonowner Occupied	1,099	767	236	54	33	9	N
Unoccupied	236	N	N	N	N	N	236
Government Owned	521	444	58	3	Q	Q	C
Vacancy Status							
Completely Vacant	140	N	N	N	N	N	140
Mostly Vacant	113	77	Q	Q	Q	N	29
Partially Vacant	697	400	137	44	21	13	82
Not At All Vacant	3,707	3,051	549	66	26	15	Ν
Multibuilding Facility Activity							
Not Part of a Multibuilding							
Facility	3,295	2,446	532	58	33	19	207
College or University	70	66	3	Q	Q	Q	C
Primary or Secondary School	224	221	Q	N	N	Q	C
Office Complex	134	78	35	10	3	1	C
Retail Complex	181	113	26	29	6	2	C
Religious Campus or Complex	186	170	Q	N	Q	N	N
Health Care Complex	72	50	Q	Q	Q	Q	C
Government Complex Other	61 434	49 335	Q 47	Q Q	Q Q	N Q	C N
				~	~	~	•
Energy Sources (more than one may apply)							
2 27	4 205	3,437	680	113	48	27	00
Electricity	4,395			79	23	19	90 50
Natural Gas	2,670	2,038	459				
Fuel Oil	434	346	71	5	5	6	C
District Heat	117	101	7	Q	1	1	N
District Chilled Water	50	44	3	Q	Q	Q	N
Propane Other	451 153	397 140	43 Q	Q Q	Q Q	Q Q	C
Energy End Uses (more than							
one may apply)							
Buildings with Space Heating	4,016	3,138	661	103	43	24	48
Buildings with Cooling	3,560	2,711	637	106	46	25	34
Buildings with Water Heating	3,239	2,507	538	96	37	23	38
Buildings with Cooking	857	673	106	44	17	16	C
Buildings with Manufacturing	151	125	12	Q	Q	Q	N
Buildings with Electricity							
Generation	172	141	16	5	5	4	C
Heating Equipment (more							
than one may apply)							
Heat Pumps	492	355	109	17	7	3	C
Furnaces	1,460	1,132	282	22	7	1	G
Individual Space Heaters	894	713	144	14	Q	3	C
District Heat	96	80	6	Q	Q	1	N
Boilers	581	479	71	10	7	Q	C
Packaged Heating Units	1,347	1,012	224	59	23	10	C
J	,	,				. •	_

Table B14. Number of Establishments in Building, Number of Buildings, 1999

			Numbe	er of Buildings	(thousand)		
			Nι	ımber of Estab	lishments in Bu	ilding	
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Cooling Equipment (many							
Cooling Equipment (more							
than one may apply)							
Residential-Type Central	676	506	149	Q	4	2	
Air Conditioners		339		18	4 7	3	Q
Heat Pumps	485		118				
Individual Air Conditioners	799	612	151	Q	Q	3	Q
District Chilled Water	50	44	3 16	Q 4	Q	Q 11	N
Central Chillers	130	92	16	4	5	11	Q
Packaged Air Conditioning	4.050	4 400	000	0.4	0.4	4.4	
Units	1,953	1,469	322	84	31	14	Q
Swamp Coolers	136	124	8	Q	Q	Q	N
Other	49	44	Q	Q	Q	Q	N
Lighting Equipment Types							
(more than one may apply)							
Incandescent	2,193	1,746	329	61	29	19	Q
Standard Fluorescent	3,778	2,965	628	105	44	25	Q
Compact Fluorescent	607	451	108	28	11	9	Q
High Intensity Discharge	430	322	74	18	5	Q	N
Halogen	572	425	98	31	9	8	Q
Other	58	41	Q	Q	Q	Q	N
Personal Computers							
None	1,617	1,248	120	Q	Q	Q	233
1 to 4	1,636	1,323	268	34	Q	Q	Q
5 to 9	542	385	136	14	Q	Q	Q
10 to 19	403	271	78	32	7	Q	Q
20 to 49	247	174	47	11	11	Q	N
50 to 99	105	59	24	8	10	3	Q
100 to 249	71	45	10	6	5	4	N
250 or More	36	23	4	2	3	5	N
Photo control							
Photocopiers	0.005	0.004	005	00	4.4	0	0.40
None	2,825	2,231	295	30	14	Q	246
One	1,114	888	177	40	Q	Q	Q
2 to 4	540	346	167	13	9	5	Q
5 to 9	102 75	41 22	42 8	15 16	4 18	Q 11	N N
TO OF INIOIO	73	22	O	10	10	- 11	IN
Other Electronic Equipment							
(more than one may apply)							
Laser Printers	1,949	1,421	377	81	41	18	Q
FAX Machines	2,807	2,076	552	101	47	20	Q
Medical Diagnostic Equipment	86	53	26	Q	2	Q	N

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

N=No responding cases in sample.

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

Table B15. Number of Establishments in Building, Floorspace, 1999

			Total Floo	rspace (millio	n square feet)		
			Nu	mber of Estab	ishments in Bu	uilding	
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
All Buildings	67,338	43,343	10,582	3,574	3,260	4,811	1,769
Building Floorspace							
(Square Feet)							
1,001 to 5,000	6,774	5,358	857	Q	Q	Q	512
5,001 to 10,000	8,238	5,952	1,630	137	Q	Q	Q
10,001 to 25,000	11,153	7,812	1,982	784	Q	Q	296
25,001 to 50,000	9,311	6,720	1,220	550	494	Q	Q
50,001 to 100,000	10,112	6,063	1,833	845	839	432	Q
100,001 to 200,000	8,271	4,798	1,453	480	790	690	Q
200,001 to 500,000	6,851	4,126	931	498	455	702	Q
Over 500,000	6,628	2,514	676	Q	416	2,771	Q
Principal Building Activity							
Education	8,651	7,947	657	Q	Q	Q	N
Food Sales	994	808	Q	N	N	Q	N
Food Service	1,851	1,638	Q	Q	N	N	N
Health Care	2,918	2,139	341	Q	157	Q	N
	1,865	1,611	Q	Q	137 Q	Q	N
Inpatient							
Outpatient	1,053	529	195	Q	Q	Q	N
Lodging	4,521	3,724	617	Q	N	Q	N
Mercantile	10,398	3,831	1,618	1,387	1,205	2,315	Q
Retail (Other Than Mall)	4,766	3,756	783	Q	Q	Q	Q
Enclosed and Strip Malls	5,631	Q	836	1,261	1,171	2,289	N
Office	12,044	5,073	2,502	1,369	1,395	1,705	N
Public Assembly	4,393	3,122	821	Q	Q	Q	Q
Public Order and Safety	1,168	773	320	Q	Q	N	N
Religious Worship	3,405	3,016	373	Q	N	N	N
Service	3,388	2,674	672	Q	Q	N	Q
				313	Q		
Warehouse and Storage	10,477	7,097	2,104			Q	Q
Other Vacant	1,222 1,908	913 586	Q Q	Q Q	Q Q	Q N	N 1,217
	1,222		_	_			.,
Year Constructed				_	_		
1919 or Before	4,034	2,804	593	Q	Q	Q	261
1920 to 1945	6,445	4,327	1,236	Q	Q	255	234
1946 to 1959	9,127	6,244	1,543	Q	Q	Q	468
1960 to 1969	10,866	7,779	1,279	496	321	766	Q
1970 to 1979	11,840	7,185	1,798	663	947	1,091	Q
1980 to 1989	13,931	7,382	2,388	1,251	988	1,622	Q
1990 to 1999	11,094	7,622	1,745	485	498	621	Q
E 1							
Floors One	26,800	17,636	4,381	1,480	1,351	918	1,035
Two	16,985	11,651	2,655	738	425	1,193	324
Three	8,928	6,346	1,517	301	189	Q	Q
Four to Nine Ten or More	10,180 4,445	6,313 1,398	1,555 475	737 317	696 599	779 1,603	Q Q
	7,770	1,000	7/3	317	333	1,000	Q
Census Region							
Northeast	12,360	7,665	2,186	494	705	1,159	Q
Midwest	16,761	11,299	2,900	571	579	864	548
South	23,485	14,723	3,421	1,440	1,239	2,000	662
West	14,731	9,655	2,075	1,068	738	788	407
Climate Zone: 45-Year Average Under 2,000 CDD and							
More than 7,000 HDD	5,890	4,124	1,099	Q	Q	Q	Q
5,500-7,000 HDD	17,083	11,387	2,746	590	776	1,162	422
4,000-5,499 HDD	16,243	10,037	2,864	888	696	1,349	409
Fewer than 4,000 HDD	16,333	10,037	2,323	1,278	833	1,024	531
2,000 CDD or More and	10,555	10,545	2,323	1,210	033	1,024	331
•	44 700	7 440	4 540	24-	75^	4.40:	00-
Fewer than 4,000 HDD	11,788	7,449	1,549	617	753	1,134	285

Table B15. Number of Establishments in Building, Floorspace, 1999

			Total Floo	orspace (million	n square feet)		
ļ					lishments in Bu	ıilding	
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Moukove (main shift)							
Workers (main shift)	14 221	10 700	1 610	0	0	0	1 760
Fewer than 5	14,321	10,723	1,619	Q	Q	Q	1,769
5 to 9	6,325	4,718	1,459	Q	Q	Q	N
10 to 19	8,028	6,063	1,701	216	Q	Q	N
20 to 49	10,814	7,280	2,204	918	389	Q	N
50 to 99	8,898	5,111	1,554	773	1,021	440	N
100 to 249	8,356	4,796	1,053	752	992	764	N
250 or More	10,595	4,651	992	683	789	3,480	N
Ownership and Occupancy							
Nongovernment Owned	54,994	33,290	9,077	3,369	3,097	4,549	1,613
Owner Occupied	37,785	25,947	5,371	1,699	1,336	3,433	N
Nonowner Occupied	15,596	7,343	3,706	1,670	1,761	1,116	N
Unoccupied	1,613	7,040 N	0,700 N	1,070 N	1,701 N	N	1,613
Government Owned	12,343	10,053	1,505	205	Q	Q	1,013 Q
Vanada Otatua							
Vacancy Status	050	N.	N.	N.	N.	N	050
Completely Vacant	953	N	N	N	N	N	953
Mostly Vacant	956	586	Q	Q	Q	N	264
Partially Vacant	15,520	5,698	2,238	1,700	1,821	3,513	552
Not At All Vacant	49,910	37,058	8,276	1,850	1,427	1,298	N
Multibuilding Facility Activity Not Part of a Multibuilding							
Facility	41,289	26,162	6,621	1,770	2,047	3,271	1,419
College or University	2,605	2,336	186	Q	Q	Q	Q
Primary or Secondary School	3,388	3,229	Q	N	N	Q	Q
Office Complex	3,353	1,220	787	533	463	284	Q
Retail Complex	3,555	1,035	466	799	396	839	Q
Religious Campus or Complex	1,907	1,665	Q	N	Q	N	N
Health Care Complex	2,339	1,673	334	Q	Q	Q	Q
Government Complex			400	Q	Q	Q N	Q N
Other	1,513 7,389	1,025 4,998	1,439	263	Q	Q	Q
Energy Sources (more than one may apply)							
Electricity	65,716	42,839	10,442	3,568	3,260	4,809	797
Natural Gas	45,525	29,717	7,439	2,463	1,786	3,596	525
Fuel Oil	13,285	8,327	1,795	481	810	1,861	Q
District Heat	5,891	4,149	559	331	171	681	N N
District Chilled Water	2,750	2,117	207	Q	Q	Q	N
Propane Other	6,290 2,322	4,921 1,676	728 Q	Q Q	Q Q	Q Q	Q Q
Energy End Uses (more than							
one may apply)							
Buildings with Space Heating	61,602	40,297	10,038	3,289	2,993	4,563	422
Buildings with Cooling	58,474	37,062	9,632	3,453	3,168	4,741	417
Buildings with Water Heating	56,474 56,115	36,207	8,866	3, 4 55 3,191	2,828	4,595	417
Buildings with Manufacturing	24,681	14,870	3,143	1,541	1,611	3,483	Q
Buildings with Manufacturing	3,126	2,094	524	Q	Q	Q	N
Buildings with Electricity Generation	11,882	7,109	1,523	537	761	1,927	Q
	11,002	7,100	1,020	007	701	1,021	Q
Heating Equipment (more than one may apply)							
Heat Pumps	8,923	5,009	1,741	529	559	1,067	Q
-							
Furnaces	14,449	10,187	3,020	420	346	378	Q
Individual Space Heaters	17,349	11,358	3,263	652	690	1,294	Q
District Heat	5,534	3,847	517	331	Q	681	N
Boilers	19,522	13,385	2,861	787	821	1,592	Q
Packaged Heating Units	25,743	15,436	3,885	1,967	1,615	2,656	Q
Other	4,073	2,266	464	Q	280	830	Q

Table B15. Number of Establishments in Building, Floorspace, 1999

			Total Floo	orspace (millio	n square feet)		
	L		Nu	mber of Estab	lishments in Bu	ilding	
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Cooling Equipment (more							
than one may apply)							
Residential-Type Central							
Air Conditioners	8,329	5,833	1,554	190	230	516	C
	,	,	,				
Heat Pumps	9,147	5,058	1,869	584	556	1,062	C
Individual Air Conditioners	14,276	10,302	2,282	427	398	656	C
District Chilled Water	2,750	2,117	207	Q	Q	Q	N
Central Chillers	12,909	7,088	1,609	681	833	2,651	C
Packaged Air Conditioning							
Units	36,527	22,190	5,848	2,742	2,154	3,260	C
Swamp Coolers	2,219	1,662	223	Q	Q	Q	N
Other	1,312	820	Q	Q	Q	Q	N
Lighting Equipment Types							
(more than one may apply)							
Incandescent	38,156	24,358	5,930	2,026	2,219	3,540	C
Standard Fluorescent	60,344	39,064	9,845	3,393	3,126	4,750	C
Compact Fluorescent	20,666	11,751	3,131	1,386	1,205	3,165	C
High Intensity Discharge	19,223	12,406	2,730	856	692	2,539	N
Halogen	17,926	10,103	2,625	1,168	1,026	2,974	G
Other	1,004	499	Q	Q	Q	Q	N
Personal Computers							
None	9,583	6,911	951	Q	Q	Q	1.498
1 to 4	13,853	10,377	2,558	535	Q	Q	1, 100 G
5 to 9	6,528	4,408	1,497	329	Q	Q	G
10 to 19	7,514	4,351	1,568	654	376	Q	C
20 to 49	8,087	5,115	1,488	504	669	310	<i>C</i>
50 to 99	5,867	3,540	846	372	543	555	C
	,	*					
100 to 249250 or More	6,818 9,088	3,795 4,845	859 814	522 537	563 669	1,079 2,224	N
Dhatasaniana							
Photocopiers	04.004	45.004	0.000	000	000	455	4.005
None	21,631	15,084	2,969	828	609	455	1,685
One	12,928	10,025	2,011	555	Q 470	Q	C
2 to 4	15,620	10,518	3,419	536	473	656	C
5 to 9	5,384 11,774	3,160 4,555	1,139 1,044	482 1,172	272 1,817	Q 3,187	N
Other Fleeternic Fruit word	•	•	•			•	
Other Electronic Equipment (more than one may apply)							
Laser Printers	46,567	28,624	7,497	2,882	2,963	4,495	C
FAX Machines	54,764	33,961	9,305	3.398	3,233	4.725	G
Medical Diagnostic Equipment	2,493	1,727	328	0,000 Q	157	4,729 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.

Table B16. Multibuilding Facilities, Number of Buildings and Floorspace, 1999

ļ	Numbe	r of Buildings (the	ousand)	Total Floorspace (million square fed			
		Buildi Multibuildir	ngs on ng Facilities		Buildir Multibuildir	-	
	All Buildings	All Buildings	With Central Physical Plant	All Buildings	All Buildings	With Central Physical Plant	
All Buildings	4,657	1,362	142	67,338	26,049	7,10	
Building Floorspace							
(Square Feet)							
1,001 to 5,000	2,348	604	Q	6,774	1,706	(
5,001 to 10,000	1,110	297	Q	8,238	2,211	(
10,001 to 25,000	708	253	26	11,153	3,965	464	
25,001 to 50,000	257	104	26	9,311	3,728	90	
50,001 to 100,000	145	63	17	10,112	4,498	1,27	
100,001 to 200,000	59	27	8	8,271	3,799	1,159	
200,001 to 500,000	23	10	5	6,851	3,107	1,538	
Over 500,000	7	3	2	6,628	3,036	1,484	
Principal Building Activity							
Education	327	229	38	8,651	4,574	1,81	
Food Sales	174	Q	Q	994	Q	C	
Food Service	349	38	Q	1,851	271	C	
Health Care	127	29	8	2,918	1,823	1,100	
Inpatient	11	5	3	1,865	1,401	963	
Outpatient	116	24	Q	1,053	423	13	
Lodging	153	88	23	4,521	1,751	735	
Mercantile	667	112	Q	10,398	2,995	C	
Retail (Other Than Mall)	534	73	Q	4,766	861	C	
Enclosed and Strip Malls	133	39	Q	5,631	2,134	G	
Office	739	229	21	12,044	4,769	1,280	
Public Assembly	305	121	18	4,393	2,093	904	
Public Order and Safety	72	22	3	1,168	529	206	
Religious Worship	307	108	Q	3,405	1,276	200	
Service	478	63	Q	3,388	818		
Warehouse and Storage	603	234	Q	10,477	3,987		
Other	102	22	Q	1,222	519	250	
Vacant	253	53	Q	1,908	514	23.	
Year Constructed							
1919 or Before	419	94	20	4,034	1,038	41:	
1920 to 1945	499	129	21	6,445	2,331	579	
1946 to 1959	763	200	30	9,127	3,484	1,360	
1960 to 1969	665	191	26	10,866	4,385	1,894	
1970 to 1979	774	228	14	11,840	5,040	1,25	
1980 to 1989	846	322	23	13,931	5,871	916	
1990 to 1999	690	199	8	11,094	3,901	684	
Census Region							
Northeast	686	150	33	12,360	4,037	1,418	
Midwest	1,188	250	28	16,761	5,826	1,72	
South	1,762	544	30	23,485	9,207	1,649	
West	1,021	418	51	14,731	6,978	2,313	
Workers (main shift)							
Fewer than 5	2,376	620	42	14,321	4,556	570	
5 to 9	807	190	16	6,325	2,124	370	
10 to 19	683	210	31	8,028	2,442	534	
20 to 49	487	219	20	10,814	4,535	84	
50 to 99	174	63	14	8,898	3,645	730	
100 to 249	90	40	10	8,356	3,561	1,332	
250 or More	39	21	9	10,595	5,185	2,718	

Table B16. Multibuilding Facilities, Number of Buildings and Floorspace, 1999

	Number	r of Buildings (the	ousand)	Total Floo	rspace (million so	quare feet)
		Buildir Multibuildir	ngs on ng Facilities		Buildir Multibuildir	•
	All Buildings	All Buildings	With Central Physical Plant	All Buildings	All Buildings	With Central Physical Plant
Weekly Operating Hours						
39 or Fewer	978	301	Q	6,596	2,207	Q
40 to 48		325	43	13,105	5,113	1,022
49 to 60		288	22	14,200	5,255	1,171
				,	,	,
61 to 84		184	18 8	12,458	4,500	1,186
85 to 167 Open Continuously		93 171	42	9,116 11,863	3,412 5,562	935 2,657
Ownership and Occupancy						
Ownership and Occupancy Nongovernment Owned	4,135	1,038	79	54,994	19,102	3,929
•					,	
Owner Occupied		751	65	37,785	13,745	3,395
Nonowner Occupied		244	13	15,596	5,072	495
Unoccupied		43 324	Q 64	1,613 12,343	285 6,947	Q 3,172
Government Owned	321	324	04	12,343	0,947	3,172
Vacancy Status						
Completely Vacant	140	Q	Q	953	Q	Q
Mostly Vacant	. 113	36	Q	956	361	Q
Partially Vacant	. 697	263	17	15,520	6,196	1,484
Not At All Vacant	3,707	1,047	124	49,910	19,339	5,546
Multibuilding Facility Activity						
Not Part of a Multibuilding						
Facility	3,295	N	N	41,289	N	N
College or University		70	53	2,605	2,605	2,064
Primary or Secondary School		224	25	3,388	3,388	899
Office Complex		134	3	3,353	3,353	583
Retail Complex		181	Q	3,555	3,555	Q
Religious Campus or Complex		186	Q	1,907	1,907	Q
Health Care Complex		72	16	2,339	2,339	1,303
Government Complex		61	19	1,513	1,513	731
Other		434	15	7,389	7,389	1,140
Central Plant that Produces						
District Hot Water	97	97	97	4,468	4,468	4,468
District Steam	91	91	91	4,409	4,409	4,409
District Chilled Water		88	88	4,951	4,951	4,951
Electricity		32	32	1,377	1,377	1,377
Energy Sources (more than						
one may apply)						
Electricity	4,395	1,262	141	65,716	25,399	7,075
Natural Gas	2,670	663	67	45,525	16,613	4,161
Fuel Oil	,	98	18	13,285	5,401	2,321
District Heat		85	69	5,891	4,318	3,617
District Chilled Water		47	35	2,750	2,441	2,066
Propane		112	4	6,290	2,041	396
Other		19	Q	2,322	681	Q
Energy End Uses (more than						
one may apply)						
Buildings with Space Heating	4,016	1,139	138	61,602	23,532	6,842
Buildings with Cooling		993	115	58,474	22,088	6,270
Buildings with Water Heating		878	126	56,115	21,410	6,378
Buildings with Cooking		187	32	24,681	9,202	3,171
Buildings with Manufacturing		25	Q	3,126	983	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.

Table B17. Energy Sources, Number of Buildings, 1999

			Nu	mber of Bu	ildings (the	usand)			
		All		Energy S	Sources Use	ed (more th	an one may	apply)	
	All Buildings	Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other ^a
All Buildings	4,657	4,403	4,395	2,670	434	117	50	451	153
Building Floorspace									
(Square Feet)									
1,001 to 5,000	2,348	2,193	2,186	1,193	220	Q	Q	215	93
5,001 to 10,000	1,110	1,036	1,036	684	74	Q	Q	124	Q
10,001 to 25,000	708	689	688	448	65	24	Q	74	19
25,001 to 50,000	257	253	253	176	28	19	7	17	7
50,001 to 100,000	145	143	143	103	22	13	7	13	5
100,001 to 200,000	59	59	59	42	13	7	5	6	Q
200,001 to 500,000	23	23	23	18	9	3	2	2	Q
Over 500,000	7	7	7	5	4	2	1	1	Q
Principal Building Activity									
Education	327	327	327	225	19	37	Q	17	7
Food Sales	174	173	173	88	Q	Q	N	Q	Q
Food Service	349	349	349	246	Q	Q	Q	78	Q
Health Care	127	127	127	73	14	3	2	Q	Q
Inpatient	11	11	11	9	9	3	2	Q	Q
Outpatient	116	116	116	63	Q	Q	Q	Q	Q
Lodging	153	153	153	104	7	18	Q	20	Q
Mercantile	667	667	667	439	87	Q	Q	37	38
Retail (Other Than Mall)	534	534	534	350	76	Q	Q	30	Q
Enclosed and Strip Malls	133	133	133	89	Q	N	Q	7	Q
Office	739	738	738	452	88	20	6	30	4
Public Assembly	305	299	299	187	24	15	Q	52	Q
Public Order and Safety	72	64	64	31	20	3	Q	Q	Q
Religious Worship	307	307	307	214	22	Q	Q	62	Q
Service	478	472	472	277	80	Q	Q	43	Q
Warehouse and Storage	603	496	496	226	18	Q	Q	50	Q
Other	102	98	98	40	Q	Q	Q	Q	Q
Vacant	253	130	123	68	Q	Q	N N	Q	Q
Year Constructed									
1919 or Before	419	364	363	291	53	20	Q	Q	Q
1920 to 1945	499	480	480	329	55 55	9	2	45	Q
1946 to 1959	763	724	716	426	109	21	5	65	36
1960 to 1969	665	628	628	406	65	18	7	72	12
1970 to 1979	774	758	758	481	37	Q	Q	66	24
1980 to 1989		781	781	389	70	16	Q	89	39
1990 to 1999		669	669	349	45	15	4	94	Q
Census Region									
Northeast	686	640	639	311	218	31	2	112	21
Midwest	1,188	1,113	1,113	874	48	25	14	109	37
South	1,762	1,689	1,689	820	138	39	Q	167	64
West	1,021	961	954	665	30	22	13	62	Q
Climate Zone: 45-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	525	491	491	329	73	3	Q	94	Q
5,500-7,000 HDD	986	924	924	652	123	22	6	91	29
4,000-5,499 HDD	1,085	1,029	1,029	551	185	46	Q	130	53
Fewer than 4,000 HDD	1,134	1,077	1,070	727	19	14	7	64	16
2,000 CDD or More and	.,	.,	.,	,	.0			J.	
Fewer than 4,000 HDD	926	882	882	410	34	33	23	72	48

Table B17. Energy Sources, Number of Buildings, 1999

			<u>Nu</u>	ımber of Bu	ildings (tho	usand)			
		Δ		Energy 9	Sources Use	ed (more th	an one may	apply)	
	All Buildings	All Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other ^a
Workers (main shift) Fewer than 5	2,376	2,129	2,121	1,151	182	38	Q	215	83
5 to 9	807	800	800	560	95	18	Q	71	Q
10 to 19	683	683	683	424	54	15	Q	74	Q
20 to 49	487	487	487	321	54	12	3	73	23
50 to 99	174	174	174	118	17	19	10	11	5
100 to 249	90	90	90	67	18	9	4	6	Q
250 or More	39	39	39	28	15	7	5	2	1
Weekly Operating Hours									
39 or Fewer	978	777	770	376	65	Q	Q	135	Q
40 to 48	1,156	1,147	1,147	673	102	41	Q	98	36
49 to 60	986	980	980	651	110	18	13	55	42
61 to 84	664	649	649	447	63	17	6	56	29
85 to 167	474	459	459	285	29	14	4	69	Q
Open Continuously	398	390	390	238	65	26	11	39	Q
Ownership and Occupancy									
Nongovernment Owned	4,135	3,905	3,898	2,366	386	67	21	415	144
Owner Occupied	2,801	2,747	2,747	1,605	311	53	13	355	126
Nonowner Occupied	1,099	1,069	1,069	719	75	Q	Q	57	17
Unoccupied	236	89	82	43	Q	N	N	Q	Q
Government Owned	521	498	498	304	48	50	29	36	9
Vacancy Status	140	51	44	0	N	N	N	0	N
Completely Vacant Mostly Vacant	113	80	44 79	Q 40	N Q	N Q	N N	Q Q	N Q
Partially Vacant	697	636	636	370	51	Q	Q	57	Q
Not At All Vacant	3,707	3,636	3,636	2,232	376	94	36	390	129
Energy Sources (more than									
one may apply)									
Electricity	4,395	4,395	4,395	2,663	434	117	50	451	153
Natural Gas	2,670	2,670	2,663	2,670	91	52	21	35	59
Fuel Oil	434	434	434	91	434	8	3	80	26
District Heat	117	117	117	52	8	117	43	Q	Q
District Chilled Water	50	50	50	21	3	43	50	Q	Q
Propane	451	451	451	35	80	Q	Q	451	36
Other	153	153	153	59	26	Q	Q	36	153
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016		4,008	2,588	432	116	49	434	149
Buildings with Cooling	3,560	3,560	3,560	2,335	302	97	50	318	107
Buildings with Water Heating	3,239		3,239	2,191	288	101	37	334	89
Buildings with Cooking	857		857	615	92	28	6	158	47
Buildings with Manufacturing Buildings with Electricity	151	151	151	77	35	Q	Q	Q	Q
Generation	172	172	172	118	75	15	5	27	33
Energy-Related Space Functions									
(more than one may apply)									
Commercial Food Preparation	767	767	767	551	79	25	6	138	47
Activities with Large									
Amounts of Hot Water	698	698	698	542	77	47	20	108	29

^a "Other" includes wood, coal, solar, and all other energy sources.

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.

Table B18. Energy Sources, Floorspace, 1999

			Tota	al Floorspac	e (million so	quare feet)			
		All		Energy	Sources Use	ed (more tha	ın one may a	apply)	
	All Buildings	Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other ^a
All Buildings	. 67,338	65,753	65,716	45,525	13,285	5,891	2,750	6,290	2,322
Building Floorspace									
(Square Feet)									
1,001 to 5,000	. 6,774	6,309	6,280	3,566	620	Q	Q	635	292
5,001 to 10,000	. 8,238	7,721	7,721	5,088	583	Q	Q	986	Q
10,001 to 25,000	. 11,153	10,851	10,843	7,001	983	414	Q	1,203	290
25,001 to 50,000	. 9,311	9,175	9,175	6,405	983	660	294	568	250
50,001 to 100,000	. 10,112	10,034	10,034	7,165	1,612	933	525	865	350
100,001 to 200,000	. 8,271	8,246	8,246	5,915	1,875	903	630	854	Q
200,001 to 500,000		6,790	6,790	5,282	2,984	1,003	470	616	Q
Over 500,000		6,628	6,628	5,104	3,645	1,707	630	562	Q
Principal Building Activity									
Education	8,651	8,651	8,651	6,570	1,635	1,159	676	757	325
Food Sales	. 994	993	993	659	Q	Q	N	Q	Q
Food Service	. 1,851	1,851	1,851	1,510	Q	Q	Q	298	Q
Health Care	. 2,918	2,918	2,918	2,285	1,754	744	433	Q	Q
Inpatient	. 1,865	1,865	1,865	1,677	1,605	649	356	Q	Q
Outpatient		1,053	1,053	609	Q	Q	Q	Q	Q
Lodging		4,521	4,521	3,548	789	629	219	587	Q
Mercantile		10,398	10,398	7,887	1,411	Q	Q	863	365
Retail (Other Than Mall)		4,766	4,766	3,518	553	Q	Q	276	Q
Enclosed and Strip Malls		5,631	5,631	4,369	858	N	Q	587	Q
Office		12,043	12,043	7,356	3,913	1,536	678	370	192
Public Assembly		4,340	4,340	2,989	850	848	436	469	Q
Public Order and Safety		1,030	1,030	627	398	297	Q	Q	Q
Religious Worship		3,405	3,405	2,457	187	Q	Q	714	Q
Service		3,358	3,358	2,093	641	Q	Q	272	Q
Warehouse and Storage		9,879	9,879	6,211	1,102	Q	Q	1,338	Q
Other		1,217	1,217	707	205	Q	Q	1,550 Q	Q
Vacant		1,149	1,112	626	Q	Q	N N	Q	Q
Year Constructed									
1919 or Before	. 4,034	3,722	3,714	2,766	745	486	Q	Q	Q
1920 to 1945	,	6,281	6,281	4,257	1,060	764	134	473	Q
1946 to 1959		8,822	8,794	6,040	1,782	1,088	406	748	433
1960 to 1969	- /	10,686	10,686	7,512	2,349	1,406	633	1,220	353
1970 to 1979		11,750	11,750	8,080	2,446	788	492	1,033	352
1980 to 1989	,	13,485	13,485	8,794	2,795	682	424	1,333	499
1990 to 1999		11,007	11,007	8,076	2,108	677	407	1,295	353
Census Region									
Northeast	. 12,360	11,972	11,964	7,305	5,414	1,898	326	1,706	580
Midwest		16,389	16,389	13,506	2,423	1,521	746	1,405	606
South		23,076	23,076	14,199	3,749	1,265	939	2,389	579
West	,	14,315	14,287	10,515	1,699	1,207	739	790	557
Climate Zone: 45-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	. 5,890	5,750	5,750	4,064	1,612	250	Q	1,166	Q
5,500-7,000 HDD		16,706	16,706	12,573	3,773	1,743	763	1,343	691
4,000-5,499 HDD		15,800	15,792	10,455	4,531	2,443	653	1,619	602
Fewer than 4,000 HDD		15,951	15,922	12,149	1,903	875	683	1,040	442
2,000 CDD or More and	,	, ,	•	,	,			,	
Fewer than 4,000 HDD	. 11,788	11,546	11,546	6,285	1,466	581	589	1,122	383

Table B18. Energy Sources, Floorspace, 1999

All Buildings 14,321 6,325 8,028 10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116 11,863	All Buildings Using Any Energy Source 12,788 6,274 8,028 10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930 11,835	12,750 6,274 8,028 10,814 8,898 8,356 10,595 5,314 13,070 14,186	7,108 4,633 5,589 7,737 6,278 6,146 8,035	Fuel Oil 964 796 676 1,294 1,593 2,482 5,480	390 304 475 544 696 1,052 2,431	District Chilled Water Q Q Q Q 162 478 484 1,234	1,451 646 688 1,189 839 787 691	Other ^a 345 Q Q 317 364 417 527
14,321 6,325 8,028 10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	Buildings Using Any Energy Source 12,788 6,274 8,028 10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	12,750 6,274 8,028 10,814 8,898 8,356 10,595 5,314 13,070 14,186	7,108 4,633 5,589 7,737 6,278 6,146 8,035	964 796 676 1,294 1,593 2,482 5,480	390 304 475 544 696 1,052 2,431	District Chilled Water Q Q Q Q 162 478 484	1,451 646 688 1,189 839 787	345 Q Q 317 364 417
6,325 8,028 10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	6,274 8,028 10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	6,274 8,028 10,814 8,898 8,356 10,595 5,314 13,070 14,186	4,633 5,589 7,737 6,278 6,146 8,035	796 676 1,294 1,593 2,482 5,480	304 475 544 696 1,052 2,431	Q Q 162 478 484	646 688 1,189 839 787	Q Q 317 364 417
6,325 8,028 10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	6,274 8,028 10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	6,274 8,028 10,814 8,898 8,356 10,595 5,314 13,070 14,186	4,633 5,589 7,737 6,278 6,146 8,035	796 676 1,294 1,593 2,482 5,480	304 475 544 696 1,052 2,431	Q Q 162 478 484	646 688 1,189 839 787	Q Q 317 364 417
8,028 10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	8,028 10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	8,028 10,814 8,898 8,356 10,595 5,314 13,070 14,186	5,589 7,737 6,278 6,146 8,035	676 1,294 1,593 2,482 5,480	475 544 696 1,052 2,431	Q 162 478 484	688 1,189 839 787	Q 317 364 417
10,814 8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	10,814 8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	10,814 8,898 8,356 10,595 5,314 13,070 14,186	7,737 6,278 6,146 8,035	1,294 1,593 2,482 5,480	544 696 1,052 2,431	162 478 484	1,189 839 787	317 364 417
8,898 8,356 10,595 6,596 13,105 14,200 12,458 9,116	8,898 8,356 10,595 5,351 13,070 14,186 12,381 8,930	8,898 8,356 10,595 5,314 13,070 14,186	6,278 6,146 8,035	1,593 2,482 5,480	696 1,052 2,431	478 484	839 787	364 417
8,356 10,595 6,596 13,105 14,200 12,458 9,116	8,356 10,595 5,351 13,070 14,186 12,381 8,930	8,356 10,595 5,314 13,070 14,186	6,146 8,035 2,825	2,482 5,480	1,052 2,431	484	787	417
10,595 6,596 13,105 14,200 12,458 9,116	5,351 13,070 14,186 12,381 8,930	5,314 13,070 14,186	8,035 2,825	5,480	2,431			
6,596 13,105 14,200 12,458 9,116	5,351 13,070 14,186 12,381 8,930	5,314 13,070 14,186	2,825			1,234	691	527
13,105 14,200 12,458 9,116	13,070 14,186 12,381 8,930	13,070 14,186		504	0			
13,105 14,200 12,458 9,116	13,070 14,186 12,381 8,930	13,070 14,186		504	0			
14,200 12,458 9,116	14,186 12,381 8,930	14,186	8,197		Q	Q	944	Q
12,458 9,116	12,381 8,930			1,540	796	239	1,026	285
9,116	8,930	1000	9,714	2,638	945	589	1,068	570
		12,381	9,007	2,500	943	504	980	440
11,863	11 835	8,930	6,449	1,532	915	505	1,085	324
	11,000	11,835	9,334	4,571	2,254	893	1,187	582
54,994	53,668	53,640	37,026	9,893	3,333	1,560	5,305	1,864
37,785	37,506	37,506	25,597	8,284	2,907	1,325	4,051	1,486
,		15,441		,			1,244	358
1,613		693	461	Q	N	N	Q	Q
12,343	12,085	12,076	8,500	3,392	2,559	1,190	985	458
				N			Q	N
								Q
								378
49,910	49,511	49,511	34,174	9,639	4,570	2,229	5,213	1,891
,		,						2,322
								1,572
								554
								Q
								Q
6,290 2,322	2,322	2,322	1,887 1,572	2,296 554	Q Q	Q	6,290 438	438 2,322
61 602	61 602	61 565	44 385	13 074	5 862	2 730	6.076	2,276
								2,276
								1,887
								1,331
								1,331 Q
5,120	3,120	5,120	2,022	555	Q	Q	700	Q
11,882	11,882	11,882	9,119	8,749	2,083	919	1,486	1,132
23.328	23.328	23.328	18.916	7.576	2.416	1.027	2.712	1,331
,0	,0_0	_3,0_0	,	.,5.5	_, 3	.,0=1	_,· . _	.,001
21.793	21.793	21,793	17,601	6,856	2,735	1,158	2,643	1,165
	12,343 953 956 15,520 49,910 65,716 45,525 13,285 5,891 2,750 6,290 2,322 61,602 58,474 56,115 24,681 3,126	1,613 721 12,343 12,085 953 385 956 765 15,520 15,093 49,910 49,511 65,716 65,716 45,525 45,525 13,285 13,285 5,891 5,891 2,750 2,750 6,290 6,290 2,322 2,322 61,602 61,602 58,474 58,474 56,115 56,115 24,681 3,126 3,126 11,882 11,882 23,328 23,328	1,613 721 693 12,343 12,085 12,076 953 385 356 956 765 756 15,520 15,093 15,093 49,910 49,511 49,511 65,716 65,716 65,716 45,525 45,496 13,285 13,285 13,277 5,891 5,891 5,891 2,750 2,750 2,750 6,290 6,290 6,290 2,322 2,322 2,322 61,602 61,602 61,565 58,474 58,474 58,474 56,115 56,115 56,115 24,681 24,681 24,681 3,126 3,126 3,126 11,882 11,882 11,882 23,328 23,328 23,328	1,613 721 693 461 12,343 12,085 12,076 8,500 953 385 356 Q 956 765 756 367 15,520 15,093 15,093 10,725 49,910 49,511 49,511 34,174 65,716 65,716 45,496 45,525 45,525 45,496 45,525 13,285 13,277 8,088 5,891 5,891 5,891 2,683 2,750 2,750 2,750 1,316 6,290 6,290 6,290 1,887 2,322 2,322 1,572 61,602 61,602 61,565 44,385 58,474 58,474 58,474 42,147 56,115 56,115 56,115 41,366 24,681 24,681 24,681 19,857 3,126 3,126 3,126 2,322 11,882 11,882 11,882 9,119 23,328 23,328 23,328 18,916	1,613 721 693 461 Q 12,343 12,085 12,076 8,500 3,392 953 385 356 Q N 956 765 756 367 Q 15,520 15,093 15,093 10,725 3,528 49,910 49,511 49,511 34,174 9,639 65,716 65,716 45,496 13,277 45,525 45,525 45,496 45,525 8,088 13,285 13,285 13,277 8,088 13,285 5,891 5,891 5,891 2,683 1,839 2,750 2,750 2,750 1,316 749 6,290 6,290 6,290 1,887 2,296 2,322 2,322 2,322 1,572 554 61,602 61,602 61,565 44,385 13,074 58,474 58,474 58,474 42,147 12,185 56,115 56,115 56,115 41,366 11,852 24,681 24,681 24,681 19,857 7,840 3,126 3,126 3,126 2,322 555 11,882 11,882 11,882 9,119 <td>1,613 721 693 461 Q N 12,343 12,085 12,076 8,500 3,392 2,559 953 385 356 Q N N 956 765 756 367 Q Q 15,520 15,093 15,093 10,725 3,528 1,311 49,910 49,511 49,511 34,174 9,639 4,570 65,716 65,716 65,716 45,496 13,277 5,891 45,525 45,525 45,496 45,525 8,088 2,683 13,285 13,285 13,277 8,088 13,285 1,839 5,891 5,891 2,683 1,839 5,891 2,750 2,750 2,750 1,316 749 2,354 6,290 6,290 6,290 1,887 2,296 Q 2,322 2,322 2,322 1,572 554 Q 61,602 61,602 61,565 44,385 13,074 5,862 58,474 58,474</td> <td>1,613 721 693 461 Q N N 12,343 12,085 12,076 8,500 3,392 2,559 1,190 953 385 356 Q N N N N 956 765 756 367 Q Q N 15,520 15,093 15,093 10,725 3,528 1,311 521 49,910 49,511 49,511 34,174 9,639 4,570 2,229 65,716 65,716 45,496 13,277 5,891 2,750 4,570 2,229 65,716 65,716 45,496 45,525 8,088 2,683 1,316 13,285 13,285 13,277 8,088 13,285 1,839 749 5,891 5,891 2,683 1,839 5,891 2,354 2,750 2,750 2,750 1,316 749 2,354 2,750 6,290 6,290 6,290 1,887 2,296 Q Q 61,602 61,602 61,565</td> <td>1,613 721 693 461 Q N N Q 12,343 12,085 12,076 8,500 3,392 2,559 1,190 985 953 385 356 Q N N N Q 956 765 756 367 Q Q N Q 15,520 15,093 15,093 10,725 3,528 1,311 521 1,051 49,910 49,511 49,511 34,174 9,639 4,570 2,229 5,213 65,716 65,716 45,496 45,525 8,088 2,683 1,316 1,887 13,285 13,285 13,277 8,088 13,285 13,285 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,250 Q Q 6,290 2,322 2,322 2,322 1,572 554 Q Q 6,290</td>	1,613 721 693 461 Q N 12,343 12,085 12,076 8,500 3,392 2,559 953 385 356 Q N N 956 765 756 367 Q Q 15,520 15,093 15,093 10,725 3,528 1,311 49,910 49,511 49,511 34,174 9,639 4,570 65,716 65,716 65,716 45,496 13,277 5,891 45,525 45,525 45,496 45,525 8,088 2,683 13,285 13,285 13,277 8,088 13,285 1,839 5,891 5,891 2,683 1,839 5,891 2,750 2,750 2,750 1,316 749 2,354 6,290 6,290 6,290 1,887 2,296 Q 2,322 2,322 2,322 1,572 554 Q 61,602 61,602 61,565 44,385 13,074 5,862 58,474 58,474	1,613 721 693 461 Q N N 12,343 12,085 12,076 8,500 3,392 2,559 1,190 953 385 356 Q N N N N 956 765 756 367 Q Q N 15,520 15,093 15,093 10,725 3,528 1,311 521 49,910 49,511 49,511 34,174 9,639 4,570 2,229 65,716 65,716 45,496 13,277 5,891 2,750 4,570 2,229 65,716 65,716 45,496 45,525 8,088 2,683 1,316 13,285 13,285 13,277 8,088 13,285 1,839 749 5,891 5,891 2,683 1,839 5,891 2,354 2,750 2,750 2,750 1,316 749 2,354 2,750 6,290 6,290 6,290 1,887 2,296 Q Q 61,602 61,602 61,565	1,613 721 693 461 Q N N Q 12,343 12,085 12,076 8,500 3,392 2,559 1,190 985 953 385 356 Q N N N Q 956 765 756 367 Q Q N Q 15,520 15,093 15,093 10,725 3,528 1,311 521 1,051 49,910 49,511 49,511 34,174 9,639 4,570 2,229 5,213 65,716 65,716 45,496 45,525 8,088 2,683 1,316 1,887 13,285 13,285 13,277 8,088 13,285 13,285 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,250 Q Q 6,290 2,322 2,322 2,322 1,572 554 Q Q 6,290

^a "Other" includes wood, coal, solar, and all other energy sources.

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.

Table B19. Energy End Uses, Number of Buildings and Floorspace, 1999

		Numb	er of Build	ings (tho	usand)			Total Flo	orspace (million so	uare feet)	
				ergy Use						ergy Use		
			(more t	nan one i	nay apply)		†		(IIIOTE L	nan one n	nay apply) I	
	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact- uring	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact- uring
All Buildings	4,657	4,016	3,560	3,239	857	151	67,338	61,602	58,474	56,115	24,681	3,126
Building Floorspace (Square Feet)												
1,001 to 5,000	2,348	1,982	1,680	1,456	357	Q	6,774	5,684	4,879	4,280	1,095	Q
5,001 to 10,000	1,110	946	828	778	176	36		7,090	6,212	5,748	1,272	318
10,001 to 25,000	708	629	611	574	150	28	11,153	9,865	9,530	9,000	2,415	519
25,001 to 50,000	257	237	223	222	72	11	9,311	8,565	8,116	8,088	2,630	390
50,001 to 100,000	145	137	134	127	54	9	10,112	9,597	9,401	8,887	3,901	600
100,001 to 200,000	59	57	55	54	29	3	8,271	7,893	7,609	7,527	4,092	478
200,001 to 500,000	23	22	21	21	14	1	6,851	6,445	6,345	6,258	4,254	283
Over 500,000	7	7	7	7	5	Q	6,628	6,465	6,382	6,327	5,020	Q
Principal Building Activity						_						_
Education	327	326	274	240	106	Q		8,612	7,973	8,059		Q
Food Sales	174	149	166	163	85	Q		880	978	951	676	Q
Food Service	349	321	324	349	316		,	1,721	1,760	1,846		Q
Health Care	127	127	127	126	11	Q		2,918	2,815	2,903		Q
Inpatient	11	11	11	11	9	Q	•	1,865	1,762	1,862	,	Q
Outpatient		116 150	116 126	115 149	Q	N	,	1,053	1,053	1,040		N
Lodging	153				41	Q Q		4,424	4,051	4,442		Q Q
Mercantile	667 534	626 502	632 499	439 323	96 29	Q	,	9,848 4,615	10,174 4,573	8,698 3,453	5,218 811	Q
Enclosed and Strip Malls	133	123	132	116	68	Q		5,233	5,601	5,244	4,407	Q
Office	739	728	716	615	19	Q	,	11,810	11,782	10,872		441
Public Assembly	305	274	232	249	101	Q	,	4,015	3,859	3,893		Q
Public Order and Safety	72	61	32	41	12	Q		1,021	760	830	301	Q
Religious Worship	307	306	232	252	51	N	,	3,383	2,765	3,109		N
Service	478	421	289	280	Q	25	,	3,027	2,481	2,351	Q	325
Warehouse and Storage	603	357	308	227	Q	51	•	8,104	7,621	6,743		1,634
Other	102	84	76	64	Q	Q	,	1,086	1,087	983		,,55 i
Vacant	253	84	27	44	Q	Q		754	368	436		Q
Year Constructed												
1919 or Before	419	350	260	277	69	Q	4,034	3,593	2,911	3,130	1,091	Q
1920 to 1945	499	430	313	311	85	Q	•	5,559	4,383	4,644	2,232	Q
1946 to 1959	763	666	589	493	115	28	•	8,402	7,601	7,154		535
1960 to 1969	665	557	496	493	131	19	-,	9,966	9,325	9,421	4,178	409
1970 to 1979	774	691	649	592	161	32		10,916	11,050	10,182	,	555
1980 to 1989	846 690	713 608	702 549	623 450	173 124	37 Q	*	12,566 10,600	12,849 10,355	12,137 9,446		744 485
Census Region												
Northeast	686	601	473	515	141	22	12,360	11,667	10,311	10,577	5,245	568
Midwest	1,188	1,049	861	776	221	18	*	15,916	14,371	13,702		818
South	1,762	1,503	1,506	1,179	315	87		20,598	21,549	19,014		1,035
West	1,021	863	720	769	181	24		13,421	12,243	12,822		706
Climate Zone: 45-Year Average												
Under 2,000 CDD and	505	475	260	200	07	_	E 000	F 660	4 004	F 000	0.040	240
More than 7,000 HDD	525	475 870	366 711	396 674	97 180	Q 9		5,669	4,804	5,090	2,213	319 571
5,500-7,000 HDD	986	870 950	711 766	674 751	189	43	•	16,206	14,289	14,123		571 860
4,000-5,499 HDD Fewer than 4,000 HDD	1,085 1,134	950 997	913	751 836	200 211	43 34	•	15,292 14,923	13,999	13,800		869 827
2,000 CDD or More and	1,134	997	913	836	211	34	10,333	14,923	14,535	14,128	5,519	021

Table B19. Energy End Uses, Number of Buildings and Floorspace, 1999

-	1	Numb	er of Build					Total Flo		million sq		
				ergy Use han one n						ergy Use han one n		
	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact- uring	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact uring
Workers (main shift)												
Fewer than 5	2,376	1,835	1,513	1,312	287	Q	14,321	10,552	8,704	8,401	1,651	(
5 to 9	807	773	,	643	131	24	6,325	6,020	5,291	5,145	1,341	230
	683	667	636	586				7,762	,	7,000	2,021	47
10 to 19					172			,	7,409	,	,	
20 to 49	487	456		417	154		-,-	10,347	9,930	9,445	3,871	64
50 to 99	174	166		159	65		-,	8,536	8,519	8,166	4,354	54
100 to 249	90	81	88	85	30		-,	8,053	8,129	7,760	4,305	430
250 or More	39	38	39	36	18	2	10,595	10,333	10,491	10,199	7,138	544
Weekly Operating Hours												
39 or Fewer	978	638	439	427	93	Q	6,596	4,217	3,113	3,340	884	
40 to 48	1,156	1,068	968	779	97	47	13,105	12,090	11,041	10,049	2,492	75
49 to 60	986	943	850	746	131	43	14,200	13,677	13,225	12,280	4,159	71
61 to 84	664	598	563	521	188	24	12,458	11,787	11,701	11,334	6,052	60
85 to 167	474	407	436	436	264	5	9,116	8,399	8,528	8,041	4,659	423
Open Continuously	398	361	304	330	85		11,863	11,432	10,866	,	6,435	474
5 6 6 6												
Energy Sources (more than												
one may apply)												
Electricity	4,395	4,008	3,560	3,239	857	151	65,716	61,565	58,474	56,115	24,681	3,12
Natural Gas	2,670	2,588	2,335	2,191	615		45,525	44,385	42,147	41,366	19,857	2,32
Fuel Oil	434	432			92		,	13,074	12,185	11,852	7,840	55
District Heat	117	116		101	28			5,862	5,165	,	2,487	(
District Chilled Water	50	49	50	37	6		2,750	2,739	2,750	2,455	1,047	(
Propane	451	434			158		-,	6,076	5,415		3,005	
Other	153	149	107	89	47	Q	2,322	2,276	2,069	1,887	1,331	(
Energy End Uses (more than												
one may apply)												
Buildings with Space Heating	4,016	4,016	3,400	3,087	798	143	61,602	61,602	56,361	54,204	23,813	3,03
Buildings with Cooling	3,560	3,400	3,560	2,915	792	129	58,474	56,361	58,474	52,589	23,730	2,86
Buildings with Water Heating	3,239	3,087	2,915	3,239	818			54,204	52,589	56,115	23,830	2,36
Buildings with Cooking	857	798	,	,	857	Q	24,681	23,813	23,730	,	24,681	49
Buildings with Manufacturing	151	143			Q	151	3,126	3,031	2,861	2,364	495	3,120
Buildings with Electricity	101	. 70	0	55	×.	101	0,120	3,001	_,001	_,00+	100	0,12
Generation	172	169	149	143	63	Q	11,882	11,643	11,538	11,079	7,823	330
Francis Balatad Organ Francis												
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	767	711	716	733	767	Q	23.328	22.488	22,457	22,563	23,328	478
Activities with Large	101	, , , ,	, 10	733	101	Q	20,020	££, 7 00	22,701	22,000	20,020	770
Nouviusa willi Laige												

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.

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

			Num	ber of Building	gs (thousand	1)		
				•	_	ergy Sources l ne may apply)	Jsed	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other ^a
All Buildings	4,657	4,016	1,880	2,380	377	96	307	94
Building Floorspace								
(Square Feet)	0.040	4.000	000	4 000	04.4	0	400	0
1,001 to 5,000		1,982	926	,	214		162	Q
5,001 to 10,000		946 629	379 324		73 52		88 42	Q
10,001 to 25,000		237	32 4 129		20		7	Q Q
25,001 to 50,000		137	74		9		5	Q
100,001 to 200,000		57	34		6		Q	Q
200.001 to 500.000		22	11	13	3		Q	Q
Over 500,000		7	4	4	1		Q	Q
Principal Building Activity								
Education	327	326	166	196	17	30	10	Q
Food Sales	174	149	63	79	Q	Q	Q	Q
Food Service	349	321	143	192	Q	Q	Q	Q
Health Care	127	127	78	63	Q	3	Q	N
Inpatient	11	11	3	5	Q	3	Q	N
Outpatient	116	116	75	58	Q	Q	Q	N
Lodging	153	150	101	74	Q	13	Q	Q
Mercantile	667	626	273	392	86	Q	31	Q
Retail (Other Than Mall)	534	502	204	318	76	Q	Q	Q
Enclosed and Strip Malls	133	123	68	75	Q	N	Q	N
Office	739	728	430		65		Q	Q
Public Assembly	305	274	121	153	Q		Q	Q
Public Order and Safety	72	61	21	30	Q		Q	Q
Religious Worship	307	306	125		22		62	Q
Service	478	421	135		71		Q	Q
Warehouse and Storage	603	357	171		15		39	Q
Other Vacant	102 253	84 84	Q 18		Q Q		Q Q	Q Q
Year Constructed								
1919 or Before	419	350	105	254	52	19	Q	Q
1920 to 1945		430	145		53		Q	Q
1946 to 1959		666	307	376	98		39	Q
1960 to 1969		557	224		56		48	Q
1970 to 1979		691	376	423	28	Q	39	Q
1980 to 1989	846	713	411	337	54	11	66	Q
1990 to 1999	690	608	312	311	36	4	78	Q
Census Region								
Northeast	686	601	186	273	210	31	63	Q
Midwest	1,188	1,049	331	834	33		93	26
South	1,762	1,503	945	677	114	27	120	45
West	1,021	863	418	595	Q	17	31	Q
Climate Zone: 45-Year Average								
Under 2,000 CDD and	505	475	400	201	00	^	7,	^
More than 7,000 HDD		475 970	133		69		74 66	Q
5,500-7,000 HDD	986	870	312		111		66	Q
4,000-5,499 HDD	1,085	950	435		170		79	33
Fewer than 4,000 HDD	1,134	997	509	647	Q	8	Q	Q
2,000 CDD or More and								

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

			Num	ber of Building	ıs (thousand)		
			Num	Space	-Heating En	ergy Sources l	Jsed	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	ne may apply) District Heat	Propane	Other ^a
Workers (main shift)								
Fewer than 5	2,376	1,835	773	1,047	174	30	183	55
5 to 9	,	773	363	502	91	14	37	Q
10 to 19		667	343	390	51	10	54	Q
20 to 49	. 487	456	233	262	39	12	28	Q
50 to 99	. 174	166	103	103	10	15	Q	Q
100 to 249		81	43	54	8	8	Q	Q
250 or More	39	38	22	22	2	7	Q	Q
Weekly Operating Hours								
39 or Fewer	978	638	259	355	64	Q	113	Q
40 to 48			516	616	90		72	Q
49 to 60		943	457	599	103		28	27
61 to 84		598	250	383	56		40	Q
85 to 167		407	208	232	25		35	Q
Open Continuously		362	189	195	38		18	Q
Energy Sources (more than								
one may apply)								
Electricity	4,395	4,008	1,880	2,373	376	96	307	94
Natural Gas		2,588	954	2,380	60		Q	19
Fuel Oil	,	432	163	62	377	7	Q	Q
District Heat		116	46	20	Q	96	Q	Q
District Chilled Water		49	23	4	Q		Q	Q
Propane		434	145	28	76		307	Q
Other			57	52	Q		Q	94
Primary Space-Heating								
Energy Source								
Electricity	1,128	1,128	1,128	174	37	Q	7	Q
Natural Gas	,	*	607	2,189	33		Q	Q
Fuel Oil	,		76	2	302		Q	Q
District Heat		77	9	Q	Q		Q	Q
Propane			58		Q		282	Q
Other	. 38	38	Q	Q	Q		Q	38
Cooling Energy Sources								
(more than one may apply)								
Electricity	3,450	3,297	1,674	1,992	246	54	211	60
Natural Gas			68		Q		Q	N
District Chilled Water	50	49	23	4	Q	39	Q	Q
Water-Heating Energy Sources								
(more than one may apply)								
Electricity	1,546	1,465	927	667	90	23	106	43
Natural Gas			531	1,311	44		Q	Q
Fuel Oil			34		107		Q	Q
District Heat			21	3	Q		Q	Q
Propane			29	Q	Q		81	Q
Cooking Energy Sources								
(more than one may apply)								
Electricity	437	398	216	205	36	11	43	Q
•								
Natural Gas	505	475	208	390	24	Q	Q	Q

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

			Num	ber of Building	s (thousand	i)		
				•	•	ergy Sources U ne may apply)	Jsed	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other ^a
Energy End Uses (more than								
one may apply)								
Buildings with Space Heating	4,016	4,016	1,880	2,380	377	96	307	94
Buildings with Cooling	3,560	3,400	1,701	2,070	246	77	212	61
Buildings with Water Heating	3,239	3,087	1,465	1,914	246	80	195	50
Buildings with Cooking	857	798	362	480	74	. 21	75	25
Buildings with Manufacturing	151	143	76	67	Q	Q	Q	Q
Buildings with Electricity							-	-
Generation	172	169	89	97	23	9	4	Q
Percent of Floorspace Heated								
Not Heated	641	Q	N	Q	N	N	N	N
1 to 50	576	576	290	301	58	Q	61	Q
51 to 99	627	627	255	394	52	16	30	Q
100	2,813	2,813	1,335	1,685	266	80	216	42
Heating Equipment (more								
than one may apply)								
Heat Pumps	492	492	475	144	Q	. 4	12	Q
Furnaces	1,460	1,460	512	1,077	166	Q	128	Q
Individual Space Heaters	894	894	584	543	100	7	104	27
District Heat	96	96	26	Q	Q	96	Q	Q
Boilers	581	581	193	381	152	. Q	41	12
Packaged Heating Units	1,347	1,347	744	865	17	Q	81	Q
Other	185	185	110	67	34	. 1	19	52

N=No responding cases in sample.

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

a "Other" includes wood, coal, solar, and all other energy sources.
 Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

Table B21. Space-Heating Energy Sources, Floorspace, 1999

			Total F	oorspace (mil	lion square f	eet)		
				•	•	ergy Sources l ne may apply)	Jsed	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other ^a
All Buildings	67,338	61,612	32,291	37,902	5,611	5,534	2,728	945
Building Floorspace								
(Square Feet)								
1,001 to 5,000	,	5,684	2,651	3,250	598		469	Q
5,001 to 10,000		7,090	2,808	4,613	573		688	Q
10,001 to 25,000		9,865	5,079	6,069	773		682	Q
25,001 to 50,000		8,574	4,752	5,225	687		247	Q
50,001 to 100,000		9,597	5,238	6,200	635		366	Q
100,001 to 200,000		7,893	4,719	4,917	791		Q	Q
200,001 to 500,000		6,445	3,234	3,949	847		Q	Q
Over 500,000	6,628	6,465	3,810	3,680	707	1,698	Q	Q
Principal Building Activity								
Education	8,651	8,612	3,613	5,317	1,375		200	Q
Food Sales	994	880	359	556	Q		Q	Q
Food Service	1,851	1,721	836	1,210	Q	Q	Q	Q
Health Care	2,918	2,918	1,335	1,793	641		Q	N
Inpatient		1,865	693	1,257	615		Q	N
Outpatient		1,053	642	536	Q		Q	N
Lodging		4,424	2,984		Q		Q	Q
Mercantile	10,398	9,848	6,148	6,423	649		332	Q
Retail (Other Than Mall)	4,766	4,615	2,239	3,150	470		Q	Q
Enclosed and Strip Malls	5,631	5,233	3,909	3,274	Q		Q	N
Office	12,044	11,819	7,221	6,060	812	,	Q	Q
Public Assembly	4,393	4,015	1,848	2,370	Q		Q	Q
Public Order and Safety	1,168	1,021	354	512	Q		Q	Q
Religious Worship	3,405	3,383	1,534	2,270	182		706	Q
Service	3,388	3,027	1,145	1,981	405		Q	Q
Warehouse and Storage	10,477	8,104	4,285	5,719	576		483	Q
OtherVacant	1,222 1,908	1,086 754	401 228	612 575	Q Q	Q Q	Q Q	Q Q
V O								
Year Constructed 1919 or Before	4,034	3,593	1,267	2,399	593	480	Q	Q
1920 to 1945		5,559	2,223	3,808	651		Q	Q
1946 to 1959	9,127	8,402	3,822	,	1,065		319	Q
1960 to 1969		9,966	4,789		1,083		473	Q
1970 to 1979		10,916	6,116		1,015		415	Q
1980 to 1989	,	12,566	8,140	7,226	772		526	Q
1990 to 1999	,	10,610	5,933		432		608	Q
Census Region								
Northeast	12,360	11,667	4,625	5,703	3,612	1,876	761	Q
Midwest	16,761	15,916	6,429	12,467	619		733	281
South	23,485	20,608	13,862		1,128		1,013	260
West	14,731	13,421	7,375		252		221	Q
Climate Zone: 45-Year Average								
Under 2,000 CDD and								
More than 7,000 HDD	5,890	5,669	1,920	3,949	1,065	250	616	Q
5,500-7,000 HDD	17,083	16,206	6,767	11,335	1,833		613	Q
4,000-5,499 HDD	16,243	15,292	8,030	8,234	2,267		766	305
Fewer than 4,000 HDD		14,923	8,670	10,109	281		Q	Q
2,000 CDD or More and	-,-30	.,0	-,	-,	-2.			~

Table B21. Space-Heating Energy Sources, Floorspace, 1999

			Total F	loorspace (mil	lion square f	eet)		
				•	_	ergy Sources (ne may apply)	Jsed	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other ^a
Workers (main shift)								
Fewer than 5	14,321	10,552	4,405	6,432	912	289	1,136	190
5 to 9		6,020	2,941	3,910	634	292	372	Q
10 to 19		7,772	3,981	4,784	518	372	378	Q
20 to 49	10,814	10,347	5,599	6,585	691	534	456	Q
50 to 99	8,898	8,536	4,817	5,229	925	645	Q	Q
100 to 249	8,356	8,053	4,500	5,126	900	1,031	Q	Q
250 or More	10,595	10,333	6,048	5,836	1,031	2,371	Q	Q
Weekly Operating Hours								
39 or Fewer	6,596	4,217	1,636	2,441	486	Q	809	Q
40 to 48	13,105	12,090	6,215	7,330	952	730	576	Q
49 to 60		13,677	7,065	8,499	1,403	910	416	388
61 to 84	12,458	11,787	6,632	7,120	896	911	368	Q
85 to 167	9,116	8,399	4,540	5,438	703	830	288	Q
Open Continuously	11,863	11,442	6,204	7,074	1,170	2,114	272	Q
Energy Sources (more than								
one may apply)								
Electricity		61,575	32,291	37,874	5,602		2,728	945
Natural Gas	45,525	44,394	21,230		2,447		250	524
Fuel Oil		13,083	6,470		5,611	1,787	398	Q
District Heat		5,862	1,903		Q	,	Q	Q
District Chilled Water		2,739	1,012		Q		Q	Q
Propane Other		6,076 2,276	2,809 1,015		1,510 Q		2,728 Q	Q 945
Drimany Casas Hasting								
Primary Space-Heating Energy Source								
Electricity	17,627	17,627	17,627	4,465	333	Q	288	Q
Natural Gas	32,729	32,729	11,902	,	1,422		Q	Q
Fuel Oil		3,719	799		3,719		Q	Q
District Heat	,	5,077	1,277		0,7 10 Q		Q	Q
Propane		2,107	593		Q		2,107	Q
Other	, -	343	Q		Q	N	Q	343
Cooling Energy Sources								
(more than one may apply)								
Electricity	55,545	53,468	30,329	33,933	4,590	3,173	2,169	768
Natural Gas		1,898	935		Q		Q Q	N
District Chilled Water		2,739	1,012	,	Q		Q	Q
Water-Heating Energy Sources								
(more than one may apply)								
Electricity	24,171	23,070	16,403	11,446	1,636	906	1,129	496
Natural Gas	29,196	28,489	13,417	25,292	1,758	629	Q	Q
Fuel Oil	2,218	2,206	627	573	2,045	Q	Q	Q
District Heat	4,182	4,162	1,132	525	Q	3,968	Q	Q
Propane	1,371	1,227	493	Q	Q	N	770	Q
Cooking Energy Sources								
(more than one may apply)								
Electricity	13,733	13,193	8,107	7,676	1,530	1,327	455	Q
Natural Gas		16,256	8,646		1,621		Q	Q
Propane		1,683	991	Q	540		461	Q

Table B21. Space-Heating Energy Sources, Floorspace, 1999

-			l otal F	loorspace (mil	lion square f	eet)		
				Space	-Heating En	ergy Sources L	Jsed	
					more than or	ne may apply)	•	
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other ^a
Energy End Uses (more than								
one may apply)								
Buildings with Space Heating	61,602	61,602	32,291	37,893	5,611	5,534	2,728	945
Buildings with Cooling	58,474	56,370	30,961	35,080	4,638	4,844	2,191	779
Buildings with Water Heating	56,115	54,213	28,867	34,164	4,759	4,943	2,018	682
Buildings with Cooking	24,681	23,823	13,404	14,929	2,814	2,337	801	477
Buildings with Manufacturing	3,126	3,031	1,668	1,940	Q	Q	Q	Q
Buildings with Electricity								
Generation	11,882	11,652	6,951	6,847	1,510	1,986	253	Q
Percent of Floorspace Heated								
Not Heated	5,736	Q	N	Q	N	N	N	N
1 to 50	7,593	7,593	4,722	4,319	564	Q	461	Q
51 to 99	10,745	10,745	6,110	6,642	786	886	421	Q
100	43,264	43,264	21,459	26,932	4,260	4,575	1,845	593
Heating Equipment (more								
than one may apply)								
Heat Pumps	8,923	8,923	8,667	4,466	532	730	204	Q
Furnaces	14,449	14,449	6,822	11,524	1,295	Q	1,075	Q
Individual Space Heaters	17,349	17,349	12,350	11,488	1,444	1,210	1,051	534
District Heat	5,534	5,534	1,609	678	Q	5,534	Q	Q
Boilers	19,522	19,522	8,410	15,131	4,176	Q	672	420
Packaged Heating Units	25,743	25,743	16,861	17,324	1,040	767	937	Q
Other	4,073	4,073	2,972	1,982	341	249	272	315

^a "Other" includes wood, coal, solar, and all other energy sources.

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

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

Table B22. Primary Space-Heating Energy Sources, Number of Buildings, 1999

		N	lumber of Build	lings (thousand)	
			Primar	y Space-Heating	g Energy Sourc	e Useď
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings	4,657	4,016	1,128	2,189	302	77
Building Floorspace						
(Square Feet)	2 240	1 000	504	1 000	167	0
1,001 to 5,000 5,001 to 10,000	2,348 1,110	1,982 946	591 200	1,028 582	167 70	Q Q
10,001 to 25,000	708	629	195	336	40	13
25,001 to 50,000	257	237	79	122	14	
50,001 to 100,000	145	137	39	76	7	
100,001 to 200,000	59	57	18	30	3	
200,001 to 500,000	23	22	5	12	2	
Over 500,000	7	7	2	3	Q	2
Principal Building Activity						
Education	327	326	111	172	14	20
Food Sales	174	149	53	77	Q	Q
Food Service	349	321	87	176	Q	Q
Health Care	127	127	55	62	Q	3
Inpatient	11	11	Q	5	Q	
Outpatient	116	116	55	57	Q	Q
Lodging	153	150	80	55	Q	13
Mercantile	667	626	187	360	50	Q
Retail (Other Than Mall)	534	502	126	305	43	
Enclosed and Strip Malls	133	123	61	54	Q	N
Office	739	728	252	376	64	18
Public Assembly	305	274	58	144	Q	15
Public Order and Safety	72	61	Q	28	Q	3
Religious Worship	307	306	29	200	Q	Q
Service	478	421	83	235	Q	Q
Warehouse and Storage	603	357	100	201	Q	Q
Other	102	84	Q	38	Q	Q
Vacant	253	84	Q	66	Q	Q
Year Constructed	440	250	24	050	50	40
1919 or Before	419 499	350	21 60	250 299	50 41	19 9
1946 to 1959	763	430 666	181	346	86	14
1960 to 1969	665	557	105	345	45	15
1970 to 1979	774	691	233	383	20	6
1980 to 1989	846	713	311	282	35	
1990 to 1999	690	608	218	284	Q	
Census Region						
Northeast	686	601	76	254	190	24
Midwest	1,188	1,049	128	792	Q	21
South	1,762	1,503	672	598	92	16
West	1,021	863	253	545	Q	16
Climate Zone: 45-Year Average						
Under 2,000 CDD and						
More than 7,000 HDD	525	475	31	311	59	
5,500-7,000 HDD	986	870	114	583	83	
4,000-5,499 HDD	1,085	950	245	446	136	
Fewer than 4,000 HDD	1,134	997	365	566	Q	7
2,000 CDD or More and					=	
Fewer than 4,000 HDD	926	724	373	283	Q	11

Table B22. Primary Space-Heating Energy Sources, Number of Buildings, 1999

		N	umber of Build	lings (thousand	l)	
			Primar	y Space-Heating	Energy Source	e Useď
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
Workers (main shift)						
Fewer than 5	2,376	1,835	480	1,004	134	21
5 to 9	807	773	174	469	77	13
			221		41	10
10 to 19	683	667		339		
20 to 49	487	456	148 72	234	37	11
50 to 99	174	166		77	7	3
100 to 249	90 39	81 38	21 12	47 19	5 1	7
Weekly Operating Hours						
39 or Fewer	978	638	119	343	51	C
40 to 48	1,156	1,068	315	576	74	24
49 to 60	986	943	263	544	92	16
61 to 84	664	598	162	351	39	9
85 to 167	474	407	136	207	19	7
Open Continuously	398	361	132	167	28	20
Energy Sources (more than						
one may apply)						
Electricity	4,395	4,008	1,128	2,182	302	77
Natural Gas	2,670	2,588	331	2,189	25	33
Fuel Oil	434	432	64	54	302	(
District Heat	117	116	35	4	Q	77
District Chilled Water	50	49	Q	3	Q	28
Propane	451	434	57	24	62	
Other	153	149	38	41	Q	G
Energy End Uses (more than						
one may apply)						
Buildings with Space Heating	4,016	4,016	1,128	2,189	302	77
Buildings with Cooling	3,560	3,400	1,058	1,883	192	58
Buildings with Water Heating	3,239	3,087	867	1,759	205	70
Buildings with Cooking	857	798	210	438	58	13
Buildings with Manufacturing	151	143	51	58	Q	G
Buildings with Electricity Generation	172	169	51	87	20	ç
Generation	172	109	31	07	20	•
Percent of Floorspace Heated						
Not Heated	641	N	N	N	N	N
1 to 50	576	576	189	277	44	C
51 to 99	627	627	165	365	45	15
100	2,813	2,813	774	1,547	213	61
Heating Equipment (more than one may apply)						
Heat Pumps	492	492	373	97	Q	3
Furnaces	1,460	1,460	192	1,017	119	C
Individual Space Heaters	894	894	213	498	79	5
District Heat	96	96	Q	2	Q	77
Boilers	581	581	40	364	136	C
Packaged Heating Units	1,347	1,347	494	758	130 Q	4
Other	185	185	62	60	Q	C

^a Additionally, 282,000 buildings used propane; 38,000 buildings used wood, coal, or some other energy source; and no buildings used solar as a primary space heating energy source.

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.

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

Table B23. Primary Space-Heating Energy Sources, Floorspace, 1999

		Tota	ıl Floorspace (ı	million square fe	et)	
			Primar	/ Space-Heating	Energy Source	e Useď
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings	. 67,338	61,602	17,627	32,729	3,719	5,077
Building Floorspace						
(Square Feet)						
1,001 to 5,000	. 6,774	5,684	1,567	3,080	482	C
5,001 to 10,000	. 8,238	7,090	1,496	4,292	557	Q
10,001 to 25,000	. 11,153	9,865	3,035	5,320	597	232
25,001 to 50,000		8,565	2,866	4,416	486	577
50,001 to 100,000			2,765	5,261	484	836
100,001 to 200,000		7,893	2,497	4,128	383	853
200,001 to 500,000		6,445	1,509	3,531	474	894
Over 500,000		6,465	1,892	2,701	Q	1,554
Principal Building Activity						
Education	8,651	8,612	1,502	4,873	1,024	1,017
Food Sales	994	880	244	490	Q	Q
Food Service	1,851	1,721	492	1,008	Q	Q
Health Care	2,918	2,918	461	1,679	Q	626
Inpatient		1,865	Q	1,174	Q	538
Outpatient			431	505	Q	Q
Lodging		4,424	2,112	1,727	Q	517
Mercantile		9,848	4,273	4,968	319	Q
Retail (Other Than Mall)		4,615	1,332	2,790	290	Q
Enclosed and Strip Malls		5,233	2,942	2,178	Q	N
Office			4,334	5,279	720	1,367
Public Assembly	,	4,015	639	2,065	720 Q	805
Public Order and Safety			Q	470	Q	279
,		1,021				
Religious Worship			321	2,222	Q	Q
Service		3,027	710	1,657	Q	Q
Warehouse and Storage		8,104	2,208	5,160	301	Q
OtherVacant	,	1,086 754	174 Q	583 549	Q Q	Q Q
Year Constructed						
1919 or Before	4,034	3,593	231	2,292	544	471
1920 to 1945	,	5,559	826	3,258	462	726
1946 to 1959	-,	8,402	1,712	4,656	747	954
1960 to 1969		9,966	2,039	5,496	717	1,300
1970 to 1979		10,916	3,678	5,421	661	704
1980 to 1989 1990 to 1999	-,	12,566 10,600	5,433 3,708	5,930 5,677	329 Q	493 428
Census Region						
Northeast	12,360	11,667	1,645	4,913	2,803	1,709
Midwest		15,916	2,355	11,348	2,003 Q	1,709
South			9,259	8,815	718	904
West		13,421	4,368	7,653	7 10 Q	1,053
Climate Zone: 45-Year Average						
Under 2,000 CDD and						
More than 7,000 HDD	. 5,890	5,669	427	3,692	816	222
5,500-7,000 HDD	17,083	16,206	2,654	10,175	1,208	1,625
4,000-5,499 HDD	16,243	15,292	3,638	7,148	1,519	2,225
Fewer than 4,000 HDD	. 16,333	14,923	5,619	8,306	Q	576
2,000 CDD or More and						
Fewer than 4,000 HDD	. 11,788	9,512	5,288	3,409	Q	429

Table B23. Primary Space-Heating Energy Sources, Floorspace, 1999

		Tota	al Floorspace (ı	million square fe	eet)	
			Primary	y Space-Heating	Energy Source	e Useď
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
Workers (main shift)						
Fewer than 5	14,321	10,552	2,259	6,115	788	264
5 to 9	6,325	6,020	1,412	3,539	484	284
10 to 19		7,762	2,527	4,136	336	36
20 to 49		10,347	3,290	5,671	564	509
50 to 99	8,898	8,536	2,840	4,214	714	540
100 to 249	8,356	8,053	2,201	4,336	479	960
250 or More		10,333	3,099	4,719	355	2,143
Weekly Operating Hours						
39 or Fewer	6,596	4,217	564	2,349	444	
40 to 48	13,105	12,090	3,391	6,705	753	632
49 to 60	14,200	13,677	3,642	7,681	1,084	817
61 to 84	12,458	11,787	4,240	5,905	631	78
85 to 167	9,116	8,399	2,526	4,322	485	818
Open Continuously	11,863	11,432	3,263	5,768	323	1,99
Energy Sources (more than one may apply)						
Electricity	65,716	61,565	17,627	32,701	3,711	5,07
Natural Gas	45,525	44,385	8,437	32,729	888	2,10
Fuel Oil	13,285	13,074	2,710	4,852	3,719	1,578
District Heat	5,891	5,862	474	284	Q	5,07
District Chilled Water	2,750	2,739	310	334	Q	2,084
Propane	6,290	6,076	1,468	1,360	1,044	
Other	2,322	2,276	507	1,104	Q	C
Energy End Uses (more than						
one may apply)						
Buildings with Space Heating	61,602	61,602	17,627	32,729	3,719	5,07
Buildings with Cooling	58,474	56,361	17,160	30,003	2,912	4,392
Buildings with Water Heating	56,115	54,204	15,562	29,379	3,085	4,519
Buildings with Cooking	24,681	23,813	7,203	12,286	1,549	2,03
Buildings with Manufacturing	3,126	3,031	894	1,708	Q	C
Buildings with Electricity						
Generation	11,882	11,643	3,298	5,682	726	1,782
Percent of Floorspace Heated						
Not Heated		N	N	N	N	N
1 to 50	,	7,593	3,013	3,648	481	C
51 to 99	10,745	10,745	3,275	5,829	409	837
100	43,264	43,264	11,339	23,252	2,829	4,176
Heating Equipment (more than one may apply)						
Heat Pumps	8,923	8,923	5,009	3,076	Q	588
Furnaces		14,449	2,281	10,311	821	0
Individual Space Heaters	, -	17,349	4,788	9,945	683	1,042
District Heat		5,534	.,, 30 Q	211	Q	5,07
Boilers		19,522	2,171	13,918	2,717	0,07
Packaged Heating Units		25,743	10,090	13,958	333	60:
Other		4,073	1,807	1,634	Q	

^a Additionally, buildings comprising 2,107 million square feet used propane; buildings comprising 343 million square feet used wood, coal, or some other energy source; and no buildings used solar as a primary space heating energy source.

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

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

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

		Number o	f Buildings (th	ousand)			Total Floors	pace (million s	quare feet)
			Cooling	Energy So an one may				Cooling	Energy So an one may	ources
	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water
All Buildings	4,657	3,560	3,450	142	50	67,338	58,474	55,545	1,914	2,750
Building Floorspace										
(Square Feet)										
1,001 to 5,000	2,348	1,680	1,640	Q	Q		4,879	4,784	Q	Q
5,001 to 10,000	1,110	828	796	Q	Q	8,238	6,212	5,938	Q	Q
10,001 to 25,000	708	611	596	23	Q	11,153	9,530	9,307	325	Q
25,001 to 50,000	257	223	214	8	7	9,311	8,116	7,753	268	294
50,001 to 100,000	145	134	127	4	7	10,112	9,401	8,870	315	525
100,001 to 200,000		55	51	2	5	8,271	7,609	7,011	282	630
200,001 to 500,000	23	21	20	Q	2	6,851	6,345	5,991	Q	470
Over 500,000	7	7	6	Q	1		6,382	5,890	Q	630
Principal Building Activity										
Education	327	274	265	Q	Q	8,651	7,973	7,305	Q	676
Food Sales	174	166	148	Q	N	994	978	947	Q	N
Food Service	349	324	312	Q	Q	1,851	1,760	1,687	Q	Q
Health Care	127	127	125	Q	2		2,815	2,537	Q	433
Inpatient	11	11	9	Q	2	,	1,762	1,554	Q	356
Outpatient	116	116	116	Q	Q	,	1,053	983	Q	Q
Lodging		126	123	Q	Q		4,051	3,880	Q	219
3 3		632	622	26	Q			,	462	219 Q
Mercantile							10,174	9,914		
Retail (Other Than Mall)	534	499	491	Q	Q		4,573	4,423	Q	Q
Enclosed and Strip Malls	133	132	131	Q	Q		5,601	5,492	Q	Q
Office	739	716	695	31	6		11,782	11,024	319	678
Public Assembly	305	232	214	Q	Q		3,859	3,544	Q	436
Public Order and Safety	72	32	31	Q	Q		760	706	Q	Q
Religious Worship	307	232	231	Q	Q		2,765	2,763	Q	Q
Service	478	289	288	Q	Q		2,481	2,470	Q	Q
Warehouse and Storage	603	308	305	Q	Q	10,477	7,621	7,520	Q	Q
Other		76	64	Q	Q		1,087	880	Q	Q
Vacant	253	27	27	N	N	1,908	368	368	N	N
Year Constructed 1919 or Before	419	260	245	Q	Q	4,034	2,911	2,632	Q	Q
	499	313	312	Q	2		4,383	4,235	Q	134
1920 to 1945				_		-, -				
1946 to 1959		589	578	Q	5		7,601	7,160	Q	406
1960 to 1969		496	472	26	7		9,325	8,676	353	633
1970 to 1979		649	636	35	Q		11,050	10,583	376	492
1980 to 1989		702	693	11	Q		12,849	12,490	300	424
1990 to 1999	690	549	514	Q	4	11,094	10,355	9,770	416	407
Census Region										
Northeast	686	473	459	13	2	12,360	10,311	9,766	446	326
Midwest	1,188	861	825	48	14	16,761	14,371	13,474	550	746
South	1,762	1,506	1,492	Q	Q	23,485	21,549	20,908	266	939
West	1,021	720	673	60	13	14,731	12,243	11,396	652	739
Climate Zone: 45-Year Average										
Under 2,000 CDD and										
More than 7,000 HDD	525	366	347	Q	Q	5,890	4,804	4,631	249	Q
5,500-7,000 HDD	986	711	689	35	6		14,289	13,284	743	763
4,000-5,499 HDD	1,085	766	734	30	Q		13,999	13,213	423	653
Fewer than 4,000 HDD		913	885	42	7		14,535	13,972	405	683
2,000 CDD or More and	.,	2.0	230	•=	·	-,-50	.,	, - / -		
Fewer than 4,000 HDD	926	803	795	Q	23	11,788	10,847	10,444	Q	589
	320	230	. 30	•	_0	, . 50	. 0,0 11	,	•	230

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

Mail Buildings Mail Buildings Mile Mile	g Energy So han one may Natural	y apply)
National		
Fewer than 5 2,376 1,513 1,466 63 Q 14,321 8,704 8,35 5 to 9 807 681 667 Q Q 6,325 5,291 5,1 10 to 19 683 636 617 Q Q 8,028 7,409 7,0 20 to 49 487 433 420 Q 3 10,814 9,930 9,6 50 to 99 174 169 163 Q 10 8,898 8,519 8,2 100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 </th <th>Gas</th> <th>District Chilled Water</th>	Gas	District Chilled Water
Fewer than 5 2,376 1,513 1,466 63 Q 14,321 8,704 8,35 5 to 9 807 681 667 Q Q 6,325 5,291 5,1 10 to 19 683 636 617 Q Q 8,028 7,409 7,0 20 to 49 487 433 420 Q 3 10,814 9,930 9,6 50 to 99 174 169 163 Q 10 8,898 8,519 8,2 100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 </td <td></td> <td></td>		
5 to 9 807 681 667 Q Q 6,325 5,291 5,1 10 to 19 683 636 617 Q Q 8,028 7,409 7,0 20 to 49 487 433 420 Q 3 10,814 9,930 9,6 50 to 99 174 169 163 Q 10 8,898 8,519 8,2 100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84	6 398	Q
20 to 49 487 433 420 Q 3 10,814 9,930 9,6 50 to 99 174 169 163 Q 10 8,898 8,519 8,2 100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 <td< td=""><td>6 Q</td><td>Q</td></td<>	6 Q	Q
50 to 99 174 169 163 Q 10 8,898 8,519 8,2 100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142	6 Q	C
100 to 249 90 88 82 5 4 8,356 8,129 7,5 250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) 8 8 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 <t< td=""><td>4 258</td><td>162</td></t<>	4 258	162
250 or More 39 39 35 0 5 10,595 10,491 9,5 Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q	8 287	478
Weekly Operating Hours 39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117	5 361	484
39 or Fewer 978 439 438 Q Q 6,596 3,113 3,0 40 to 48 1,156 968 955 24 Q 13,105 11,041 10,7 49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 </td <td>0 173</td> <td>1,234</td>	0 173	1,234
40 to 48		
49 to 60 986 850 808 40 13 14,200 13,225 12,4 61 to 84 664 563 547 20 6 12,458 11,701 11,0 85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 50 24 Q 50 2,750 2,750 1,0	5 Q	Q
61 to 84		239
85 to 167 474 436 419 29 4 9,116 8,528 7,9 Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		589
Open Continuously 398 304 285 Q 11 11,863 10,866 10,2 Energy Sources (more than one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		504
Energy Sources (more than one may apply) Electricity		505
one may apply) Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0	2 281	893
Electricity 4,395 3,560 3,450 142 50 65,716 58,474 55,5 Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		
Natural Gas 2,670 2,335 2,237 142 21 45,525 42,147 40,3 Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		
Fuel Oil 434 302 299 2 3 13,285 12,185 11,5 District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0	,	2,750
District Heat 117 97 73 Q 43 5,891 5,165 3,4 District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		1,316
District Chilled Water 50 50 24 Q 50 2,750 2,750 1,0		749
		2,354
December 0 0 0 000 E 44E E 50		2,750
Propane 451 318 315 Q Q 6,290 5,415 5,3 Other 153 107 106 Q Q 2,322 2,069 1,9		Q
	-	
Primary Space-Heating Energy Source		
Electricity	2 Q	310
Natural Gas		334
Fuel Oil		Q
District Heat		2,084
Propane	7 N	N
Other	N Q	N
Water-Heating Energy Sources		
(more than one may apply)		
Electricity	8 573	447
Natural Gas	3 1,358	498
Fuel Oil	7 Q	C
District Heat	4 Q	1,729
Propane	9 N	C
Cooking Energy Sources		
(more than one may apply)		
Electricity	0 352	530
Natural Gas	5 615	701
Propane	2 N	C
Energy End Uses (more than		
one may apply)		
Buildings with Space Heating	9 1,898	2,739
Buildings with Cooling	5 1,914	2,750
Buildings with Water Heating		2,455
Buildings with Cooking		1,047
Buildings with Manufacturing	5 Q	Q
Buildings with Electricity	_	_
Generation	2 243	919

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

		Number o	f Buildings (th	ousand)			otal Floors	pace (million square feet)			
	All Buildings			Cooling Energy Sources (more than one may apply)				All	Cooling Energy Sources (more than one may apply)		
		All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	All Buildings	Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	
Percent of Floorspace Cooled											
Not Cooled	1,097	N	N	N	N	8,864	N	N	N	N	
1 to 50	1,012	1,012	1,005	20	Q	16,846	16,846	16,536	435	Q	
51 to 99	751	751	720	32	8	16,966	16,966	16,117	609	772	
100	1,796	1,796	1,725	90	40	24,662	24,662	22,893	870	1,805	
Cooling Equipment (more											
than one may apply)											
Residential-Type Central											
Air Conditioners	676	676	676	Q	Q	8,329	8,329	8,329	Q	Q	
Heat Pumps	485	485	485	17	4	9,147	9,147	9,120	187	336	
Individual Air Conditioners	799	799	799	18	Q	14,276	14,276	14,276	376	359	
District Chilled Water	50	50	24	Q	50	2,750	2,750	1,093	Q	2,750	
Central Chillers	130	130	127	2	1	12,909	12,909	12,405	272	386	
Packaged Air Conditioning											
Units	1,953	1,953	1,870	111	Q	36,527	36,527	35,387	1,595	721	
Swamp Coolers	136	136	135	Q	Q	2,219	2,219	2,175	Q	Q	
Other	49	49	48	Q	Q	1.312	1.312	1.244	Q	Q	

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

 $N\hbox{=}No\ responding\ cases\ in\ sample.$

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

Table B25. Water-Heating Energy Sources, Number of Buildings, 1999

			Number o	of Buildings (tho	usand)		
					ng Energy Sou han one may a		
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
All Buildings	4,657	3,239	1,546	1,520	110	62	130
Building Floorspace							
(Square Feet)							
1,001 to 5,000	2,348	1,456	795	574	Q	Q	Q
5,001 to 10,000	1,110	778	317	429	Q	Q	Q
10,001 to 25,000	708	574	265	274	14	9	31
25,001 to 50,000	257	222	87	127	9	14	Q
50,001 to 100,000	145	127	51	71	5	9	Q
100,001 to 200,000	59	54	21	31	Q	5	Q
200,001 to 500,000	23	21	7	12	2	2	Q
Over 500,000	7	7	4	3	Q	1	N
Principal Building Activity							
Education	327	240	95	132	9	19	Q
Food Sales	174	163	68	82	Q	Q	Q
Food Service	349	349	90	223	Q	Q	Q
Health Care	127	126	67	55	Q	3	Q
Inpatient	11	11	Q	8	1	3	N
Outpatient	116	115	66	47	Q	Q	Q
Lodging	153	149	46	86	Q	17	Q
Mercantile	667	439	263	181	Q	N	Q
Retail (Other Than Mall)	534	323	181	141	Q	N	Q
Enclosed and Strip Malls	133	116	82	40	Q	N	Q
Office	739	615	371	216	26	9	Q
Public Assembly	305	249	110	128	Q	6	Q
Public Order and Safety	72	41	Q	21	Q	Q	Q
Religious Worship	307	252	84	146	Q	Q	Q
Service	478	280	152	110	Q	Q	Q
Warehouse and Storage	603	227	148	84	Q	Q	N
Other	102	64	30	30	Q	Q	N
Vacant	253	44	Q	27	Q	N	Q
Year Constructed							
1919 or Before	419	277	93	174	12	5	Q
1920 to 1945	499	311	123	163	Q	8	Q
1946 to 1959	763	493	212	239	41	11	Q
1960 to 1969	665	493	213	244	18	11	Q
1970 to 1979	774	592	298	277	Q	7	Q
1980 to 1989	846	623	379	206	Q	11	Q
1990 to 1999	690	450	229	217	Q	Q	Q
Census Region							
Northeast	686	515	214	168	87	15	56
Midwest	1,188	776	307	452	Q	14	38
South	1,762	1,179	707	470	Q	16	Q
West	1,021	769	318	431	Q	17	Q
Workers (main shift)							
Fewer than 5	2,376	1,312	637	616	Q	15	46
5 to 9	807	643	286	308	Q	Q	Q
10 to 19	683	586	318	243	Q	9	Q
20 to 49	487	417	184	204	22	10	Q
50 to 99	174	159	75	79	6	9	Q
100 to 249	90	85	29	52	4	6	Q
250 or More	39	36	16	18	1	5	Q

Table B25. Water-Heating Energy Sources, Number of Buildings, 1999

			Number of Buildings (thousand)						
					g Energy Sou nan one may a				
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane		
Weekly Operating Hours									
39 or Fewer	978	427	195	192	Q	Q	Q		
40 to 48	1,156	779	442	312	16	16	Q		
49 to 60	986	746	415	309	22	7	25		
61 to 84	664	521	210	292	15	8	Q		
85 to 167	474	436	181	233	Q	9	Q		
Open Continuously	398	330	103	182	19	23	18		
Energy Sources (more than one may apply)									
Electricity	4,395	3,239	1,546	1,520	110	62	130		
Natural Gas	2,670	2,191	748	1,520	9	17	Q		
Fuel Oil	434	288	109	65	110	4	Q		
District Heat	117	101	37	22	Q	62	Q		
District Chilled Water	50	37	Q	15	Q	19	Q		
Propane	451	334	165	21	44	Q	130		
Other	153	89	54	33	Q	Q	Q		
Primary Space Heating									
Energy Source									
Electricity	1,128	867	687	185	Q	Q	12		
Natural Gas	2,189	1,759	583	1,232	Q	Q	N		
Fuel Oil	302	205	74	Q	99	Q	Q		
District Heat	77	70	15	20	Q	45	N		
Propane	282	174	98	N	Q	N	76		
Other	38	Q	Q	Q	Q	N	Q		
Cooking Energy Sources									
(more than one may apply)									
Electricity	437	410	199	190	18	8	41		
Natural Gas	505	497	111	412	6	4	Q		
Propane	118	105	38	Q	17	Q	55		
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016	3,087	1,465	1,459	109	61	116		
Buildings with Cooling	3,560	2,915	1,435	1,375	70	50	109		
Buildings with Water Heating	3,239	3,239	1,546	1,520	110	62	130		
Buildings with Cooking	857	818	283	481	35	11	74		
Buildings with Manufacturing	151	89	55	36	Q	Q	Q		
Buildings with Electricity									
Generation	172	143	63	68	Q	12	Q		
Water Heating Equipment									
Centralized System	2,472	2,472	1,048	1,244	88	52	104		
Distributed System	566	566	399	173	Q	5	Q		
Combination of Centralized									
and Distributed System	200	200	99	103	Q	5	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.

Table B26. Water-Heating Energy Sources, Floorspace, 1999

			Total Floors	pace (million so	uare feet)		
					ng Energy Sou han one may a		
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
All Buildings	67,338	56,115	24,171	29,196	2,218	4,182	1,371
Building Floorspace							
(Square Feet)					_	_	_
1,001 to 5,000		4,280	2,307	1,719	Q	Q	Q
5,001 to 10,000		5,748	2,287	3,204	Q	Q	Q
10,001 to 25,000	,	9,000	4,220	4,221	224	164	493
25,001 to 50,000		8,088	3,175	4,602	304 351	471 613	Q Q
50,001 to 100,000		8,887 7,527	3,590 2,970	4,924 4,344	Q	732	Q
200,001 to 500,000		6,258	2,970	3,446	437	752 758	Q
Over 500,000	6,628	6,327	3,551	2,736	Q	1,295	N
Principal Building Activity							
Education	8,651	8,059	1,996	4,938	831	882	Q
Food Sales	994	951	284	592	Q	Q	Q
Food Service	1,851	1,846	509	1,277	Q	Q	Q
Health Care	2,918	2,903	619	1,649	219	713	Q
Inpatient	1,865	1,862	Q	1,165	206	628	N
Outpatient	1,053	1,040	478	484	Q	Q	Q
Lodging	4,521	4,442	745	3,152	Q	536	251
Mercantile	10,398	8,698	5,959	3,811	Q	N	Q
Retail (Other Than Mall)	4,766	3,453	1,937	1,519	Q	N	Q
Enclosed and Strip Malls	5,631	5,244	4,022	2,293	Q	N	Q
Office	12,044	10,872	5,771	4,460	284	953	Q
Public Assembly	4,393	3,893	1,295	2,061	Q	597	Q
Public Order and Safety	1,168	830	Q	454	Q	Q	Q
Religious Worship	3,405	3,109	1,109	1,812	Q	Q	Q
Service	3,388	2,351	1,353	978	Q	Q	Q N
Warehouse and Storage Other	10,477	6,743 983	3,950 269	3,145 569	Q Q	Q Q	N N
Vacant	1,222 1,908	436	209 Q	298	Q	N N	Q
Year Constructed							
1919 or Before	4,034	3,130	1,034	1,848	187	256	Q
1920 to 1945	6,445	4,644	1,551	2,516	Q	627	Q
1946 to 1959	9,127	7,154	2,235	4,047	578	813	Q
1960 to 1969	10,866	9,421	3,438	5,390	424	1,029	Q
1970 to 1979	11,840	10,182	4,981	4,701	322	574	Q
1980 to 1989	13,931	12,137	6,533	5,483	303	507	Q
1990 to 1999	11,094	9,446	4,399	5,211	Q	377	Q
Census Region							
Northeast	12,360	10,577	4,485	4,074	1,678	1,300	561
Midwest	16,761	13,702	4,633	8,323	Q	1,219	428
South	23,485	19,014	10,480	8,943	328	863	Q
West	14,731	12,822	4,574	7,856	Q	799	Q
Workers (main shift) Fewer than 5	14,321	8,401	3,332	4,426	Q	288	438
5 to 9		5,145	2,094	2,666	Q	200 Q	436 Q
10 to 19		7,000	3,354	3,435	Q	305	Q
20 to 49		9,445	3,905	5,435 5,161	365	370	Q
50 to 99		8,166	3,558	4,525	375	439	Q
100 to 249		7,760	3,056	4,239	422	803	Q
	5,550	1,130	5,500	1,200		000	· ·

Table B26. Water-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)											
					ng Energy Sou han one may a							
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane					
Weekly Operating Hours												
39 or Fewer	6,596	3,340	1,148	1,851	Q	Q	Q					
40 to 48	13,105	10,049	4,793	4,885	338	395	Q					
49 to 60	14,200	12.280	6,003	5,728	369	523	282					
61 to 84	12,458	11,334	5,919	5,481	403	685	Q					
85 to 167	9,116	8,041	3,310	4,343	Q	690	Q					
Open Continuously	11,863	11,070	2,998	6,907	504	1,876	268					
Energy Sources (more than one may apply)												
Electricity	65,716	56,115	24,171	29,196	2,218	4,182	1,371					
Natural Gas	45,525	41,366	13,914	29,196	959	1,829	Q					
Fuel Oil	13,285	11,852	5,017	5,148	2,218	1,343	Q					
District Heat	5,891	5,301	1,090	675	Q	4,182	Q					
District Chilled Water	2,750	2,455	447	498	Q	1,729	Q					
Propane	6,290	5,409	2,806	1,173	906	Q	1,371					
Other	2,322	1,887	978	1,116	Q	Q	Q					
Primary Space Heating Energy Source												
Electricity	17,627	15,562	11,461	4,830	Q	Q	288					
Natural Gas	32,729	29,379	8,940	22,589	451	Q	N					
Fuel Oil	3,719	3,085	1,021	437	1,639	Q	Q					
District Heat	5,077	4,519	690	517	Q	3,776	N					
Propane	2,107	1,454	824	N	Q	N	642					
Other	343	Q	Q	Q	Q	N	Q					
Cooking Energy Sources												
(more than one may apply)												
Electricity	13,733	13,136	6,559	6,875	811	979	554					
Natural Gas	16,785	16,431	5,166	11,979	654	1,235	Q					
Propane	1,754	1,635	857	Q	436	Q	373					
Energy End Uses (more than one may apply)												
Buildings with Space Heating	61,602	54,204	23.070	28,479	2,206	4,162	1,227					
	58.474	52,589	23,070	26,479 27,461	1,890	3,723	1,227					
Buildings with Water Heating	,	52,589	23,177 24,171	27,461	2,218	*						
Buildings with Water Heating	56,115 24,681		24,171 9,556	29,196 14,020	1,423	4,182 1,791	1,371 778					
Buildings with Cooking	3,126	23,830 2,364	1,016	14,020	1,423 Q	1,791 Q	77° Q					
Buildings with Electricity	3,120	2,304	1,016	1, 44 3	Q	Q	Q					
Generation	11,882	11,079	5,163	5,737	710	1,575	Q					
Water Heating Equipment												
Centralized System	35,579	35,579	12,585	19,755	1,534	2,715	1,020					
Distributed System	10,899	10,899	7,068	4,032	Q	566	Q					
Combination of Centralized	, 555	, 500	.,000	.,	~	5.00	~					

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.

Table B27. Cooking Energy Sources, Number of Buildings and Floorspace, 1999

				g Energy S	ources			Cooking	g Energy S	OUTCOS
			(more ti	nan one ma	y apply)				an one ma	
	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane
All Buildings	4,657	857	437	505	118	67,338	24,681	13,733	16,785	1,754
Building Floorspace										
(Square Feet)										
1,001 to 5,000	2,348	357	189	189	70	6,774	1,095	574	602	205
5,001 to 10,000	1,110	176	76	121	Q	8,238	1,272	574	877	-00
10,001 to 25,000	708	150	76	80	Q	11,153	2,415	1,249	1,272	
25,001 to 50,000		72	39		5					
, , , , , , , , , , , , , , , , , , ,	257			46		9,311	2,630	1,432	1,637	184
50,001 to 100,000	145	54	30	35	4	10,112	3,901	2,157	2,503	336
100,001 to 200,000	59	29	16	19	2	8,271	4,092	2,260	2,705	
200,001 to 500,000	23	14	8	11	Q	6,851	4,254	2,456	3,418	
Over 500,000	7	5	3	4	Q	6,628	5,020	3,031	3,770	C
Principal Building Activity										
Education	327	106	49	70	6	8,651	5,670	2,913	3,986	444
Food Sales	174	85	69	27	Q	994	676	406	373	
Food Service	349	316	142	220	71	1,851	1,761	858	1,348	273
Health Care	127	11	5	8	Q	2,918	1,812	1,078	1,461	C
Inpatient	11	9	4	8	Q	1,865	1,738	1,016	1,443	C
Outpatient	116	Q	Q	Q	N	1,053	Q	Q	Q	N
Lodging	153	41	17	23	Q	4,521	2,401	920	2,020	C
Mercantile	667	96	58	58	6	10,398	5,218	3,059	3,481	388
Retail (Other Than Mall)	534	29	21	Q	Q	4,766	811	630	333	Q
Enclosed and Strip Malls	133	68	37	44	6	5,631	4,407	2,428	3,149	384
Office	739	19	12	10	Q	12,044	3,149	2,119	1,794	G
Public Assembly	305	101	50	44	Q	4,393	2,027	1,204	1,183	C
•	72	12	Q	Q	Q	1,168	301	1,20 4 Q	1,103 Q	
Public Order and Safety										
Religious Worship	307	51	19	36	Q	3,405	842	428	569	
Service	478	Q	Q	Q	N	3,388	Q	Q	Q	
Warehouse and Storage	603	Q	Q	Q	N	10,477	Q	Q	Q	N
OtherVacant	102 253	Q Q	Q Q	Q Q	Q N	1,222 1,908	Q Q	Q Q	Q Q	C N
	200	~	~	~		.,000	~	~	~	
Year Constructed 1919 or Before	419	69	12	50	Q	4,034	1,091	425	766	C
1920 to 1945	499	85	45	53	Q	6,445	2,232	1,132	1,508	C
1946 to 1959	763	115	45	84	Q	9,127	3,195	1,132	2,416	
1960 to 1969										
	665	131	69	75 05	Q	10,866	4,178	2,428	2,786	
1970 to 1979	774	161	85	95	23	11,840	4,551	2,726	3,071	395
1980 to 1989	846 690	173 124	108 71	69 78	45 5	13,931 11,094	5,030 4,403	3,097 2,458	3,173 3,065	
1000 to 1000	000	.2.	, ,	,,	Ü	11,001	1, 100	2,100	0,000	000
Census Region	000	444	00	0.5	20	40.000	5.045	0.000	2 200	500
Northeast	686	141	68	65	36	12,360	5,245	2,680	3,380	
Midwest	1,188	221	92	153	Q	16,761	6,042	3,335	4,445	
South West	1,762 1,021	315 181	206 71	160 127	35 Q	23,485 14,731	8,569 4,825	5,166 2,551	5,345 3,614	
	1,021	101	, ,	121	ų.	,,,,,,,	1,020	2,001	0,014	G
Workers (main shift) Fewer than 5	2,376	287	146	145	Q	14,321	1,651	830	778	C
5 to 9	807	131	43	75 112	Q	6,325	1,341	545 970	836	
10 to 19	683	172	92	113	Q	8,028	2,021	879	1,433	
20 to 49	487	154	95	99	20	10,814	3,871	2,169	2,595	
50 to 99	174	65	33	42	5	8,898	4,354	2,354	2,969	338
100 to 249 250 or More	90 39	30 18	16 12	19 12	3 Q	8,356 10,595	4,305 7,138	2,349 4,608	2,970 5,204	445 Q

Table B27. Cooking Energy Sources, Number of Buildings and Floorspace, 1999

		Number of	Buildings (th	Total Floorspace (million square feet)						
				g Energy S nan one ma					g Energy S an one ma	
	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane
					opuno					Терине
Weekly Operating Hours	070	00	00	40	•	0.500	201	440	404	
39 or Fewer	978	93	32	42	Q	6,596	884	440	464	C
40 to 48	1,156	97	34	57	Q	13,105	2,492	1,142	1,606	C
49 to 60	986	131	55	80	12	14,200	4,159	2,298	2,646	266
61 to 84	664	188		140	19	12,458	6,052	3,464	4,443	284
85 to 167	474	264		134	40	9,116	4,659	2,917	2,618	472
Open Continuously	398	85	49	51	6	11,863	6,435	3,472	5,008	384
Energy Sources (more than one may apply)										
Electricity	4,395	857	437	505	118	65,716	24,681	13,733	16,785	1,754
Natural Gas	2,670	615		505	3	45,525	19,857	10,015	16,785	292
Fuel Oil	434	92		35	25	13,285	7,840	4,612	5,264	756
District Heat	117	28	18	Q	Q	5,891	2,487	1,445	1,563	C
District Chilled Water	50	6	4	4	Q	2,750	1,047	530	701	C
Propane	451	158		5	118	6,290	3,005	1,838	616	1.754
Other	153	47		15	Q	2,322	1,331	968	717	C
Water Heating Energy Sources										
(more than one may apply)										
Electricity	1,546	283	199	111	38	24,171	9,556	6,559	5,166	857
Natural Gas	1,520	481	190	412	Q	29,185	14,020	6,875	11,979	C
Fuel Oil	110	35	18	6	17	2,218	1,423	811	654	436
District Heat	62	11	8	4	Q	4,182	1,791	979	1,235	C
Propane	130	74	41	Q	55	1,371	778	554	Q	373
Energy End Uses (more than										
one may apply)										
Buildings with Space Heating	4,016	798	397	475	111	61,602	23,813	13,184	16,256	1,683
Buildings with Cooling	3,560	792	409	479	95	58,474	23,730	13,247	16,268	1,634
Buildings with Water Heating	3,239	818	410	497	105	56,115	23,830	13,136	16,431	1,635
Buildings with Cooking	857	857	437	505	118	24,681	24,681	13,733	16,785	1,754
Buildings with Manufacturing Buildings with Electricity	151	Q	Q	Q	Q	3,126	495	Q	Q	C
Generation	172	63	37	43	5	11,882	7,823	4,881	5,615	444

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

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

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

					1			•	-		
		Number of	Buildings (thousand)		Total Floorspace (million square feet)					
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	
All Buildings	4,657	641	576	627	2,813	67,338	5,736	7,593	10,745	43,264	
Building Floorspace											
(Square Feet)											
1,001 to 5,000	2,348	366	230	272	1,479	6,774	1,091	707	750	4,227	
5,001 to 10,000	1,110	164	194	149	603	8,238	1,148	1,504	1,177	4,409	
10,001 to 25,000	708	79	102	128	399	11,153	1,289	1,611	1,936	6,317	
25,001 to 50,000	257	20	29	45	162	9,311	746	1,078	1,690	5,796	
50,001 to 100,000	145	8	12	20	105	10,112	515	877	1,407	7,313	
100,001 to 200,000	59	3	5	7	45	8,271	378	739	946	6,207	
200,001 to 500,000	23	1	2	4	16	6,851	406	589	1,341	4,515	
Over 500,000	7	Q	1	2	5	6,628	Q	487	1,498	4,480	
Principal Building Activity											
Education	327	Q	Q	43	269	8,651	Q	Q	1,184	7,253	
Food Sales	174	Q	Q	58	84	994	Q	Q	151	623	
Food Service	349	Q	Q	67	213	1,851	Q	Q	428	1,084	
Health Care	127	N	Q	20	94	2,918	N	Q	496	2,272	
Inpatient	11	N	Q	2	9	1,865	N	Q	295	1,477	
Outpatient	116	N	Q	Q	85	1,053	N	Q	Q	795	
Lodging	153	Q	12	22	117	4,521	Q	367	807	3,250	
Mercantile	667	41	103	117	405	10,398	550	1,131	2,109	6,608	
Retail (Other Than Mall)	534	Q	84	108	311	4,766	Q	711	1,211	2,693	
Enclosed and Strip Malls	133	Q	Q	10	94	5,631	Q	420	898	3,915	
Office	739	Q	22	98	608	12,044	234	486	2,570	8,754	
Public Assembly	305	31	30	20	224	4,393	378	342	540	3,133	
Public Order and Safety	72	Q	Q	Q	41	1,168	Q	Q	Q	819	
Religious Worship	307	Q	Q	35	253	3,405	Q	Q	618	2,632	
Service	478	57	72	94	255	3,388	362	406	628	1,993	
Warehouse and Storage	603	247	205	29	123	10,477	2,373	3,749	850	3,505	
Other	102	Q	Q	Q	70	1,222	Q	Q	Q	833	
Vacant	253	168	Q	Q	58	1,908	1,154	Q	Q	505	
Year Constructed											
1919 or Before	419	69	48	56	246	4,034	441	507	798	2,288	
1920 to 1945	499	69	79	103	248	6,445	886	834	1,249	3,476	
1946 to 1959	763	97	93	86	487	9,127	725	1,304	1,178	5,920	
1960 to 1969	665	108	58	75	424	10,866	901	1,038	1,891	7,037	
1970 to 1979	774	83	107	86	498	11,840	924	1,458	1,670	7,789	
1980 to 1989	846	133	113	111	490	13,931	1,366	1,254	2,181	9,131	
1990 to 1999	690	82	78	109	421	11,094	493	1,198	1,777	7,625	
Floors											
One		500	329	322	1,728	26,800	3,722	3,850	2,913	16,315	
Two		94	209	163	702	16,985	1,052	2,534	2,616	10,783	
Three		34	18	113	255	8,928	440	362	2,253	5,873	
Four to Nine Ten or More		Q Q	20 1	25 3	120 8	10,180 4,445	427 Q	577 270	1,842 1,121	7,334 2,960	
Census Region											
Northeast	686	86	83	82	436	12,360	693	1,053	1,688	8,927	
Midwest	1,188	138	151	175	724	16,761	846	1,571	2,323	12,022	
South	1,762		182	254	1,067	23,485	2,887	2,538	4,335	13,725	
West	1,021	158	160	117	586	14,731	1,310	2,432	2,399	8,590	
Climate Zone: 45-Year Average											
Under 2,000 CDD and											
More than 7,000 HDD	525	Q	64	64	347	5,890	Q	674	626	4,368	
5,500-7,000 HDD	986	115	105	145	621	17,083	877	1,091	2,478	12,637	
4,000-5,499 HDD	1,085	136	154	144	651	16,243	952	1,760	2,701	10,831	
Fewer than 4,000 HDD	1,134	137	125	154	718	16,333	1,410	2,270	3,061	9,593	
2,000 CDD or More and											
Fewer than 4,000 HDD	926	203	129	119	476	11,788	2,276	1,797	1,879	5,836	

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

	•					_ · · ·					
		Number of	Buildings (thousand)		Total Floorspace (million square feet)					
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	
Workers (main shift)											
Fewer than 5	2,376	541	326	332	1,176	14,321	3,769	2,323	2,174	6,055	
5 to 9		34	155	77	541	6,325	305	1,426	732	3,862	
10 to 19		16	57	95	515	8,028	265	1,249	1,304	5,209	
20 to 49		32	21	86	349	10,814	468	958	1,848	7,541	
50 to 99		8	14	21	132	8,898	362	776	1,137	6,622	
100 to 249		Q	2	10	69	8,356	302 Q	357	1,137	6,490	
250 or More	39	Q	1	7	31	10,595	Q	504	2,344	7,485	
200 Of Micro	00	ų.		•	01	10,000	ų.	001	2,011	7,100	
Weekly Operating Hours											
39 or Fewer	978	340	100	41	497	6,596	2,379	657	368	3,191	
40 to 48		87	186	202	680	13,105	1,015	2,258	2,290	7,541	
49 to 60		43	118	137	689	14,200	523	1,753	2,538	9,386	
61 to 84		66	94	97	408	12,458	670	1,224	2,100	8,463	
85 to 167		68	42	74	290	9,116	717	925	1,366	6,108	
Open Continuously	398	37	36	76	250	11,863	431	775	2,082	8,575	
Vacancy Status											
Completely Vacant	140	110	Q	Q	Q	953	721	Q	Q	Q	
Mostly Vacant		58	Q	Q	38	956	433	Q	Q	319	
Partially Vacant		146	99	107	345	15,520	1,664	1,950	2,904	9,003	
Not At All Vacant	3,707	327	454	515	2,410	49,910	2,918	5,438	7,797	33,757	
Energy Sources (more than											
one may apply)											
Electricity	4,395	387	569	626	2,813	65,716	4,151	7,564	10,737	43,264	
Natural Gas	2,670	82	322	441	1,825	45,525	1,141	4,873	8,052	31,460	
Fuel Oil	434	Q	62	59	311	13,285	Q	1,113	2,584	9,377	
District Heat	117	Q	Q	22	90	5,891	Q	Q	986	4,708	
District Chilled Water	50	Q	Q	4	43	2,750	Q	Q	379	2,298	
Propane	451	Q	87	50	298	6,290	Q	1,046	1,083	3,947	
Other	153	Q	49	17	84	2,322	Q	261	473	1,541	
Space-Heating Energy Sources											
(more than one may apply)											
Electricity	1,880	N	290	255	1,335	32,291	N	4,722	6,110	21,459	
Natural Gas	2,380	Q	301	394	1,685	37,902	Q	4,319	6,642	26,932	
Fuel Oil	377	N	58	52	266	5,611	N	564	786	4,260	
District Heat	96	N	Q	16	80	5,534	N	Q	886	4,575	
Propane	307	N	61	30	216	2,728	N	461	421	1,845	
Other	94	N	Q	Q	42	945	N	Q	Q	593	
Primary Space-Heating											
Energy Source											
Electricity	1,128	N	189	165	774	17,627	N	3,013	3,275	11,339	
Natural Gas	2,189		277	365	1,547	32,729	N	3,648	5,829	23,252	
Fuel Oil			44	45	213	3,719	N	481	409	2,829	
District Heat		N	Q	15	61	5,077	N	Q	837	4,176	
Propane		N	Q	28	205	2,107	N	Q	339	1,445	
Other	38	N	Q	Q	Q	343	N	Q	Q	Q	
Energy End Uses (more than											
one may apply)											
Buildings with Space Heating	4,016	N	576	627	2,813	61,602	N	7,593	10,745	43,264	
Buildings with Cooling	3,560	159	461	524	2,415	58,474	2,113	6,619	9,939	39,802	
Buildings with Water Heating	3,239	152	373	476	2,237	56,115	1,911	5,823	9,453	38,928	
Buildings with Cooking	857	59	72	148	578	24,681	867	1,326	4,410	18,077	
Buildings with Manufacturing		Q	37	14	92	3,126	Q	890	376	1,766	
Buildings with Electricity	101	· ·	01		02	5,120	· ·	000	0.0	.,,,,,	
Generation	172	Q	Q	25	129	11,882	Q	700	2,523	8,420	
		~	~		0	, - 3=	~		_,0	-,0	

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

	ı	Number of	Buildings (thousand)		Total Floorspace (million square feet)					
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	
Percent of Floorspace Cooled											
Not Cooled	1,097	482	115	102	398	8,864	3,622	974	806	3,462	
1 to 50	1,012	47	400	113	452	16,846	653	5,549	2,146	8,498	
51 to 99	751	26	24	364	337	16,966	329	628	6,831	9,178	
100	1,796	87	36	48	1,625	24,662	1,131	441	963	22,126	
Percent Lit When Open											
Zero	34	Q	Q	N	Q	173	Q	Q	N	Q	
1 to 50	835	94	277	114	349	9,187	1,012	2,994	1,427	3,754	
51 to 99	1,228	66	71	313	778	20,665	715	1,313	5,374	13,264	
100	2,096	101	206	196	1,593	34,233	1,508	3,054	3,925	25,747	
Building Never Open/	,				,	,	,	ŕ	ŕ	,	
Electricity Not Used	464	354	Q	Q	86	3,080	2,400	Q	Q	445	
Heating Equipment (more											
than one may apply)											
Heat Pumps	492	N	53	70	369	8,923	N	1,098	1,797	6,028	
Furnaces	1,460	N	236	271	953	14,449	N	2,718	3,042	8,689	
Individual Space Heaters	894	N	137	150	607	17,349	N	2,432	3,332	11,585	
District Heat	96	N	Q	16	80	5,534	N	Q	886	4,575	
Boilers	581	N	54	66	460	19,522	N	1,203	2,977	15,343	
Packaged Heating Units	1,347	N	129	232	986	25,743	N	2,702	4,661	18,380	
Other	185	N	53	13	118	4,073	N	607	774	2,692	
Building Shell Conservation											
Features (more than one											
may apply)											
Multipaned Windows	2,130	82	233	293	1,521	38,193	1,232	3,380	6,378	27,204	
Tinted, Reflective, or											
Shading Glass	1,283	58	161	197	868	29,915	1,138	2,841	5,318	20,619	
HVAC Conservation Features											
(more than one may apply)											
Variable Air-Volume System	550	33	64	53	399	19,387	445	1,434	3,339	14,169	
Economizer Cycle	567	Q	15	102	442	21,256	Q	902	3,565	16,640	
HVAC Maintenance Energy Management and	2,786	81	302	419	1,983	53,395	1,412	5,057	8,836	38,090	
Control System (EMCS)	460	8	24	41	387	21,613	360	989	3,492	16,771	
Off-Hour Equipment Reduction											
(more than one may apply)											
Heating	2,862	N	409	435	2,018	39,969	N	5,198	6,853	27,918	
Cooling	2,622	103	368	375	1,776	39,161	1,418	4,837	6,496	26,410	
Lighting	3,675	227	515	517	2,415	51,083	2,783	6,498	8,362	33,440	
Office Equipment	184	Q	7	25	148	9,063	Q	395	1,408	6,998	

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

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

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	I	Number of	Buildings ((thousand)		To	tal Floorsp	oace (millior	n square feet)
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled
All Buildings	4,657	1,097	1,012	751	1,796	67,338	8,864	16,846	16,966	24,662
Building Floorspace										
(Square Feet)										
1,001 to 5,000	2,348	668	352	294	1,034	6,774	1,895	1,084	838	2,957
5,001 to 10,000		282	292		348	8,238	2,026		1,435	2,544
10,001 to 25,000	,	98	242		222	11,153	1,623	,	2,224	3,477
25,001 to 50,000		34	69	58	96	9,311	1,195		2,128	3,470
50,001 to 100,000		10	37	37	60	10,112	711	2,574	2,668	4,159
100,001 to 200,000		4	13		27	8,271	662		2,281	3,627
200,001 to 500,000		2	7		7	6,851	506	,	2,339	2,055
Over 500,000			1	3	2	6,628	Q	,	3,053	2,372
Principal Building Activity										
Education	327	54	55	59	160	8,651	678	2,718	2,242	3,013
Food Sales	174	Q	Q	57	88	994	Q	Q	372	440
Food Service	349	Q	59	98	167	1,851	Q	274	752	734
Health Care	127	Q	Q	27	76	2,918	Q	Q	1,258	1,409
Inpatient		Q	Q	3	4	1,865	Q	Q	943	757
Outpatient	116	N	Q	23	72	1,053	N	Q	315	652
Lodging		27	12	35	80	4,521	470		1,542	2,141
Mercantile		35	210		270	10,398	224		3,227	4,965
Retail (Other Than Mall)		34	184	117	199	4,766	194	1,662	1,266	1,645
Enclosed and Strip Malls		Q	Q	35	71	5,631	Q	Q	1,961	3,320
Office		22	63	154	499	12,044	262		4,525	6,363
Public Assembly		73	20	54	157	4,393	535		1,059	2,198
Public Order and Safety		/3 Q	16	9	6		333 Q		285	2,190
· ·						1,168				
Religious Worship		76	55		136	3,405	640		688	1,331
Service		190	185		69	3,388	907	1,598	338	545
Warehouse and Storage	603	295	264	Q	26	10,477	2,855		299	601
Other Vacant		Q 226	24 Q	6 Q	45 Q	1,222 1,908	Q 1,540		323 Q	488 Q
Year Constructed										
1919 or Before	419	159	105	65	90	4,034	1,123	1,237	1,022	653
1920 to 1945		186	133		86	6,445	2,062		1,234	1,213
1946 to 1959		174	205		282	9,127	1,526		1,796	2,737
1960 to 1969		169	126		247	10,866	1,542		3,235	3,683
1970 to 1979		125	163	118	368	11,840	790	2,812	2,998	5,240
1980 to 1989		144	148		426	13,931	1,083		3,584	6,431
1990 to 1999		141	131	122	296	11,094	739		3,096	4,706
Floors										
One	2,879	781	481	363	1,255	26,800	4,944	7,123	4,299	10,434
Two		195	361	218	394	16,985	1,794		3,984	5,898
Three		88	138	114	80	8,928	969		2,647	2,594
Four to Nine		33	31	51	62	10,180	971	1,480	3,729	3,999
Ten or More		Q	1	5	5	4,445	Q		2,306	1,737
Census Region										
Northeast	686	213	226	80	168	12,360	2,049	3,914	3,196	3,202
Midwest	1,188	327	330	207	324	16,761	2,390	5,068	4,741	4,562
South	1,762	256	289	320	896	23,485	1,936	4,618	5,801	11,130
West	1,021	301	167	144	409	14,731	2,489	3,246	3,229	5,768
Climate Zone: 45-Year Average										
Under 2,000 CDD and										
More than 7,000 HDD		159	169	101	96	5,890	1,086		1,442	1,144
5,500-7,000 HDD	986	275	266		278	17,083	2,794		4,744	4,944
4,000-5,499 HDD	1,085	319	263		350	16,243	2,245		4,416	5,148
Fewer than 4,000 HDD	1,134	221	141	173	599	16,333	1,798	3,068	3,826	7,641
2,000 CDD or More and										
Fewer than 4,000 HDD	926	123	173	157	474	11,788	941	2,524	2,538	5,785

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	. ,						1					
	<u> </u>	Number of	Buildings (thousand)		Total Floorspace (million square feet)						
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled		
Workers (main shift)												
Fewer than 5	2,376	862	416	314	784	14,321	5,617	3,288	1,843	3,573		
5 to 9	•	126	270	89	322	6,325	1,034	2,477	734	2,080		
10 to 19		47	170	152	314	8,028	618	2,799	1,977	2,634		
20 to 49		54	99	106	228	10,814	884	3,152	2,714	4,065		
50 to 99		5	36	50	83	8,898	379	2,173	2,510	3,837		
100 to 249		Q	19	28	42	8,356	Q	1,910	2,639	3,580		
250 or More	39	Q	3	13	23	10,595	Q	1,048	4,550	4,893		
Weekly Operating Hours												
39 or Fewer	978	539	88	66	285	6,596	3,483	815	596	1,702		
40 to 48		188	309	170	489	13,105	2,064	4,305	2,311	4,426		
49 to 60		136	292	184	375	14,200	974	4,595	3,580	5,050		
61 to 84		102	198	124	242	12,458	757	2,797	3,634	5,270		
85 to 167		38	71	127	238	9,116	588		2,645	3,322		
						,		2,561	*			
Open Continuously	398	94	54	82	168	11,863	998	1,774	4,201	4,891		
Vacancy Status			_	-	_			_	_	_		
Completely Vacant	140	128	Q	Q	Q	953	797	Q	Q	Q		
Mostly Vacant		98	Q	Q	Q	956	743	Q	Q	Q		
Partially Vacant		198	134	158	206	15,520	1,723	2,849	5,123	5,825		
Not At All Vacant	3,707	673	874	585	1,575	49,910	5,601	13,844	11,788	18,677		
Energy Sources (more than												
one may apply)												
Electricity	4,395	836	1,012	751	1,796	65,716	7,242	16,846	16,966	24,662		
Natural Gas	2,670	335	679	544	1,112	45,525	3,378	12,068	12,694	17,386		
Fuel Oil	434	132	149	63	90	13,285	1,100	3,354	4,780	4,051		
District Heat	117	20	9	31	57	5,891	726	583	1,957	2,626		
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,805		
Propane	451	133	97	52	169	6,290	875	2,203	1,620	1,592		
Other	153	46	34	19	54	2,322	253	574	756	739		
Cooling Energy Sources												
(more than one may apply)												
Electricity	3,450	N	1,005	720	1,725	55,545	N	16,536	16,117	22,893		
Natural Gas	142	N	20	32	90	1,914	N	435	609	870		
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,805		
Energy End Uses (more than												
one may apply)												
Buildings with Space Heating	4,016	616	965	725	1,709	61,602	5,242	16,193	16,637	23,531		
Buildings with Cooling	3,560	N	1,012	751	1,796	58,474	N	16,846	16,966	24,662		
Buildings with Water Heating	3,239	324	754	660	1,500	56,115	3,526	14,119	15,905	22,565		
Buildings with Cooking	857	66	154	228	410	24,681	950	3,979	9,208	10,543		
Buildings with Manufacturing	151	22	76	Q	42	3,126	265	1,765	517	580		
Buildings with Electricity												
Generation	172	23	40	48	61	11,882	344	1,634	5,316	4,588		
Percent of Floorspace Heated												
Not Heated	641	482	47	26	87	5,736	3,622	653	329	1,131		
1 to 50	576	115	400	24	36	7,593	974	5,549	628	441		
51 to 99		102	113		48	10,745	806	2,146	6,831	963		
100	2,813	398	452	337	1,625	43,264	3,462	8,498	9,178	22,126		
Percent Lit When Open	0.4	_	^	k +	^	470	_	^		^		
Zero		Q 177	Q 207	N 76	Q 196	173	Q 1 909	Q 4 202	N 1 290	Q 1 716		
1 to 50		177	397	76	186	9,187	1,808	4,383	1,280	1,716		
51 to 99		132	240		442	20,665	1,317	4,310	9,032	6,005		
100	2,096	348	365	258	1,125	34,233	3,024	8,000	6,617	16,593		
Building Never Open/	40.		_	^	^	0.000	0.000	^	^	_		
Electricity Not Used	464	414	Q	Q	Q	3,080	2,608	Q	Q	Q		

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	ı	Number of	Buildings (thousand)		Total Floorspace (million square feet)					
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	
Cooling Equipment (more											
than one may apply)											
Residential-Type Central											
Air Conditioners	676	N	241	156	280	8,329	N	3,054	2,604	2,67	
Heat Pumps	485	N	84	92	310	9,147	N	1,910	3,040	4,19	
Individual Air Conditioners	799	N	414	161	224	14,276	N	6.855	3,647	3.77	
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,80	
Central Chillers	130	N	Q	45	66	12,909	N	903	6,368	5,639	
Packaged Air Conditioning			_			,			2,222	-,	
Units	1.953	N	390	445	1.118	36,527	N	9.465	10.695	16.36	
Swamp Coolers	136	N	39	32	65	2,219	N	880	540	800	
Other	49	N	Q	19	Q	1,312	N	233	591	48	
Building Shell Conservation											
Features (more than one											
may apply)											
Multipaned Windows	2,130	295	524	392	919	38,193	2.717	9,607	11,157	14,71	
Tinted, Reflective, or	2,130	293	324	392	919	30,193	2,717	9,007	11,137	14,71	
Shading Glass	1,283	103	273	266	641	29,915	1,195	6,143	9,377	13,20	
HVAC Conservation Features											
(more than one may apply)											
Variable Air-Volume System	550	Q	91	116	328	19,387	378	2,436	7,098	9,47	
Economizer Cycle	567	N	72	151	344	21,256	N N	3,067	8,012	10,17	
HVAC Maintenance	2,786	266	682		1,297	53,395	3,086	13,113	15,243	21,95	
Energy Management and	2,700	200	002	542	1,231	33,393	3,000	13,113	15,245	21,90	
0,	460	27	74	85	264	04 642	705	2.002	7.640	10.01	
Control System (EMCS)	400	37	74	65	204	21,613	795	2,983	7,618	10,21	
Off-Hour Equipment Reduction											
(more than one may apply)											
Heating	2,862	414	738	494	1,216	39,969	3,329	11,278	10,170	15,19	
Cooling	2,622	N	806	533	1,283	39,161	N	12,168	10,686	16,30	
Lighting	3,675	565	927	627	1,556	51,083	5,079	14,601	12,311	19,09	
Office Equipment	184	9	41	41	93	9,063	315	2,614	2,454	3,679	

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.

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

All Buildings	. 2,348 . 1,110 . 708 . 257 . 145 . 59	Not Lit ^a 498 323 114 47 10 Q Q Q Q	1 to 50 Percent Lit 835 351 279 147 40 13	51 to 99 Percent Lit 1,228 517 351 198 84	100 Percent Lit 2,096 1,156 367 316	All Buildings 67,338 6,774 8,238	Not Lit ^a 3,253 915 818	1 to 50 Percent Lit 9,187	51 to 99 Percent Lit 20,665	100 Percent Lit 34,233
Building Floorspace (Square Feet) 1,001 to 5,000	. 2,348 . 1,110 . 708 . 257 . 145 . 59	323 114 47 10 Q Q	351 279 147 40 13	517 351 198	1,156 367	6,774	915	1,061	,	
(Square Feet) 1,001 to 5,000	. 1,110 . 708 . 257 . 145 . 59	114 47 10 Q Q Q	279 147 40 13	351 198	367			,	1,499	0.000
1,001 to 5,000	. 1,110 . 708 . 257 . 145 . 59	114 47 10 Q Q Q	279 147 40 13	351 198	367			,	1,499	0.000
5,001 to 10,000	. 1,110 . 708 . 257 . 145 . 59	114 47 10 Q Q Q	279 147 40 13	351 198	367			,	1,499	0.000
5,001 to 10,000	. 1,110 . 708 . 257 . 145 . 59	47 10 Q Q Q	147 40 13	198		8,238	818			3,299
25,001 to 50,000	. 257 . 145 . 59 . 23	10 Q Q Q	40 13		316			2,014	2,614	2,79
25,001 to 50,000	. 257 . 145 . 59 . 23	Q Q Q	13	84		11,153	796	2,320	3,085	4,95
50,001 to 100,000	. 145 . 59 . 23	Q Q			124	9,311	325	1,474	3,013	4,499
100,001 to 200,000200,001 to 500,000	. 59 . 23	Q Q		52	77	10,112	Q	925	3,657	5,38
200,001 to 500,000	. 23	Q	-	16	39	8,271	Q	529	2,247	5,40
			2	8	13	6,851	Q	448	2,345	3,91
Over 500,000			0	3	4	6,628	Q	415	2,206	3,982
Principal Building Activity										
Education	327	Q	28	98	202	8,651	Q	503	3,492	4,644
Food Sales	174	Q	Q	46	95	994	Q	Q	160	62
Food Service		Q	68	109	171	1,851	Q	443	658	746
Health Care		N	Q	58	47	2,918	N	Q	1,475	1,383
Inpatient		N	N	6	5	1,865	N	N	1,022	843
Outpatient		N	Q	52	42	1,053	N	Q	453	540
Lodging		Q	29	50	70	4,521	Q	857	1,508	2,111
Mercantile		Q	101	206	352	10,398	Q	1,204	3,144	5,993
Retail (Other Than Mall)		Q	81	163	282	4,766	Q	638	1,459	2,616
Enclosed and Strip Malls		Q	Q	43	71	5,631	Q	567	1,439	3,376
Office		Q	93	264	381		Q	753	4,642	6,642
		Q	53	109	118	12,044 4,393	Q	616	1,862	1,811
Public Assembly Public Order and Safety		Q	Q	30	26	1,168	Q	Q	321	636
•		N	78	89	141		N		993	1,357
Religious Worship						3,405		1,056		
Service		Q 103	104	111	250	3,388	Q 1 211	642	768	1,927
Warehouse and Storage		193	180	47	183	10,477	1,211	2,357	1,413	5,496
Other Vacant		Q 222	Q 31	Q Q	60 Q	1,222 1,908	Q 1,553	Q 297	222 Q	815 C
Year Constructed										
1919 or Before	410	77	100	101	00	4.024	406	1 120	1 200	1 100
		77 65	122	121	99	4,034	486	1,130	1,290	1,129
1920 to 1945			152	107	175	6,445	590	1,452	1,879	2,523
1946 to 1959		88	159	202	315	9,127	621	1,720	2,856	3,930
1960 to 1969		73	91	218	283	10,866	388	1,162	3,765	5,552
1070 to 1070	. 774	51	113	237	374	11,840	284	1,448	3,832	6,276
1980 to 1989		76 Q	108 91	199 144	464 387	13,931 11,094	659 Q	1,318 957	3,801 3,242	8,153 6,670
Floors										
One	. 2,879	367	391	614	1,507	26,800	1,938	3,498	6,059	15,305
Two		87	300	398	383	16,985	633	3,490	5,581	7,755
Three		27	111	136	147	8,928	309	1,589	3,339	3,691
Four to Nine		Q	32	75	53	10,180	309 Q	978	3,928	4,960
Ten or More		Q	Q	4	6	4,445	Q	9/0 Q	1,758	2,523
Census Region										
Northeast	. 686	79	123	194	291	12,360	582	1,620	4,081	6,077
Midwest		156	273	337	422	16,761	793	2,486	5,814	7,668
South		173	275	453	862	23,485	1,263	3,013	6,392	12,817
West	,	90	164	245	522	14,731	614	2,068	4,378	7,671

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

		Number of	Buildings (thousand)		Total Floorspace (million square feet)					
	All Buildings	Not Lit ^a	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	All Buildings	Not Lit ^a	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	
Manhama (marin alaife)											
Workers (main shift)	0.070	407	550	407	005	44.004	0.000	0.000	0.000	4.40	
Fewer than 5		467	558	487	865	14,321	3,096	3,999	2,822	4,404	
5 to 9		Q	135	216	442	6,325	Q		1,733	2,869	
10 to 19		Q	102		354	8,028	Q	1,679	2,336	3,930	
20 to 49		N	32		264	10,814	N	996	3,974	5,844	
50 to 99		N	7		90	8,898	N	405	3,562	4,93	
100 to 249		N	Q	35	54	8,356	N	Q	2,485	5,526	
250 or More	39	N	Q	12	27	10,595	N	Q	3,752	6,729	
Weekly Operating Hours											
39 or Fewer	978	411	146	135	286	6,596	2,741	920	1,003	1,932	
40 to 48	1,156	Q	280	346	521	13,105	Q	2,851	4,172	6,037	
49 to 60		Q	209	279	490	14,200	Q	2,080	4,882	7,208	
61 to 84	664	Q	72	194	361	12,458	Q	1,300	4,041	6,970	
85 to 167	474	Q	59	162	237	9,116	Q	918	2,603	5,384	
Open Continuously	398	Q	69	112	201	11,863	Q	1,118	3,964	6,702	
Vacancy Status											
Completely Vacant	140	140	N	N	N	953	953	N	N	N	
Mostly Vacant	113	82	31	Q	Q	956	601	297	Q	C	
Partially Vacant	697	142	158	225	172	15,520	904	2,180	5,417	7,018	
Not At All Vacant	3,707	134	646	1,003	1,923	49,910	795	6,710	15,241	27,163	
Energy Sources (more than											
one may apply)											
Electricity	4,395	236	835	1,228	2,096	65,716	1,631	9,187	20,665	34,233	
Natural Gas	,	70	500	884	1,216	45,525	648	5,855	15,751	23,271	
Fuel Oil		Q	53		211	13,285	Q	1,150	4,771	7,27	
District Heat		N	17	44	56	5,891	N N	444	2,024	3,423	
District Chilled Water		N	Q	Q	21	2,750	N	Q	880	1,655	
Propane		Q	82		257	6,290	Q	1,019	1,523	3,713	
Other		Q	Q	48	82	2,322	Q		1,025	1,140	
For a service of the											
Energy End Uses (more than											
one may apply)	4,016	118	741	1 160	1,995	61,602	752	8,175	10.050	32,725	
Buildings with Space Heating				1,162					19,950	•	
Buildings with Cooling		58	658	1,096	1,748	58,474	538	7,379	19,348	31,209	
Buildings with Water Heating		52	584	999	1,603	56,115	528	7,073	18,484	30,029	
Buildings with Cooking	857	Q	140	283	434	24,681	Q	_, 0	9,115	13,259	
Buildings with Manufacturing	151	Q	24	33	88	3,126	Q	263	765	2,041	
Buildings with Electricity Generation	172	Q	Q	70	82	11,882	Q	646	4,636	6,576	
		~	~	. •	02	,002	~	0.0	.,000	0,0.	
Percent of Floorspace Heated Not Heated	641	380	94	66	101	5 79G	2 500	1 012	715	1 500	
		380		66	101	5,736	2,500		715	1,508	
1 to 50		21	277	71	206	7,593	232	2,994	1,313	3,054	
51 to 99		Q 93	114 349		196 1,593	10,745 43,264	Q 500	1,427 3,754	5,374 13,264	3,925 25,747	
	, -				,			,	•	•	
Percent of Floorspace Cooled Not Cooled	1,097	440	177	132	348	8,864	2,715	1,808	1 217	3,024	
									1,317		
1 to 50		Q	397		365	16,846	Q	4,383	4,310	8,000	
51 to 99		Q	76		258	16,966	Q	1,280	9,032	6,617	
100	1,796	Q	186	442	1,125	24,662	Q	1,716	6,005	16,59	

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

	,	Number of	Buildings (thousand)		To	tal Floorsp	ace (millior	n square fee	t)
	All Buildings	Not Lit ^a	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	All Buildings	Not Lit ^a	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit
Danisant Lit When Classed										
Percent Lit When Closed	0.474	045	400	F4F	054	00.774	4 0 4 0	4 470	4.000	0.00
Zero	2,174	215	490	515	954	20,771	1,343	4,479	4,962	9,98
1 to 50	,	Q	258	553	866	30,950	Q	3,488	11,140	16,09
51 to 100	143	Q	Q	49	76	2,160	Q	Q	599	1,449
Building Never Closed/										
Electricity Not Used	652	270	69	112	201	13,457	1,673	1,118	3,964	6,702
Lighting Equipment Types										
(more than one may apply)										
Incandescent	2,193	Q	476	780	928	38,156	Q	5,551	14,573	17,940
Standard Fluorescent	3,778	Q	708	1,117	1,941	60,344	213	8,127	19,430	32,57
Compact Fluorescent	607	Q	112	223	271	20,666	Q	1,878	8,141	10,61
High Intensity Discharge		Q	94	120	215	19,223	Q	1,442	6,629	11,148
Halogen	572	Q	110	226	236	17,926	Q	1.784	6,977	9.13
Other		Q	Q	26	30	1,004	Q	Q	503	418
Building Shell Conservation										
Features (more than one										
may apply)										
Multipaned Windows	2,130	86	356	622	1,066	38,193	713	4,146	12,662	20,672
Tinted, Reflective, or										
Shading Glass	1,283	41	201	386	656	29,915	332	2,648	9,705	17,23
Lighting Conservation Features										
(more than one may apply)										
Specular Reflectors	843	Q	118	259	466	19,994	Q	1,936	6,993	11,053
Electronic Ballasts	2,167	Q	439	593	1,135	42,035	Q	5,299	13,311	23,39
Skylights or Atriums	580	50	101	174	256	18,286	445	1,891	6,320	9,630
Off-Hour Equipment Reduction										
(more than one may apply)										
Heating	2,862	81	519	878	1,384	39,969	493	5,573	13,152	20,750
Cooling	2,622	41	504	846	1,230	39,161	418	5,510	13,167	20,750
•	,				,	,		*	•	,
Lighting	3,675	N	742 7	1,077	1,855	51,083	N	7,736	16,402	26,945
Office Equipment	184	Q	/	79	98	9,063	Q	317	3,458	5,27

^a "Not Lit" includes buildings that were zero percent lit when open, buildings that were never open, and buildings that did not use any electricity. 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.

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

			Total Floor	space (million s	square feet)		
		Heated E			Buildings	Lit Rui	ldings ^c
	All Buildings	Total Floorspace ^a	Heated Floorspace ^b	Total Floorspace ^a	Cooled Floorspace ^b	Total Floorspace ^a	Lit Floorspace ^b
All Buildings	67,338	61,602	53,812	58,474	42,420	64,085	54,696
Building Floorspace							
(Square Feet)							
1,001 to 5,000	6,774	5,684	5,055	4,879	3,958	5,859	4,877
5,001 to 10,000	8,238	7,090	5,744	6,212	4,333		5,583
10,001 to 25,000	11,153	,	8,196	9,530	6,195		8,251
25,001 to 50,000	9,311	8,565	7,439	8,116	5,767	8,986	7,528
50,001 to 100,000	10,112		8,676	9,401	6,817	9,970	8,753
100,001 to 200,000	8,271	7,893	7,144	7,609	5,832		7,537
200,001 to 500,000	6,851	6,445	5,757	6,345	4,421	6,706	6,068
Over 500,000	6,628	6,465	5,803	6,382	5,098	6,603	6,100
Principal Building Activity							
Education	8,651	8,612	8,294	7,973	5,341	8,639	7,918
Food Sales	994	880	760	978	789	992	852
Food Service	1,851	1,721	1,520	1,760	1,431	1,848	1,450
Health Care	2,918	2,918	2,722	2,815	2,530	,	2,702
Inpatient	1,865		1,740	1,762	1,580	1,865	1,757
Outpatient	1,053	1,053	983	1,053	949	1,053	945
Lodging	4,521	4,424	4,028	4,051	3,520	4,476	3,610
Mercantile	10,398	9,848	8,629	10,174	8,247	10,341	9,038
Retail (Other Than Mall)	4,766	4,615	3,806	4,573	3,125	4,713	3,973
Enclosed and Strip Malls	5,631	5,233	4,823	5,601	5,122	,	5,065
Office	12,044	11,810	11,001	11,782	10,437	12,037	10,855
Public Assembly	4,393			3,859	3,183	,	3,518
Public Order and Safety	1,168	1,021	952	760	573		914
Religious Worship	3,405		3,154	2,765	2,127	3,405	2,543
	3,388	3,027	2,594	2,481	1,239	3,336	2,785
Service Warehouse and Storage	10,477	8,104	4,930	7,621	1,239		7,329
Other	1,222				791		
Vacant	1,222	1,086 754	579	1,087 368	228	1,176 355	1,052 129
Year Constructed							
1919 or Before	4,034	3,593	3,045	2,911	1,762	3,548	2,571
1920 to 1945	6,445		4,714	4,383	2,622	,	4,543
1946 to 1959	9,127	8,402	7,157	7,601	4,872		6,918
1960 to 1969	10,866		8,851	9,325	6,913	,	9,050
1970 to 1979	11,840			11,050	8,364	11,556	10,057
1980 to 1989	13,931	12,566		12,849	10,085		11,871
1990 to 1999	11,094	10,600	9,349	10,355	7,802		9,686
Floors							
One	26,800	23,078	19,623	21,856	15,431	24,863	21,574
Two	16,985		13,569	15,192	10,486		13,418
Three	8,928		7,675	7,959	5,326	8,619	6,925
Four to Nine	10,180			9,208	7,416		8,671
Ten or More	4,445		3,943	4,259	3,761	4,386	4,108
Census Region							
Northeast	12,360	11,667	10,574	10,311	6,656	11,778	10,074
Midwest	16,761	15,916	14,321	14,371	9,447	15,968	13,380
South	23,485	20,598	17,868	21,549	17,183	22,222	19,254
West	14,731	13,421	11,049	12,243	9,133	14,117	11,989
Climate Zone: 45-Year Average Under 2,000 CDD and							
More than 7,000 HDD	5,890	5,669	5,096	4,804	2,815	5,634	4,655
5,500-7,000 HDD	17,083		14,883	14,289	9,655		13,935
4,000-5,499 HDD	16,243			13,999	9,830		13,256
Fewer than 4,000 HDD	16,333		12,492	14,535	11,601	15,428	13,374
2,000 CDD or More and	10,000	17,020	12,732	17,000	11,001	10,720	10,074
Fewer than 4,000 HDD	11,788	9,512	7,850	10,847	8,519	11,187	9,476
1 GWCI (IIAII 4,000 FIDD	11,768	9,512	7,000	10,047	0,519	11,107	9,476

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

			Total Floor	space (million s	quare feet)		
		Heated B	Buildings	Cooled E	Buildings	Lit Bui	ldings ^c
	All Buildings	Total Floorspace ^a	Heated Floorspace ^b	Total Floorspace ^a	Cooled Floorspace ^b	Total Floorspace ^a	Lit Floorspace ^b
<u>'</u>	Dulluligs	1 loorspace	1 looi space	Tioorspace	Tioorspace	Tioorspace	Поогорасс
Workers (main shift)							
Fewer than 5	14,321	10,552	8,307	8,704	5,791	11,225	7,855
5 to 9	6,325	6,020	4,829	5,291	3,322	6,251	4,825
10 to 19	8,028	7,762	6,543	7,409	4,791	7,945	6,454
20 to 49	10,814	10,347	9,297	9,930	6,988	10,814	9,549
50 to 99	8,898	8,536	7,711	8,519	6,345	8,898	8,128
100 to 249	8,356	8,053	7,597	8,129	6,158	8,356	7,789
250 or More	10,595	10,333	9,528	10,491	9,026	10,595	10,097
Weekly Operating Hours							
39 or Fewer	6,596	4,217	3,660	3,113	2,406	3,855	3,096
40 to 48	13,105	12,090	9,874	11,041	7,203	13,061	10,325
49 to 60	14,200	13,677	11,855	13,225	9,068	14,170	12,070
61 to 84	12,458	11,787	10,474	11,701	8,870	12,312	10,831
85 to 167	9,116	8,399	7,480	8,528	6,079	8,905	7,971
Open Continuously	11,863	11,432	10,469	10,866	8,794	11,784	10,402
Vacancy Status							
Completely Vacant	953	Q	Q	Q	Q	N	N
Mostly Vacant	956	522	375	212	95	355	129
Partially Vacant	15,520	13,856	11,851	13,797	10,745	14,616	12,297
Not At All Vacant	49,910	46,992	41,382	44,309	31,446	49,114	42,270
Energy Sources (more than							
one may apply)							
Electricity	65,716	61,565	53,800	58,474	42,420	64,085	54,696
Natural Gas	45,525	44,385	39,168	42,147	30,553	44,877	38,486
Fuel Oil	13,285	13,074	11,792	12,185	8,821	13,192	11,786
District Heat	5,891	5,862	5,571	5,165	4,370	5,891	5,348
District Chilled Water	2,750	2,739	2,646	2,750	2,522	2,750	2,523
Propane	6,290	6,076	5,068	5,415	3,359	6,255	5,288
Other	2,322	2,276	1,996	2,069	1,438	2,292	2,015
Space-Heating Energy Sources							
(more than one may apply)							
Electricity	32,291	32,291	27,585	30,961	23,462	31,953	27,516
Natural Gas	37,902	37,893	33,395	35,080	24,720	37,436	32,042
Fuel Oil	5,611	5,611	5,042	4,638	2,618	5,518	4,746
District Heat	5,534	5,534	5,330	4,844	4,119	5,534	5,074
Propane	2,728	2,728	2,284	2,191	1,542	2,692	2,193
Other	945	945	798	779	516	936	767
Primary Space-Heating							
Energy Source							
Electricity	17,627	17,627	14,742	17,160	13,699	17,444	14,990
Natural Gas	32,729	32,729	28,846	30,003	20,630	32,288	27,652
Fuel Oil	3,719	3,719	3,278	2,912	1,514	3,635	3,043
District Heat	5,077	5,077	4,887	4,392	3,733	5,077	4,661
Propane	2,107	2,107	1,772	1,631	1,183	2,072	1,698
Other	343	343	286	263	146	335	252
Cooling Energy Sources							
(more than one may apply)							
Electricity	55,545	53,459	46,741	55,545	39,881	55,007	47,392
Natural Gas	1,914	1,898	1,719	1,914	1,485	1,914	1,644
District Chilled Water	2,750	2,739	2,646	2,750	2,522	2,750	2,523

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

			Total Floor	space (million s	quare feet)		
		Heated B	uildings	Cooled E	Buildings	Lit Bui	ldings ^c
	All Buildings	Total Floorspace ^a	Heated Floorspace ^b	Total Floorspace ^a	Cooled Floorspace ^b	Total Floorspace ^a	Lit Floorspace ^b
Energy End Uses (more than							
one may apply)							
Buildings with Space Heating	61,602	61,602	53,812	56,361	40,905	60,850	52,296
Buildings with Cooling	58,474	56,361	49,482	58,474	42,420	57,936	50,055
Buildings with Water Heating	56,115	54,204	48,070	52,589	38,844	55,586	48.12
Buildings with Cooking	24,681	23.813	22.090	23,730	19,070	24.647	21,920
Buildings with Manufacturing	3,126	3,031	2,250	2,861	1,338	3,069	2,750
Buildings with Electricity	0,.20	0,001	2,200	2,00.	.,000	0,000	2,. 0
Generation	11,882	11,643	10,702	11,538	9,415	11,857	10,840
Percent of Floorspace Heated							
Not Heated	5,736	N	N	2,113	1,514	3,235	2,400
1 to 50	7,593		2,009	6,619	2,220	,	
	•	7,593	,		,	7,361	5,09°
51 to 99	10,745	10,745	8,538	9,939	7,067	10,725	8,79
100	43,264	43,264	43,264	39,802	31,618	42,764	38,409
Percent of Floorspace Cooled							
Not Cooled	8,864	5,242	4,330	N	N	6,149	4,64
1 to 50	16,846	16,193	11,547	16,846	3,975	16,693	13,033
51 to 99	16,966	16,637	14,935	16,966	13,783	16,930	14,678
100	24,662	23,531	23,000	24,662	24,662	24,314	22,344
Percent Lit When Open							
Zero	173	Q	Q	Q	Q	N	N
1 to 50	9,187	8,175	5,728	7,379	3,853	9,187	3,267
51 to 99	20,665	19,950	17,807	19,348	14,402	20,665	17,195
100	34,233	32,725	29,701	31,209	23,763	34,233	34,233
Building Never Open/							
Electricity Not Used	3,080	679	515	472	369	N	Ņ
Percent Lit When Closed							
Zero	20,771	18,394	15,115	16,581	10,754	19,428	15,59°
1 to 50	30,950	29,724	26,410	28,964	21,215	30,723	26,740
51 to 100	2,160	2,015	1,806	2,064	1,657	2,151	1,963
Building Never Closed/	,	,	,	,	,	, -	,
Electricity Not Used	13,457	11,469	10,481	10,866	8,794	11,784	10,402
Heating Equipment (more							
than one may apply)							
Heat Pumps	8,923	8,923	7,819	8,766	7,104	8,870	7,803
Furnaces	14,449	14,449	11,825	12,819	7,866	14,304	11,385
Individual Space Heaters	17,349	17,349	14,759	15,708	10,273	17,129	14,722
District Heat	5,534	5,534	5,330	4,844	4,119	5,534	5,074
Boilers	19,522	19,522	18,039	17,947	12,574	19,431	17,008
Packaged Heating Units	25,743	25,743	22,846	25,134	19,505	25,512	22,714
Other	4,073	4,073	3,469	3,592	2,702	3,951	3,453
Cooling Equipment (more							
man one may appry)							
than one may apply) Residential-Type Central			6,610	8,329	5,473	8,265	6,712
Residential-Type Central	8,329	8,010	0,0.0				
Residential-Type Central Air Conditioners	8,329 9,147	8,010 9,052	7,986	9,147	7,321	9,120	8,032
Residential-Type Central Air Conditioners Heat Pumps	9,147	9,052	7,986				
Residential-Type Central Air Conditioners Heat Pumps Individual Air Conditioners	9,147 14,276	9,052 13,754	7,986 11,898	14,276	8,142	14,055	11,626
Residential-Type Central Air Conditioners Heat Pumps Individual Air Conditioners District Chilled Water	9,147 14,276 2,750	9,052 13,754 2,739	7,986 11,898 2,646	14,276 2,750	8,142 2,522	14,055 2,750	11,626 2,523
Residential-Type Central Air Conditioners	9,147 14,276	9,052 13,754	7,986 11,898	14,276	8,142	14,055	11,626 2,523
Residential-Type Central Air Conditioners	9,147 14,276 2,750 12,909	9,052 13,754 2,739 12,560	7,986 11,898 2,646 11,667	14,276 2,750 12,909	8,142 2,522 11,235	14,055 2,750 12,857	11,626 2,523 11,898
	9,147 14,276 2,750	9,052 13,754 2,739	7,986 11,898 2,646	14,276 2,750	8,142 2,522	14,055 2,750	8,032 11,626 2,523 11,898 31,889

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

			Total Floors	space (million s	quare feet)		
		Heated B	Buildings	Cooled E	Buildings	Lit Bui	ldings ^c
	All Buildings	Total Floorspace ^a	Heated Floorspace ^b	Total Floorspace ^a	Cooled Floorspace ^b	Total Floorspace ^a	Lit Floorspace ^b
Lighting Equipment Types							
(more than one may apply)	38,156	36,640	32,450	34,584	26,287	38,064	32.07
Incandescent	,	,	,		,	,	- ,-
Standard Fluorescent	60,344	57,516	50,532	55,007	39,913	60,131	51,70
Compact Fluorescent	20,666	20,127	18,151	19,829	15,888	20,634	18,23
High Intensity Discharge	19,223	18,821	16,715	18,076	11,899	19,219	17,37
Halogen	17,926	17,373	15,378	17,093	13,013	17,896	15,67
Other	1,004	973	858	953	772	989	86
Building Shell Conservation							
Features (more than one							
may apply)							
Multipaned Windows	38,193	36,962	33,278	35,476	26,242	37,480	32,81
Tinted, Reflective, or							
Shading Glass	29,915	28,777	25,703	28,721	22,459	29,583	26,48
HVAC Conservation Features							
(more than one may apply)							
Variable Air-Volume System	19,387	18,942	17,271	19,009	15,881	19,331	17,47
Economizer Cycle	21,256	21,107	19,797	21,256	17,589	21,187	19,54
HVAC Maintenance	53,395	51,983	46,550	50,309	37,457	53,044	46,43
Energy Management and							
Control System (EMCS)	21,613	21,252	19,858	20,817	17,232	21,556	19,94
Lighting Conservation Features							
(more than one may apply)							
Specular Reflectors	19,994	19,222	17,451	19,014	14,249	19,982	17,73
Electronic Ballasts	42,035	40,417	35,695	39,347	29,192	42,003	36,59
Skylights or Atriums	18,286	17,062	14,656	16,646	11,530	17,841	15,65
Off-Hour Equipment Reduction							
(more than one may apply)							
Heating	39,969	39,969	34,786	36,639	26,172	39,476	33,79
Cooling	39.161	37,743	32,819	39,161	27,834	38.743	33,06
Lighting	51,083	48,300	41,790	46,004	32,484	51,083	43,39
Office Equipment	9.063	8.802	8.247	8.748	6,215	9.052	8,42

^a "Total Floorspace" refers to all floorspace in heated, cooled, or lit buildings, including the floorspace that was not heated, cooled, or lit.

b "Heated Floorspace," "Cooled Floorspace," and "Lit Floorspace" refer only to the portion of floorspace in these buildings that was heated, cooled, or lit.

 $^{^{\}rm c}$ Data in "Lit Buildings" are for only floorspace lit when the building was open.

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

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

Table B32. Heating Equipment, Number of Buildings, 1999

				Number of I	Buildings (tho	usand)			
					ng Equipment		n one may a	(vlagı	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
All Buildings	4,657	4,016	492	1,460	894	96	581	1,347	185
Building Floorspace									
(Square Feet)									
1,001 to 5,000	2,348	1,982	240	783	397	Q	146	589	98
5,001 to 10,000	1,110	946	100	387	183	Q	144	302	Q
10,001 to 25,000		629	81	206	191	19	128	253	22
25,001 to 50,000		237	37	47	62	17	72	101	14
50,001 to 100,000		137	20	25	35	13	52	62	8
100,001 to 200,000		57	8	9	18	7	24	27	3
200,001 to 500,000		22	3	3	6	3	11	10	2
Over 500,000	7	7	1	1	3	2	3	3	1
Principal Building Activity									
Education	327	326	47	48	46	30	106	139	Q
Food Sales	174	149	Q	47	Q	Q	Q	65	Q
Food Service	349	321	Q	95	48	Q	Q	156	Q
Health Care	127	127	26	53	8	3	16	39	Q
Inpatient	11	11	1	Q	2	3	8	3	Q
Outpatient	116	116	Q	52	Q	Q	8	36	Q
Lodging		150	28	26	53	13	39	34	Q
5 5									
Mercantile	667	626	53	221	116	Q	65	255	36
Retail (Other Than Mall)	534	502	28	194	107	Q	60	173	Q
Enclosed and Strip Malls	133	123	25	27	9	N	5	81	Q
Office	739	728	139	236	135	19	105	275	13
Public Assembly	305	274	30	99	68	15	49	70	Q
Public Order and Safety	72	61	Q	Q	22	3	30	11	Q
Religious Worship	307	306	17	184	101	Q	51	78	Q
Service	478	421	37	189	122	Q	33	112	29
Warehouse and Storage	603	357	45	176	104	Q	41	76	Q
Other	102	84	Q	40	29	Q	6	24	Q
Vacant	253	84	Q	37	Q	Q	Q	Q	Q
Voor Comptunated									
Year Constructed 1919 or Before	440	250		400	70	40	400	40	_
	419	350	6	163	79	19	100	40	Q
1920 to 1945		430	23	206	107	9	83	110	Q
1946 to 1959		666	95	251	180	21	121	157	33
1960 to 1969		557	39	191	110	16	98	213	19
1970 to 1979	774	691	102	205	172	Q	63	304	35
1980 to 1989		713	124	237	127	11	65	289	59
1990 to 1999	690	608	103	208	119	4	52	235	Q
Census Region									
Northeast	686	601	24	222	119	31	189	135	22
Midwest	1,188	1,049	28	632	205	22	175	201	52
South	1,762	1,503	338	369	370	27	123	645	62
West	1,021	863	102	237	200	17	93	366	49
Climate Zone: 45-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD		475	4	246	117	3	131	65	26
5,500-7,000 HDD	986	870	27	457	170	22	182	206	51
4,000-5,499 HDD	1,085	950	153	395	211	42	161	189	44
Fewer than 4,000 HDD	1,134	997	183	198	238	8	71	509	35
2,000 CDD or More and									
Fewer than 4,000 HDD	926	724	124	164	157	21	36	378	29
•									

Table B32. Heating Equipment, Number of Buildings, 1999

Workers (main shift) Fewer than 5	All Buildings	All Heated Buildings	Heat	Heati	ng Equipment	(more than	one may a	pply)	
Fewer than 5		Heated	Heat						
Fewer than 5		Heated	Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
5 to 9		1,835	162	742	419	30	191	504	105
		773	73	370	188	14	108	204	25
10 to 19		667	131	164	125	10	109	290	12
20 to 49	487	456	81	141	86	12	83	210	18
50 to 99		166	28	24	46	15	41	84	14
100 to 249		81	11	17	20	8	31	40	5
250 or More	. 39	38	6	3	10	7	18	15	5
Weekly Operating Hours									
39 or Fewer	. 978	638	51	304	163	Q	76	156	Q
40 to 48	,	1,068	171	420	256	35	122	329	30
49 to 60		943	126	336	213	17	146	314	54
61 to 84	664	598	46	234	96	16	104	212	16
85 to 167	474	407	64	104	77	7	42	197	27
Open Continuously	. 398	361	34	62	89	20	90	139	31
Multibuilding Facility Activity									
Not Part of a Multibuilding									
Facility	. 3,295	2,876	314	1,176	654	18	383	933	135
College or University	. 70	69	Q	Q	Q	35	15	6	Q
Primary or Secondary School	224	211	35	23	31	Q	48	110	Q
Office Complex	. 134	121	33	31	26	Q	Q	38	3
Retail Complex	. 181	156	20	45	20	Q	Q	82	Q
Religious Campus or Complex	. 186	184	Q	76	54	Q	27	64	Q
Health Care Complex	. 72	65	21	Q	Q	7	12	26	Q
Government Complex	. 61	50	Q	Q	15	Q	8	7	Q
Other	434	284	32	97	74	5	51	81	18
Energy Sources (more than									
one may apply)									
Electricity	. 4,395	4,008	492	1,460	886	96	581	1,347	185
Natural Gas	. 2,670	2,588	194	1,104	581	41	416	939	71
Fuel Oil	. 434	432	38	172	115	7	170	40	39
District Heat	. 117	116	Q	Q	12	96	Q	Q	1
District Chilled Water	. 50	49	3	Q	9	39	3	Q	1
Propane		434	36	161	117	Q	87	120	28
Other	153	149	Q	46	39	Q	29	31	53
Space-Heating Energy Sources									
(more than one may apply)	4 000	4 000	475	E40	E0.4	20	400	711	440
Electricity		1,880	475	512	584	26	193	744	110
Natural Gas		2,380	144	1,077	543	Q	381	865	67
Fuel Oil		377	Q	166	100	Q	152	17	34
District Heat		96	4	Q 400	7	96	Q	Q	1
Propane		307	12	128	104	Q	41	81	19
Other	94	94	Q	Q	27	Q	12	Q	52
Primary Space-Heating									
Energy Source	4 400	4 400	070	100	242	_	40	40.	
Electricity		1,128	373	192	213	Q	40	494	62
Natural Gas	,	2,189	97	1,017	498	2	364	758	60
Fuel Oil		302	Q	119	79	Q 77	136	Q	Q
District Heat		77	3	Q	5	77 N	Q	4	Q
Propane Other		282 38	Q Q	115 Q	91 Q	N N	Q Q	74 Q	Q Q

Table B32. Heating Equipment, Number of Buildings, 1999

				Number of I	Buildings (tho	usand)			
				Heati	ng Equipment	t (more than	n one may a	ipply)	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016	4,016	492	1,460	894	96	581	1,347	18
Buildings with Cooling	3,560	3,400	478	1,193	670	77	474	1,304	143
Buildings with Water Heating	3,239	3,087	383	1,094	637	80	517	1,118	126
Buildings with Cooking	857	798	101	214	172	21	182	340	33
Buildings with Manufacturing Buildings with Electricity	151	143	Q	57	56	Q	8	46	C
Generation	172	169	30	27	45	9	77	57	ę
Percent of Floorspace Heated									
Not Heated	641	N	N	N	N	N	N	N	1
1 to 50		576	53	236	137	Q	54	129	53
51 to 99		627 2,813	70 369	271 953	150 607	16 80	66 460	232 986	13 118
	_,0.0	_,0.0	220	555	331	50	.50	220	
Heating Equipment (more									
than one may apply)	400	400	400	70	70	4	20	70	44
Heat Pumps		492	492	76	78	4	38 52	78	19
Furnaces	1,460 894	1,460 894	76 78	1,460 271	271 894	Q 7	115	108 207	28 28
Individual Space Heaters District Heat	96	96	4		69 4	96	115 Q	207 Q	20
	581	581	38	Q 52	115	90 Q	581	56	8
Boilers Packaged Heating Units		1,347	78	108	207	Q	56	1,347	15
Other		185	19	8	28	1	8	15	18
Cooling Equipment (more									
than one may apply)									
Residential-Type Central									
Air Conditioners	676	645	46	508	104	3	58	75	38
Heat Pumps		481	447	76	89	4	39	84	22
Individual Air Conditioners		771	84	262	294	16	211	167	4
District Chilled Water	50	49	3	Q	9	39	3	Q	
Central Chillers	130	126	12	12	26	15	96	26	8
Packaged Air Conditioning									
Units	1,953	1,859	130	470	327	35	223	1,219	49
Swamp Coolers	136	126	9	72	47	Q	18	48	
Other	49	48	Q	12	4	Q	14	4	C
Main Equipment Replaced Since									
1995 (more than one may apply)									
Heating Cooling	984 1,085	984 1,014	130 172	347 374	231 215	Q 10	97 128	381 397	27 18
5	1,000	1,011		0, 1	210	10	120	001	.,
Building Shell Conservation									
Features (more than one									
may apply)	0 10-	o o		202			^-	22-	-
Multipaned Windows	2,130	2,047	295	830	404	45	354	602	98
Tinted, Reflective, or Shading Glass	1,283	1,225	167	364	227	35	176	576	54
	, -	, -							
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	550	516	77	129	76	24	125	221	19
Economizer Cycle	567	559	58	88	79	32	112	334	2
HVAC Maintenance	2,786	2,704	370	954	483	93	497	1,065	88
Energy Management and									
Control System (EMCS)	460	452	48	64	68	48	116	241	2

Table B32. Heating Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)										
			ı	Heati	ng Equipment	(more than	one may a	pply)			
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other		
Off-Hour Equipment Reduction											
(more than one may apply)											
Heating	2,862	2,862	367	1,104	622	70	410	954	96		
Cooling	2,622	2,519	338	930	502	58	363	969	79		
Lighting	3,675	3,448	435	1,333	748	72	478	1,154	133		
Office Equipment	184	181	25	40	38	9	69	73	7		

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.

Table B33. Heating Equipment, Floorspace, 1999

			1	Total Floorsp	ace (million s	quare feet)			
				Heat	ing Equipmer	nt (more tha	n one may	apply)	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
All Buildings	67,338	61,602	8,923	14,449	17,349	5,534	19,522	25,743	4,073
Building Floorspace									
(Square Feet)									
1,001 to 5,000	6,774	5,684	679	2,271	1,183	Q	463	1,779	250
5,001 to 10,000	8,238	7,090	745	2,848	1,350	Q	1,040	2,301	Q
10,001 to 25,000	11,153	9,865	1,288	3,047	3,021	307	2,047	3,994	401
25,001 to 50,000	9,311	8,565	1,376	1,674	2,218	617	2,591	3,695	510
50,001 to 100,000	10,112	9,597	1,493	1,718	2,492	905	3,698	4,262	511
100,001 to 200,000		7,893	1,095	1,283	2,467	883	3,334	3,811	450
200,001 to 500,000		6,445	996	807	1,974	963	3,268	2,943	782
Over 500,000	6,628	6,465	1,250	802	2,643	1,698	3,081	2,959	903
Principal Building Activity									
Education	8,651	8,612	1,184	1,040	1,869	1,086	5,048	2,710	Q
Food Sales	994	880	Q	263	Q	Q	Q	402	Q
Food Service	1,851	1,721	Q	583	261	Q	Q	895	Q
Health Care	2,918	2,918	648	368	676	736	1,494	1,159	335
Inpatient	1,865	1,865	486	Q	560	641	1,235	761	Q
Outpatient	1,053	1,053	Q	264	Q	Q	259	398	Q
Lodging	4,521	4,424	1,068	649	1,659	527	1,814	1,688	Q
Mercantile	10,398	9,848	1,340	2,234	2,448	Q	1,291	6,664	701
Retail (Other Than Mall)	4,766	4,615	218	1,620	1,199	Q	536	2,171	Q
Enclosed and Strip Malls	5,631	5,233	1,122	614	1,199	N	755	4,493	Q
Office	12,044	11,810	1,122	1,807	2,631	1,487	4,211	4,304	1,244
			582	787		,			
Public Assembly	4,393	4,015			1,163	841	1,409	1,368	Q Q
Public Order and Safety	1,168	1,021	Q	Q	232	297	541	251	
Religious Worship	3,405	3,383	327	1,701	1,021	Q	1,010	1,047	Q
Service	3,388	3,027	381	1,129	1,165	Q	532	1,184	224
Warehouse and Storage	10,477	8,104	888	3,270	3,560	Q	1,369	3,542	428
Other Vacant	1,222 1,908	1,086 754	Q Q	309 218	257 Q	Q Q	247 Q	383 Q	Q Q
Voor Constructed									
Year Constructed 1919 or Before	4 024	2 502	254	1 214	1.040	400	1 207	400	0
	4,034	3,593	251	1,214	1,042	480	1,397	428	Q
1920 to 1945	,	5,559	449	1,552	1,772	764 1.065	2,264	1,476	Q
1946 to 1959	9,127	8,402	1,064	2,082	2,551	1,065	2,762	2,917	563
1960 to 1969	-,	9,966	1,129	2,053	2,496	1,351	4,231	3,961	560
1970 to 1979	,	10,916	1,651	2,235	3,345	769	3,275	4,899	684
1980 to 1989 1990 to 1999	-,	12,566 10,600	2,583 1,796	2,927 2,387	3,428 2,715	606 499	3,114 2,479	6,379 5,684	1,012 786
Consus Pagion									
Census Region	10.000	11 667	1 100	0.057	2 555	4.070	E 460	4.022	760
Northeast	12,360	11,667	1,193	2,257 5,767	3,555 4,667	1,876	5,469 5,061	4,033	769 1 113
Midwest	16,761	15,916	1,015	5,767	4,667	1,514	5,961	5,081	1,113
South West	23,485 14,731	20,598 13,421	4,580 2,135	3,949 2,476	5,471 3,657	1,022 1,121	4,209 3,883	10,455 6,175	1,391 800
Climate Zone: 45-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	5,890	5,669	283	1,736	1,754	250	2,815	1,436	362
5,500-7,000 HDD	17,083	16,206	1,135	4,996	4,866	1,736	6,733	5,623	1,222
4,000-5,499 HDD	16,243	15,206	2,827	4,996	4,866		5,072	5,623 4,851	1,222
						2,405			786
Fewer than 4,000 HDD	16,333	14,923	3,015	2,197	3,915	677	3,480	8,600	700
2,000 CDD or More and	44 700	0.540	4 000	4 540	0.004	400	4 400	E 000	070
Fewer than 4,000 HDD	11,788	9,512	1,663	1,516	2,064	466	1,422	5,233	676

Table B33. Heating Equipment, Floorspace, 1999

			-	Total Floorsp	ace (million s	guare feet)			
					ing Equipmer		n one mav	apply)	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Workers (main shift)									
Fewer than 5	14,321	10,552	707	3,874	2,913	289	1,840	3,005	673
5 to 9	6,325	6,020	655	2,510	1,680	292	1,285	1,788	178
10 to 19	8,028	7,762	1,340	1,953	1,973	372	1,771	3,002	219
20 to 49		10,347	1,761	2,631	2,538	534	2,739	4,935	451
50 to 99	8,898	8,536	1,401	1,221	2,531	645	3,234	4,416	300
100 to 249	8,356	8,053	1,105	1,164	2,376	1,031	3,706	4,172	608
250 or More		10,333	1,954	1,095	3,339	2,371	4,948	4,426	1,644
Weekly Operating Hours									
39 or Fewer	6,596	4,217	313	1,765	1,051	Q	1,140	1,200	Q
40 to 48	13,105	12,090	1,863	3,664	3,321	730	3,170	4,093	472
49 to 60	,	13,677	1,963	3,580	3,657	910	4,337	5,101	1,089
61 to 84	12,458	11,787	1,501	2,183	3,086	911	3,542	5,835	915
85 to 167	9,116	8,399	1,179	1,697	2,558	830	2,316	4,436	394
Open Continuously	11,863	11,432	2,105	1,560	3,677	2,114	5,018	5,077	1,025
Multibuilding Facility Activity Not Part of a Multibuilding									
Facility	41,289	38,071	5,574	10,209	11,297	1,366	11,936	15,861	2,689
College or University	2,605	2,585	Q	Q	319	1,757	566	266	Q
Primary or Secondary School	3,388	3,268	428	494	747	Q	1,724	1,515	Q
Office Complex	3,353	3,250	331	345	483	Q	1,392	1,333	309
Retail Complex	3,555	3,205	472	650	857	Q	Q	2,339	Q
Religious Campus or Complex	1,907	1,885	Q	832	584	Q	462	708	Q
Health Care Complex	2,339	2,302	604	Q	530	818	1,056	922	Q
Government Complex	1,513	1,348	Q	Q	437	740	429	200	Q
Other	7,389	5,690	862	1,655	2,096	491	1,677	2,599	346
Energy Sources (more than									
one may apply)	05.740	04.505	0.000	44.440	47.004	5 504	40.544	05.740	4.070
Electricity		61,565	8,923	14,449	17,321	5,534	19,514	25,743	4,073
Natural Gas		44,385	5,627	11,960	13,561	2,431	16,588	20,043	2,680
Fuel Oil		13,074	2,263	2,090	4,351	1,787	7,485	4,237	1,463
District Heat District Chilled Water		5,862 2,739	811 376	Q	1,314	5,534	301 326	847 497	285 159
	,	6,076	838	Q 1,801	567 1,915	2,279 Q		2,562	451
Propane Other	,	2,276	316	526	1,032	Q	2,153 1,044	1,018	483
Space-Heating Energy Sources									
(more than one may apply)									
Electricity	32,291	32,291	8,667	6,822	12,350	1,609	8,410	16,861	2,972
Natural Gas	37,902	37,893	4,466	11,524	11,488	678	15,131	17,324	1,982
Fuel Oil		5,611	532	1,295	1,444	Q	4,176	1,040	341
District Heat	5,534	5,534	730	Q	1,210	5,534	Q	767	249
Propane		2,728	204	1,075	1,051	Q	672	937	272
Other	945	945	Q	Q	534	Q	420	Q	315
Primary Space-Heating									
Energy Source	47.607	47.607	E 000	0.004	4 700	^	0 474	10.000	1 007
Electricity		17,627	5,009	2,281	4,788	Q 211	2,171	10,090	1,807
Natural Gas	,	32,729	3,076	10,311	9,945	211	13,918	13,958	1,634
Fuel Oil District Heat	,	3,719 5,077	Q 588	821 Q	683 1,042	Q 5,077	2,717 Q	333 602	Q Q
Propane		2,107	200 Q	864	725	5,077 N	Q Q	623	Q
Other		343	Q	Q	725 Q	N N	Q	Q	Q
Ou :GI	343	343	Q	Q	Q	IN	Q	Q	Q

Table B33. Heating Equipment, Floorspace, 1999

			1	Total Floorsp	ace (million s	quare feet)			
				Heat	ing Equipmer	nt (more tha	n one may	apply)	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Energy End Uses (more than									
one may apply) Buildings with Space Heating	61,602	61,602	8,923	14,449	17,349	5,534	19,522	25,743	4,073
Buildings with Cooling	58,474	56,361	8,766	12,819	15,708	4,844	17,947		3,592
Buildings with Water Heating	56,115	54,204	8,106	12,265	15,163	4,943	18,615		3,669
Buildings with Cooking		23,813	4,313	3,576	7,145	2,337	11,111		1,705
Buildings with Manufacturing	3,126	3,031	348	1,162	1,355	Q	730	1,349	Q
Buildings with Electricity									
Generation	11,882	11,643	2,396	1,437	4,275	1,986	5,704	5,016	1,444
Percent of Floorspace Heated									
Not Heated	5,736	N	N	N	N	N	N	N	N
1 to 50	7,593	7,593	1,098	2,718	2,432	Q	1,203	2,702	607
51 to 99	,	10,745	1,797	3,042	3,332	886	2,977		774
100	43,264	43,264	6,028	8,689	11,585	4,575	15,343	18,380	2,692
Heating Equipment (more than one may apply)									
Heat Pumps	8,923	8,923	8,923	1,585	2,644	730	2,634	3,828	444
Furnaces	14,449	14,449	1,585	14,449	4,460	Q	2,256	3,698	418
Individual Space Heaters	17,349	17,349	2,644	4,460	17,349	1,210	5,356	7,654	1,096
District Heat	5,534	5,534	730	Q	1,210	5,534	Q	767	249
Boilers	19,522	19,522	2,634	2,256	5,356	Q	19,522	5,277	795
Packaged Heating Units Other		25,743 4,073	3,828 444	3,698 418	7,654 1,096	767 249	5,277 795		1,193 4,073
Cooling Equipment (more than one may apply) Residential-Type Central									
Air Conditioners	8,329	8,010	1,362	4,975	2,810	303	2,282	2,617	646
Heat Pumps		9,052	8,243	1,601	2,750	701	2,749		528
Individual Air Conditioners	14,276	13,754	2,378	3,655	6,603	1,140	6,406	5,127	887
District Chilled Water	2,750	2,739	376	Q	567	2,279	326	497	159
Central Chillers	12,909	12,560	2,109	1,259	3,863	2,069	8,549	4,425	1,679
Packaged Air Conditioning									
Units	36,527	35,247	4,709	7,240	10,774	1,884	10,047	23,495	2,138
Swamp Coolers	2,219	2,190	483	756	835	Q	823	,	Q
Other	1,312	1,257	285	225	285	Q	637	385	468
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	13,220	13,220	2,392	3,550	3,797	Q	2,857	6,833	623
Cooling	17,390	16,386	2,859	4,009	4,781	826	5,240	7,755	716
Building Shell Conservation									
Features (more than one may apply)									
Multipaned Windows	38,193	36,962	6,068	8,881	10,930	3,233	13,442	15,101	2,752
Tinted, Reflective, or Shading Glass	29,915	28,777	4,617	5,194	7,488	2,904	9,604	14,049	2,303
HVAC Conservation Features	,	,	,	,	,		•	, -	
(more than one may apply)									
Variable Air-Volume System	19,387	18,942	2,773	2,473	5,022	2,780	8,355	8,506	1,734
Economizer Cycle		21,107	3,302	2,986	6,237	3,275	9,342		1,847
HVAC Maintenance		51,983	8,055	11,148	13,715	5,296	18,379		3,356
Energy Management and									
Control System (EMCS)	21,613	21,252	3,198	2,290	5,762	3,865	9,514	9,418	2,235

Table B33. Heating Equipment, Floorspace, 1999

		-		Total Floorsp	ace (million s	quare feet)			
				Heat	ing Equipmer	t (more tha	n one may	apply)	
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Off-Hour Equipment Reduction									
(more than one may apply)									
Heating	39,969	39,969	5,710	10,360	10,497	2,906	12,118	16,602	2,364
Cooling	39,161	37,743	5,413	9,450	10,062	2,538	11,606	16,697	2,173
Lighting	51,083	48,300	6,650	12,514	13,135	3,377	14,096	19,932	2,883
Office Equipment	9,063	8,802	1,242	1,469	2,181	725	4,222	3,587	412

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

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

N=No responding cases in sample.

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

Table B34. Cooling Equipment, Number of Buildings, 1999

				Num	ber of Buildings	(thousand	1)			
					Cooling Equip	ment (more	than one m	ay apply)		
	All Buildings	All Cooled Buildings	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)	0.040	4 000	040	0.40	050	0	•	057	70	•
1,001 to 5,000	2,348		319		356	Q	Q	857	79	Q
5,001 to 10,000	1,110		211	95	184	Q	Q	423	25	Q
10,001 to 25,000			96		149	Q	17	387	13	Q
25,001 to 50,000	257		24		60	7	25	141	9	4
50,001 to 100,000	145		17		29	7	28		7	Q
100,001 to 200,000			7		13	5	16		2	Q
200,001 to 500,000	23		2		7	2	9	14	Q	Q
Over 500,000	7	7	1	1	1	1	4	4	Q	Q
Principal Building Activity	207	074	00	20	70	0	24	404	0	0
Education	327		23		79	Q	31	164	Q	Q
Food Sales			Q 66		Q 71	N	Q	99 218	Q	Q
Food Service						Q	Q 9		Q	Q
Health Care	127		Q		15	2		77	Q	Q
Inpatient	11		1		Q	2	6	4	Q	Q
Outpatient	116		Q		Q	Q	4	73	Q	Q
Lodging	153		17		64	Q	10		Q	Q
Mercantile	667		87		164	Q	4	370	26	Q
Retail (Other Than Mall)	534		77		154	Q	Q	264	Q	Q
Enclosed and Strip Malls	133		Q		Q	Q	2		Q	Q
Office	739		137		90	6	31	385	5	14
Public Assembly	305		61	30	39	Q	16		Q	Q
Public Order and Safety			Q		11	Q	6	14	Q	Q
Religious Worship			50		69	Q	Q	123	Q	Q
Service	478		70		70	Q	Q		Q	Q
Warehouse and Storage	603		82		85	Q	Q	140	Q	Q
Other Vacant	102 253		Q Q		Q Q	Q N	Q Q	28 Q	Q Q	Q Q
Year Constructed										
1919 or Before	419	260	78	Q	101	Q	Q	92	Q	Q
1920 to 1945	499		75		124	2	8	143	Q	Q
1946 to 1959			129		178	5	13		29	Q
1960 to 1969			39		102	7	32		25	Q
1970 to 1979			105		112	Q	17		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			285			14	25		Q	Q
South	1,762		258		312	Q	57		Q	Q
West	1,021	720	62			13	31	443	109	Q
	.,0=1	. 20	32		.50	.3	31		.50	•
Climate Zone: 45-Year Average										
Under 2,000 CDD and More than 7,000 HDD	E05	260	00		407	^	40	470	^	^
			82 175		137 177	Q 6	10 22		Q	Q Q
5,500-7,000 HDD						Q Q	38		Q Q	
4,000-5,499 HDD			178							Q
Fewer than 4,000 HDD	1,134	913	97	174	141	7	27	596	50	Q
2,000 CDD or More and	000	000	4.4.4	440	407	00	20	400	_	Q
Fewer than 4,000 HDD	926	803	144	116	137	23	32	490	Q	

Table B34. Cooling Equipment, Number of Buildings, 1999

		Number of Buildings (thousand) Cooling Equipment (more than one may apply)										
					Cooling Equip	ment (more	than one m	ay apply)				
	All	All Cooled	Residential- Type Central Air	Heat	Individual Air	District Chilled	Central	Packaged Air Conditioning	Swamp			
	Buildings	Buildings	Conditioners	Pumps	Conditioners	Water	Chillers	Units	Coolers	Other		
Workers (main shift)												
Fewer than 5	2,376	1,513	339	169	350	Q	28	724	69	Q		
5 to 9		681	133	68	163	Q	9	354	26	Q		
10 to 19		636	101	122	146	Q	11	383	Q	Q		
20 to 49		433	69	79	61	3	22	295	13	7		
50 to 99		169	18	29	44	10	18	118	5	Q		
100 to 249		88	14	10	27	4	21	54	4	3		
250 or More		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		46	Q	Q	9	13	9	12	Q	Q		
Primary or Secondary School		171	4	23	50	Q	17	123	Q	Q		
Office Complex		115		33	8	Q	Q	43	Q	Q		
Retail Complex		163	Q	27	34	Q	Q	117	Q	Q		
Religious Campus or Complex		146	Q	Q	38	Q	Q	91	Q	Q		
Health Care Complex		61	Q	21	5	3	6	35	Q	Q		
Government Complex		46	Q	Q	Q	Q	6	6	Q	Q		
Other		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		17	18	Q	2		Q	Q		
District Chilled Water		50		4	Q	50	1	Q	Q	Q		
Energy End Uses (more than												
one may apply)	4.040	0.400	045	404	774	40	400	4.050	400			
Buildings with Space Heating		3,400	645	481	771	49	126	1,859	126	48		
Buildings with Woter Heating		3,560	676	485	799	50	130	1,953	136	49		
Buildings with Water Heating		2,915		401	650	37	124	1,646	120	34		
Buildings with Manufacturing		792		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		84	414	Q	Q	390	39	Q		
1 10 00		751	156	92	161	8	45		39			
51 to 99	751								.5.1			

Table B34. Cooling Equipment, Number of Buildings, 1999

		,		Num	ber of Buildings	(thousand)			
					Cooling Equip	ment (more	than one m	ay apply)		
	All Buildings	All Cooled Buildings	Residential- Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Heating Equipment (more										
than one may apply)	400	470	40	4.47	0.4	•	40	100	_	•
Heat Pumps		478	46	447	84	3	12		9	Q
Furnaces			508	76	262	Q	12		72	12
Individual Space Heaters		670	104	89	294	9	26		47	4
District Heat		77	3	4	16	39	15		Q	Q
Boilers		474	58	39	211	3	96		18	14
Packaged Heating Units		1,304	75	84	167	Q	26	,	48	4
Other	. 185	143	38	22	47	1	8	49	Q	Q
Cooling Equipment (more										
than one may apply)										
Residential-Type Central	2=2	0=0	0=0			^	_		_	_
Air Conditioners		676	676	45	91	Q	8		Q	Q
Heat Pumps		485	45	485	94	4	14	112	6	Q
Individual Air Conditioners		799	91	94	799	Q	18		13	Q
District Chilled Water		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	85	112	186	Q	39	,	56	12
Swamp Coolers		136	Q	6	13	Q	2		136	Q
Other	. 49	49	Q	Q	Q	Q	Q	12	Q	49
Main Equipment Replaced Since										
1995 (more than one may apply)	004	200	400	407	205	_	47	400		_
Heating Cooling		862 1,085	182 208	127 173	205 308	Q Q	17 27	490 575	39 58	Q 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)						4.0		050	_	_
Variable Air-Volume System			111	57	49	19	70		9	8
Economizer Cycle		567	49	52	51	21	63		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
•			512	347	562	36	88		93	33
Cooling			605	435	694	39	93		119	33 45
Lighting				435 27			93 26		4	45 Q
Office Equipment	184	175	12	21	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.

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

N=No responding cases in sample.

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

Table B35. Cooling Equipment, Floorspace, 1999

				Total Floo	orspace (million	square fe	et)			
					ooling Equipme	nt (more t	han one m	ay apply)		
	All Buildings	All Cooled Buildings	Residential- Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
All Buildings	67,338	58,474	8,329	9,147	14,276	2,750	12,909	36,527	2,219	1,312
Building Floorspace										
(Square Feet)										
1,001 to 5,000	6,774	4,879	890	700	962	Q	Q	2,613	253	Q
5,001 to 10,000	8,238	6,212	1,606	707	1,396	Q	Q	3,197	181	Q
10,001 to 25,000	11,153	9,530	1,420	1,270	2,482	Q	307	6,031	207	Q
25,001 to 50,000	9,311	8,116	860	1,304	2,140	294	919	5,120	325	153
50,001 to 100,000	10,112	9,401	1,221	1,593	2,057	525	1,989	6,164	477	Q
100,001 to 200,000		7,609	905	1,229	1,834	630	2,331	5,217		Q
200,001 to 500,000		6,345	715		2,032	470	2,963	4,106		Q
Over 500,000		6,382	712		1,373	630	4,223	4,080		Q
0.00	0,020	0,002	, , , _	1,210	1,070	000	1,220	1,000	· ·	•
Principal Building Activity										
Education	8,651	7,973	625		2,974	676	2,108	4,331	508	Q
Food Sales	994	978	Q		Q	N	Q	610		Q
Food Service	1,851	1,760	357	Q	394	Q	Q	1,323	Q	Q
Health Care	2,918	2,815	572	684	696	433	1,609	1,783	Q	Q
Inpatient	1,865	1,762	455	503	602	356	1,413	1,109	Q	Q
Outpatient	1,053	1,053	Q	Q	Q	Q	196	673	Q	Q
Lodging	4,521	4,051	736	1,014	2,075	219	980	1,956	Q	Q
Mercantile	10,398	10,174	1,043	1,296	1,441	Q	1,278	8,019	387	Q
Retail (Other Than Mall)	4,766	4,573	551	225	1,111	Q	Q	3,003		Q
Enclosed and Strip Malls	5,631	5,601	492		330	Q	1,115	5,017		
Office	12,044	11,782	1,089		1,500	678	4,559	6,838		
Public Assembly	4,393	3,859	579	,	742	436	920	2,152		000 Q
	,	760	379 Q		284	430 Q	302	383		Q
Public Order and Safety	1,168			Q 403						
Religious Worship	3,405	2,765	694	403	781	Q	Q	1,630		Q
Service	3,388	2,481	491	399	716	Q	Q	1,575		Q
Warehouse and Storage	10,477	7,621	1,658		2,155	Q	349	5,198		
Other	1,222 1,908	1,087 368	Q Q		Q Q	Q N	Q Q	482 Q		Q
	1,000	000	ų.	ų.	•	• • • • • • • • • • • • • • • • • • • •	ų.	Q.	ų.	•
Year Constructed 1919 or Before	4,034	2,911	677	284	1,206	Q	254	1,244	Q	Q
		,					984	,		G G
1920 to 1945	6,445	4,383	657		2,074	134		2,367		_
1946 to 1959	- ,	7,601	1,239		2,833	406	1,329	4,427		Q
1960 to 1969		9,325	957	1,119	2,296	633	2,765	5,686		Q
1970 to 1979		11,050	1,621	1,793	2,237	492	2,766	7,001		
1980 to 1989		12,849	1,904		2,155	424	2,584	8,978		
1990 to 1999	11,094	10,355	1,274	1,705	1,476	407	2,229	6,825	339	Q
Census Region										
Northeast	12,360	10,311	950	1,215	3,897	326	2,782	6,641	Q	Q
Midwest	16,761	14,371	2,951	1,063	3,724	746	3,149	8,198		
South	23,485	21,549	3,272		4,526	939	4,328	13,915		
West	14,731	12,243	1,156		2,130	739	2,651	7,773		
Climate Zone: 45-Year Average										
Under 2,000 CDD and										
More than 7,000 HDD	5,890	4,804	643	246	1,682	Q	971	2,753	Q	Q
5,500-7,000 HDD	17,083	14,289	2,433		4,070	763	3,309	8,340		
4,000-5,499 HDD	16,243	13,999	2,085		3,945	653	3,555	8,301		
Fewer than 4,000 HDD		14,535	1,550		2,516	683	3,061	10,105		
2,000 CDD or More and	10,000	17,555	1,000	2,324	2,510	003	3,001	10,103	030	204
E.VVV ODD VI INVIE BILL **										

Table B35. Cooling Equipment, Floorspace, 1999

				Total Floo	orspace (million	square fee	et)			
					ooling Equipme	•	•	ay apply)		
	All	All Cooled	Residential- Type Central Air	Heat	Individual Air	District Chilled	Central	Packaged Air Conditioning	Swamp	
	Buildings	Buildings	Conditioners	Pumps	Conditioners	Water	Chillers	Units	Coolers	Other
Mark and a second second										
Workers (main shift) Fewer than 5	. 14,321	8,704	2,041	753	2,568	Q	297	4,264	315	Q
5 to 9	, -	5,291	921	677	1,226	Q	223	2,933		Q
10 to 19	,	7,409	1,187	1,267	2,037	Q	277	4,334		Q
20 to 49		9,930	1,341	1,688	2,138	162	1,054	6,776		210
50 to 99		8,519	791	1,493	2,046	478	1,646	5,963		Q
100 to 249		8,129	868	1,027	1,940	484	2,597	5,507		341
250 or More		10,491	1,180	2,243	2,322	1,234	6,815	6,751	335	381
Weekly Operating Hours										
39 or Fewer	6,596	3,113	671	240	961	Q	218	1,820	Q	Q
40 to 48		11,041	1,882	1,985	2,573	239	1,402	6,164		165
49 to 60		13,225	1,477	2,009	2,746	589	2,569	7,890		350
61 to 84	,	11,701	1,648	1,619	2,334	504	3,182	7,950		Q
85 to 167		8,528	1,015	1,286	2,010	505	1,098	6,194		Q
Open Continuously		10,866	1,637	2,007	3,652	893	4,441	6,509		418
Multibuilding Facility Activity Not Part of a Multibuilding										
Facility	41,289	36,386	5,509	5,793	9,135	309	6,902	23,072	1,344	649
College or University	2,605	2,058	Q	Q	376	933	595	666	Q	Q
Primary or Secondary School		3,001	188	372	1,056	Q	831	1,945	Q	Q
Office Complex		3,191	Q	388	281	Q	1,325	1,875		Q
Retail Complex		3,463	221	494	552	Q	Q	2,882		Q
Religious Campus or Complex		1,702	Q	Q	430	Q	Q	1,115		Q
Health Care Complex		2,201	446	592	522	454	1,229	1,351	Q	Q
Government Complex		1,218	Q	Q	367	464	503	400		Q
Other		5,254	1,285	806	1,556	293	1,133	3,220		Q
Energy Sources (more than										
one may apply)	65,716	E0 171	0 220	9,147	14.276	2.750	12 000	26 527	2 210	1 212
Electricity		58,474	8,329	,	14,276	2,750	12,909	36,527		
Natural Gas	,	42,147	6,805	5,771	10,715	1,316	10,145	27,987		773
Fuel Oil		12,185	1,314	2,435	4,276	749	6,081	7,121		535
District Heat		5,165	335	782	1,240	2,354	2,114	2,054		Q
District Chilled Water	2,750	2,750	Q	336	359	2,750	386	721		Q
Other		5,415 2,069	867 338	800 326	1,626 593	Q Q	828 550	3,460 1,368		Q Q
	,-	,						,		
Cooling Energy Sources (more than one may apply)										
	EE E1E	EE E1E	0 220	0.120	14.276	1 002	12 405	25 207	2 175	1 244
Electricity		55,545	8,329	9,120	14,276	1,093	12,405	35,387		
Natural Gas District Chilled Water		1,914 2,750	Q Q	187 336	376 359	Q 2,750	272 386	1,595 721		Q Q
Energy End Uses (more than										
one may apply)										
Buildings with Space Heating	61,602	56,361	8,010	9,052	13,754	2,739	12,560	35,247	2,190	1,257
Buildings with Cooling		58,474	8,329	9,147	14,276	2,750	12,909	36,527	2,219	1,312
Buildings with Water Heating		52,589	7,278	8,409	12,888	2,455	12,484	33,328		
Buildings with Cooking		23,730	2,965	4,406	6,798	1,047	8,488	15,767		641
Buildings with Manufacturing		2,861	563	422	1,198	Q	445	1,889		Q
Buildings with Electricity										
Generation	. 11,882	11,538	1,358	2,544	2,860	919	6,234	7,328	511	583
Percent of Floorspace Cooled										
Not Cooled	8,864	N	N	N	N	N	N	N	N	N
1 to 50		16,846	3,054	1,910	6,855	Q	903	9,465		233
51 to 99		16,966	2,604	3,040	3,647	772	6,368	10,695		591
	. 24,662	24,662	2,672	4,197	3,774	1,805	5,639	16,368		488

Table B35. Cooling Equipment, Floorspace, 1999

				Total Floo	orspace (million	square fe	et)			
				C	ooling Equipme	ent (more t	han one m	ay apply)		
	All Buildings	All Cooled Buildings	Residential- Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Heating Equipment (more										
than one may apply)										
Heat Pumps	8,923	8,766	1,362	8,243	2,378	376	2,109	4,709	483	285
Furnaces		12,819	4,975	1,601	3,655	Q	1,259	7,240	756	225
Individual Space Heaters	17,349	15,708	2,810	2,750	6,603	567	3,863	10,774	835	285
District Heat		4,844	303	701	1,140	2,279	2,069	1,884	Q	Q
Boilers		,	2,282	2,749	6,406	326	8,549	10,047	823	637
Packaged Heating Units	,	25,134	2,617	3,799	5,127	497	4,425	23,495	1,253	385
Other		3,592	646	528	887	159	1,679	2,138	1, <u>2</u> 33	468
Cooling Equipment (more than one may apply)										
Residential-Type Central										
Air Conditioners	8,329	8,329	8,329	1,441	2,297	Q	1,489	3,365	Q	Q
Heat Pumps		9,147	1,441	9,147	2,443	336	2,272	4,895	549	293
Individual Air Conditioners	,	,	2,297	2,443	14,276	359	2,530	7,353	562	293 Q
		14,276								
District Chilled Water	,	2,750	Q	336	359	2,750	386	721	Q	Q
Central Chillers	12,909	12,909	1,489	2,272	2,530	386	12,909	6,282	312	Q
Packaged Air Conditioning										
Units		36,527	3,365	4,895	7,353	721	6,282	36,527	1,499	547
Swamp Coolers	,	2,219	Q	549	562	Q	312	1,499	2,219	Q
Other	1,312	1,312	Q	293	Q	Q	Q	547	Q	1,312
Main Equipment Replaced Since										
1995 (more than one may apply)	40.000	40.404	4.070	0.045	2.000	_	4.070	0.004	700	000
Heating		12,424	1,978	2,245	3,066	Q	1,672	8,991	730	230
Cooling	17,390	17,390	2,497	2,905	5,823	Q	3,380	11,357	910	358
Building Shell Conservation Features (more than one										
•										
may apply)	38,193	25 476	5,424	6 1 1 0	9,049	1,705	9,288	21,728	959	903
Multipaned Windows	36,193	35,476	5,424	6,148	9,049	1,703	9,200	21,720	909	903
Tinted, Reflective, or Shading Glass	29,915	28,721	3,465	4,682	5,298	1,827	8,534	19,291	1,201	759
HVAC Conservation Features										
(more than one may apply)										
Variable Air-Volume System	19,387	19,009	2,235	2,872	2,857	1,837	8,391	12,246	589	557
				3,516			9,218		966	720
Economizer Cycle		21,256	2,448		4,117	1,911		14,637		
HVAC Maintenance Energy Management and	53,395	50,309	6,780	8,272	11,204	2,670	12,705	32,576	2,040	1,220
Control System (EMCS)	21,613	20,817	2,049	3,343	4,116	2,186	9,343	12,958	626	843
Off-Hour Equipment Reduction										
(more than one may apply)										
Heating	39,969	36,639	5,217	5,804	7,866	1,631	6,968	23,102	1,560	702
Cooling		39,161	5,697	5,916	8,668	1,573		24,691	1,528	752
Lighting	,		6,512	7,018	10,240	1,855	8,214	28,904	1,800	890
Office Equipment			860	1,350	2,329	378	2,467	5,605	258	030 Q
Cinco Equipment	3,003	0,7 40	000	1,000	2,029	510	٠,٠٠١	5,005	200	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.

Table B36. Refrigeration Equipment, Number of Buildings and Floorspace, 1999

		Number of I	Buildings (1	thousand)		-	Γotal Floorspa	ce (million	square feet)
			Ту	pe of Equipr than one ma				Ту	pe of Equipr than one ma	nent
	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets
All Buildings	4,657	950	658	255	719	67,338	25,652	19,713	8,808	19,938
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	479	356	116	378	6,774	1,370	1,059	309	1,123
5,001 to 10,000	,		101	62	113	8,238	1,135	736	498	854
10,001 to 25,000		135	67	20	90	11,153	2,186	1,069	320	1,505
·						,		,		
25,001 to 50,000		78	51	18	58	9,311	2,873	1,877	651	2,098
50,001 to 100,000			41	19	41	10,112	4,051	2,980	1,351	2,976
100,001 to 200,000		31	25	12	22	8,271	4,398	3,584	1,726	3,175
200,001 to 500,000		14	13	5	12	6,851	4,376	3,869	1,491	3,607
Over 500,000	7	6	5	2	5	6,628	5,262	4,539	2,462	4,599
Principal Building Activity	207	0.4	54	40	57	0.054	5 400	4.400	4 400	0.757
Education	327	84	51	16	57	8,651	5,423	4,199	1,433	3,757
Food Sales	174	159	127	57	113	994	962	737	601	781
Food Service	349		261	90	273	1,851	1,783	1,576	514	1,287
Health Care		12	7	3	10	2,918	1,931	1,749	762	1,660
Inpatient	11	9	6	2	8	1,865	1,749	1,693	708	1,502
Outpatient	116	Q	Q	Q	Q	1,053	Q	Q	Q	Q
Lodging	153	30	20	6	23	4,521	2,360	1,973	458	2,022
Mercantile	667	178	127	68	136	10,398	5,600	4,424	3,020	4,788
Retail (Other Than Mall)	534	97	66	Q	70	4,766	1,090	609	414	864
Enclosed and Strip Malls			61	41	67	5,631	4,509	3,816	2,606	3,924
Office			17	5	15	12,044	3,331	2,350	1,370	2,742
Public Assembly			23	Q	44	4,393	1,664	959	378	1,398
Public Order and Safety			3	Q	Q	1,168	221	163	Q	1,000 Q
	307	21	Q		19		574	103 Q		427
Religious Worship				Q		3,405			Q	
Service	478	Q	Q	Q	Q	3,388	Q	Q	Q	Q
Warehouse and Storage			10	Q	Q	10,477	1,177	948	Q	414
Other Vacant	. 102 253		Q Q	Q N	Q Q	1,222 1,908	Q Q	Q Q	Q N	Q Q
	200	Q	Q		Q	1,500	Q	Q		Q
Year Constructed	419	61	32	^	E0.	4,034	040	424	0	05/
1919 or Before		104	32 70	Q	52	,	940		Q 210	854
1920 to 1945				Q	98	6,445	2,176	1,551	318	1,896
1946 to 1959			77	46	79	9,127	3,063	2,096	1,163	2,325
1960 to 1969			76	17	97	10,866	4,490	3,636	1,397	3,260
1970 to 1979		176	149	58	124	11,840	4,937	4,051	1,990	3,930
1980 to 1989	846	229	143	68	177	13,931	5,450	4,270	1,793	4,089
1990 to 1999	690	139	113	40	92	11,094	4,595	3,685	1,977	3,583
Census Region										
Northeast	686	143	101	33	94	12,360	5,536	4,335	1,917	4,489
Midwest	1,188	244	164	52	194	16,761	6,252	4,580	1,798	5,038
South	1,762	351	230	97	277	23,485	8,734	6,809	3,205	6,606
West	1,021	212	164	73	154	14,731	5,130	3,988	1,887	3,804
Workers (main shift)										
Fewer than 5	2,376	349	215	Q	266	14,321	1,586	789	Q	1,245
5 to 9			90	31	122	6,325	1,207	545	187	915
10 to 19			152	57	118	8,028	2,144	1,547	490	1,466
20 to 49		146	98	35	117	10,814	3,938	2,551	1,084	2,958
50 to 99			61	28	55	8,898	4,698	3,841	1,645	3,482
100 to 249			28	12	26	8,356			1,638	3,700
							4,752	4,444		
250 or More	39	18	14	8	15	10,595	7,328	5,996	3,466	6,172

Table B36. Refrigeration Equipment, Number of Buildings and Floorspace, 1999

		Number of E	Buildings (1	housand)		7	Total Floorspa	ce (million	square feet)
		All Buildings	-	pe of Equipn than one ma			All Buildings		pe of Equipr than one ma	
	All Buildings	with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets	All Buildings	with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets
Weekly Operating Hours										
39 or Fewer	978	62	13	Q	58	6,596	743	340	Q	62
40 to 48			63	21	52	13,105		1,711	645	1,62
49 to 60	,	148	75	41	120	14,200		2,979	1,417	3,22
61 to 84		210	154	49	156	12,458		4,618	2,311	4,86
85 to 167		321	260	102	262	9,116		4,052	1,971	4,07
Open Continuously		113	93	31	71	11,863	,	6,013	2,371	5,51
Multibuilding Facility Activity										
Not Part of a Multibuilding										
Facility	3,295	778	543	206	589	41,289	16,109	12,270	5,051	12,32
College or University	70		3	Q	4	2,605		343	Q	36
Primary or Secondary School		37	27	9	23	3,388	1,797	1,591	685	1,05
Office Complex		6	4	2	5	3,353	1,131	783	508	97
Retail Complex		56	35	26	44	3,555		1,543	1,307	1,86
Religious Campus or Complex			Q	Q	8	1,907	408	1,5 4 5	1,507 Q	340
			8	2	6				598	1,22
Health Care Complex						2,339	1,482	1,396		,
Government Complex Other		4 45	Q 35	Q Q	3 38	1,513 7,389		Q 1,374	Q 433	470 1,31
Energy Sources (more than										
one may apply)										
Electricity	4,395	950	658	255	719	65,716	25,652	19,713	8,808	19,93
Natural Gas	2,670	652	466	182	492	45,525		16,098	7,308	15,64
Fuel Oil		97	46	13	85	13,285		6,849	2,917	6,78
District Heat		25	21	Q	13	5,891	2,541	1,990	801	2,17
District Chilled Water			5	1	6	2,750	1,170	804	382	1,02
Propane		134	83	26	111	6,290		2,252	914	2,24
Other	153	47	20	Q	41	2,322	1,256	1,051	460	1,00
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	859	594	238	639	61,602	24,514	18,993	8,459	19,00
Buildings with Cooling			640	250	671	58,474	24,714	19,288	8,670	19,00
		905	647	252	680			,		
Buildings with Water Heating	3,239	682	488	252 188		56,115 24.681	24,625	19,141	8,569	19,10
Buildings with Manufacturing	857 151		408		532	,	21,775	17,386	8,113	17,42
Buildings with Manufacturing	151	12	5	Q	Q	3,126	691	569	Q	47
Buildings with Electricity Generation	172	60	50	16	48	11,882	8,172	7,044	3,378	6,81
Energy-Related Space Functions										
(more than one may apply)										
Commercial Food Preparation	767	640	465	178	498	23 320	21,054	16,962	7,863	16,83°
·	101	040	400	1/0	490	23,328	21,054	10,902	1,003	10,63
Activities with Large	000	400	000	444	044	04 700	40.704	10.070	0.400	40.00
Amounts of Hot Water	698	408	299	114	311	21,793	16,721	13,876	6,103	13,36

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

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

N=No responding cases in sample.

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

Table B37. Water Heating Equipment, Number of Buildings and Floorspace, 1999

		Number of	Buildings	(thousand	d)		Total Floors	pace (millio	n square f	eet)
			Тур	e of Water Equipme	•			Тур	e of Water Equipme	_
	All Buildings	All Buildings with Water Heating	Central- ized System	Distri- buted System	Combination Centralized and Distributed Systems	All Buildings	All Buildings with Water Heating	Central- ized System	Distri- buted System	Combinatior Centralized and Distributed Systems
All Buildings	4,657	3,239	2,472	566	200	67,338	56,115	35,579	10,899	9,63
Building Floorspace										
(Square Feet)										
1,001 to 5,000	2,348	1,456	1,175	244	Q	6,774	4,280	3,411	767	
5,001 to 10,000	1,110	778	606	141	31	8,238	5,748	4,479	1,014	25
10,001 to 25,000		574	416	103	55	11,153	9,000	6,505	1,679	816
25,001 to 50,000		222	151	37	34	9,311	8,088	5,464	1,373	1,250
50,001 to 100,000		127	79	23	25	10,112	8,887	5,534	1,615	1,739
100,001 to 200,000		54	31	12	10	8,271	7,527	4,317	1,703	1,70
200,001 to 500,000		21	12	4	5	6,851	6,258	3,365	1,703	1,714
Over 500.000		7				•				
Over 500,000	. /	/	3	2	2	6,628	6,327	2,504	1,569	2,25
Principal Building Activity										
Education		240	141	55	45	8,651	8,059	5,049	1,088	1,922
Food Sales		163	139	Q	Q	994	951	635	Q	C
Food Service	349	349	305	Q	Q	1,851	1,846	1,548	Q	C
Health Care	127	126	103	Q	6	2,918	2,903	1,755	363	78
Inpatient	. 11	11	8	Q	3	1,865	1,862	961	Q	690
Outpatient	. 116	115	95	Q	Q	1,053	1,040	794	Q	
Lodging	. 153	149	124	Q	9	4,521	4,442	3,589	Q	552
Mercantile	. 667	439	326	98	15	10,398	8,698	4,306	3,088	1,300
Retail (Other Than Mall)		323	260	60	Q	4,766	3,453	2,479	881	,
Enclosed and Strip Malls		116	66	38	12	5,631	5,244	1,828	2,207	1,209
Office		615	426	156	33	12,044	10,872	6,184	2,186	2,502
Public Assembly		249	191	45	13	4,393	3,893	2,722	655	516
Public Order and Safety		41	35	Q	Q	1,168	830	605	033 Q	0
		252	222	16	14				266	347
Religious Worship						3,405	3,109	2,495		
Service		280	226	51	Q	3,388	2,351	1,742	429	75
Warehouse and Storage		227	140	79	8	10,477	6,743	3,914	2,070	759
Other		64	53	Q	3	1,222	983	674	Q	17
Vacant	253	44	43	Q	Q	1,908	436	361	Q	C
Year Constructed										
1919 or Before	. 419	277	254	12	11	4,034	3,130	2,524	242	364
1920 to 1945	499	311	238	52	21	6,445	4,644	2,935	819	889
1946 to 1959	763	493	385	83	25	9,127	7,154	4,824	1,208	1,122
1960 to 1969		493	383	76	33	10,866	9,421	6,525	1,540	1,356
1970 to 1979		592	450	118	24	11,840	10,182	6,384	2,040	1,75
1980 to 1989		623	440	130	54	13,931	12,137	6,822	2,924	2,390
1990 to 1999		450	323	95	33	11,094	9,446	5,564	2,125	1,758
Occasion Basica										
Census Region	202	-1-	44.4	70	22	40.000	40 575	0.044	4 000	404
Northeast		515	411	78	26	12,360	10,577	6,941	1,823	1,813
Midwest	,	776	609	117	50	16,761	13,702	9,037	2,328	2,336
South	,	1,179	874	218	87	23,485	19,014	11,500	4,120	3,39
West	1,021	769	578	153	38	14,731	12,822	8,102	2,628	2,093
Workers (main shift)										
Fewer than 5	2,376	1,312	1,124	149	39	14,321	8,401	7,108	866	427
5 to 9	807	643	475	146	22	6,325	5,145	3,739	1,105	30
10 to 19	683	586	413	143	30	8,028	7,000	5,204	1,403	393
20 to 49		417	295	68	54	10,814	9,445	6,000	1,921	1,52
50 to 99		159	88	40	31	8,898	8,166	4,468	1,935	1,76
100 to 249		85	57	14	14	8,356	7,760	4,140	1,685	1,703
250 or More		36	20	6	10	10,595	10,199	4,140	1,984	3,29

Table B37. Water Heating Equipment, Number of Buildings and Floorspace, 1999

		Number of	f Buildings	(thousand	d)		Total Floors	pace (millio	n square f	eet)
			Тур	e of Water Equipme	•			Тур	e of Water Equipme	_
	All Buildings	All Buildings with Water Heating	Central- ized System	Distri- buted System	Combination Centralized and Distributed Systems	All Buildings	All Buildings with Water Heating	Central- ized System	Distri- buted System	Combination Centralized and Distributed Systems
Weekly Operating Hours										
39 or Fewer	978	427	362	47	18	6,596	3,340	2,748	336	25
40 to 48	1,156	779	577	175	27	13,105	10,049	7,001	1,931	1,11
49 to 60	986	746	553	149	44	14,200	12,280	7,321	3,039	1,92
61 to 84	664	521	386	102	34	12,458	11,334	6,440	2,493	2,40
85 to 167	474	436	336	55	45	9,116	8,041	4,985	1,535	1,52°
Open Continuously	398	330	259	38	33	11,863	11,070	7,084	1,564	2,422
Multibuilding Facility Activity Not Part of a Multibuilding										
Facility	3,295	2,361	1,909	335	117	41,289	34,705	22,835	6,269	5,60
College or University		65		16			2,326	1,700	253	
Primary or Secondary School		122	73	22			2,862	1,705	429	
Office Complex	134	106	47	51	7	3,353	3,035	1,304	948	783
Retail Complex		141	81	57	3	3,555	3,108	1,491	1,310	307
Religious Campus or Complex		128	96	Q	Q		1,656	1,286	Q	
Health Care Complex				Q			2,185	1,171	Q	
Government Complex		42		Q		,	1,177	783	Q	
Other		222		43			5,061	3,305	1,080	
Energy Sources (more than one may apply)	4.005	0.000	0.470	500	999	05.740	50.445	05 570	40.000	0.00-
Electricity		3,239	2,472	566			56,115	35,579	10,899	
Natural Gas		2,191	1,706	342			41,366	26,479	7,585	
Fuel Oil		288	228	37			11,852	6,533	1,870	
District Heat		101	84	7			5,301	3,464	695	,
District Chilled Water	50	37	29	3		•	2,455	1,556	254	
Propane Other		334 89	247 71	50 14		,	5,409 1,887	3,504 1,184	958 352	
Water-Heating Energy Sources										
(more than one may apply)										
Electricity	1,546	1,546	1,048	399	99	24,171	24,171	12,585	7,068	4,519
Natural Gas		1,520	1,244	173	103	29,196	29,196	19,755	4,032	5,409
Fuel Oil	110	110	88	Q	Q	2,218	2,218	1,534	Q	498
District Heat		62	52	5	5	4,182	4,182	2,715	566	90
Propane	130	130	104	Q	Q	1,371	1,371	1,020	Q	C
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	3,087	2,344	548	195	61,602	54,204	34,201	10,502	9,500
Buildings with Cooling	3,560	2,915	2,195	525	194	58,474	52,589	32,972	10,261	9,356
Buildings with Water Heating	3,239	3,239	2,472	566	200	56,115	56,115	35,579	10,899	9,637
Buildings with Cooking	857	818	608	98	112	24,681	23,830	13,553	4,346	5,932
Buildings with Manufacturing	151	89	64	20	5	3,126	2,364	1,385	601	378
Buildings with Electricity	170	1/12	103	0	10	11 992	11.070	5.074	1 929	3 27
Generation	172	143	103	Q	18	11,882	11,079	5,974	1,828	3,27
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	767	733	542	91	99	23,328	22,563	12,730	4,141	5,692
Activities with Large	101	133	J 4 2	91	99	25,520	22,503	12,730	4,141	5,092
Amounts of Hot Water	698	698	522	81	94	21,793	21,793	13,070	3,452	5,271
sano si rist viatoi	030	030	522	01	34	21,133	21,130	10,070	0,402	5,21

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

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.

Table B38. Lighting Equipment, Number of Buildings, 1999

			Number	r of Buildings (th	ousand)		
			L	ighting Equipme	ent (more than o	one may apply)	
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
All Buildings	4,657	4,172	2,193	3,778	607	430	572
Building Floorspace							
(Square Feet)							
1,001 to 5,000	2,348	2,024	980	1,795	198	80	194
5,001 to 10,000	1,110	1,003	548	904	149	94	136
10,001 to 25,000	708	663	391	628	109	111	123
25,001 to 50,000	257	249	138	230	62	60	43
50,001 to 100,000	145	143	83	136	48	43	41
100,001 to 200,000	59	59	33	56	24	25	23
200,001 to 500,000	23	23	14	22	12	11	9
Over 500,000	7	7	5	7	4	5	4
Principal Building Activity							
Education	327	327	120	309	56	49	34
Food Sales	174	173	53	172	Q	Q	Q
Food Service	349	349	277	308	78	Q	84
Health Care	127	127	83	126	20	8	34
Inpatient	11	11	9	11	8	3	3
Outpatient	116	116	74	115	13	Q	31
Lodging	153	149	130	121	55	18	25
Mercantile	667	666	346	614	86	40	97
Retail (Other Than Mall)	534	532	269	483	69	27	75
Enclosed and Strip Malls	133	133	77	131	17	Q	22
Office	739	738	362	696	131	39	81
Public Assembly	305	280	164	234	56	41	40
Public Order and Safety	72	59	31	57	6	6	Q
Religious Worship	307	307	237	244	30	28	53
Service	478	465	163	436	37	82	54
Warehouse and Storage	603	411	172	340	30	92	45
Other	102	86	32	84	Q	5	Q
Vacant	253	35	Q	34	Q		Q
Year Constructed							
1919 or Before	419	342	221	307	44	41	55
1920 to 1945	499	436	283	376	58	31	33
1946 to 1959	763	676	334	622	56	54	79
1960 to 1969	665	594	307	525	122	48	86
1970 to 1979	774	731	391	674	81	69	112
1980 to 1989	846	771	415	721	123		131
1990 to 1999	690	622	242	552	121		77
Census Region							
Northeast	686	608	273	565	111	63	92
Midwest	1,188	1,033	587	904	166	114	155
South	1,762	1,599	847	1,455	187	159	189
West	1,021	931	486	853	142	94	136
Workers (main shift)							
Fewer than 5	2,376	1,922	986	1,681	159	153	176
5 to 9	807	793	391	737	105	57	105
10 to 19	683	667	373	627	112	61	84
20 to 49	487	487	258	442	133		120
50 to 99	174	174	102	165	43		40
100 to 249	90	90	56	88	32	22	31
250 or More	39	39	26	39	23		17

Table B38. Lighting Equipment, Number of Buildings, 1999

	<u> </u>								
	Number of Buildings (thousand)								
			Lighting Equipment (more than one may apply)						
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen		
Weekly Operating Hours									
39 or Fewer	978	579	341	465	37	20	51		
40 to 48	1,156	1,147	532	1,052	166	116	105		
49 to 60	986	978	499	895	135	110	138		
61 to 84	664	628	322	604	95	71	125		
85 to 167	474	458	256	434	79	65	96		
Open Continuously	398	381	243	327	94	48	58		
Space in Building Vacant for at									
Least Three Consecutive Months									
Completely Vacant	140	Q	Q	Q	Q	N	Q		
Mostly Vacant	113	32	Q	31	Q	Q	Q		
Partially Vacant	697	563	316	524	99	69	103		
Not At All Vacant	3,707	3,573	1,855	3,219	506	360	469		
Multibuilding Facility Activity Not Part of a Multibuilding									
Facility	3,295	3,000	1,598	2,710	408	287	412		
College or University	70	70	43	68	18		10		
Primary or Secondary School	224	218	70	206	27	24	10		
Office Complex	134	121	38	119	18		13		
Retail Complex	181	167	98	162	27		40		
Religious Campus or Complex	186	176	112	159	15		30		
Health Care Complex	72	65	33	64	12		Q		
Government Complex Other	61 434	43 313	17 184	37 252	5 76		Q 50		
Energy Sources (more than one may apply) Electricity	4,395	4,172	2,193	3,778	607	430	572		
Natural Gas	2,670	2,610	1,463	2,349	390	287	406		
Fuel Oil	434	415	202	383	74		64		
District Heat	117	117	68	108	32		19		
District Chilled Water	50	50	25	49	17		5		
Propane	451	435	225	378	68		68		
Other	153	152	104	143	Q	16	33		
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	4,016	3,908	2,090	3,544	591	405	547		
Buildings with Cooling	3,560	3,512	1,853	3,215	556		491		
Buildings with Water Heating	3,239	3,197	1,794	2,925	516		487		
Buildings with Cooking	857	857	550	787	179		207		
Buildings with Manufacturing	151	145	74	141	32	22	30		
Buildings with Electricity Generation	172	171	93	162	58	42	46		
Percent Lit When Open									
Zero	34	Q	N	N	N	Q	N		
1 to 50		835	476	708	112		110		
51 to 99		1,228	780	1,117	223		226		
100	,	2,096	928	1,941	271		236		
Building Never Open/	2,090	2,090	920	1,941	2/1	213	230		
Electricity Not Used	464	Q	Q	Q	Q	N	Q		
Percent Lit When Closed									
Zero	2,174	1,959	960	1,738	220	173	187		
1 to 50		1,688	938	1,589	253		296		
51 to 100	,	143	51	123	39		31		
Building Never Closed/	. 10	. 10	01	120	00		31		
Electricity Not Used	652	381	243	327	94	48	58		

Table B38. Lighting Equipment, Number of Buildings, 1999

	Number of Buildings (Aboused)								
-	Number of Buildings (thousand)								
	All Buildings	All Lit Buildings	Lighting Equipment (more than one may apply)						
			Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen		
Lighting Equipment Types (more than one may apply)									
Incandescent	2,193	2,193	2,193	1,904	366	233	421		
Standard Fluorescent	3,778	3,778	1,904	3,778	490		520		
Compact Fluorescent	607	607	366	490	607	141	171		
High-Intensity Discharge	430	430	233	398	141	430	133		
Halogen	572	572	421	520	171	133	572		
Other	58	58	34	37	4	2	Q		
Lighting Conservation Features									
(more than one may apply)									
Specular Reflectors	843	843	430	843	177	121	153		
Electronic Ballasts	2,167	2,167	1,052	2,151	340		313		
Skylights or Atriums	580	531	311	484	107	94	117		
Off-Hour Equipment Reduction (more than one may apply)									
Heating	2,862	2,791	1,455	2,586	408	283	374		
Cooling	2,622	2,589	1,367	2,392	391	263	369		
Lighting	3,675	3,675	1,899	3,349	493	362	486		
Office Equipment	184	184	91	177	54	37	36		

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.

Table B39. Lighting Equipment, Floorspace, 1999

Buildings Buildings Incandescent Fluorescent Fluorescent Discrete All Buildings 67,338 64,321 38,156 60,344 20,666 Building Floorspace (Square Feet) 1,001 to 5,000 6,774 5,859 2,946 5,154 738 5,001 to 10,000 8,238 7,464 4,047 6,722 1,108	itensity	Halogen
All Buildings All Lit Buildings Incandescent Standard Fluorescent High-Indicated Discription All Buildings 67,338 64,321 38,156 60,344 20,666 Building Floorspace (Square Feet) 1,001 to 5,000 6,774 5,859 2,946 5,154 738 5,001 to 10,000 8,238 7,464 4,047 6,722 1,108	itensity narge	Halogen
Buildings Buildings Incandescent Fluorescent Fluorescent Discrete All Buildings 67,338 64,321 38,156 60,344 20,666 Building Floorspace (Square Feet) 1,001 to 5,000 6,774 5,859 2,946 5,154 738 5,001 to 10,000 8,238 7,464 4,047 6,722 1,108	narge	Halogen
Building Floorspace (Square Feet) 5,859 2,946 5,154 738 5,001 to 10,000 8,238 7,464 4,047 6,722 1,108	19,223	
(Square Feet) 1,001 to 5,000 6,774 5,859 2,946 5,154 738 5,001 to 10,000 8,238 7,464 4,047 6,722 1,108		17,926
1,001 to 5,000		
5,001 to 10,000		
	245	600
10.004 (- 05.000	663	991
10,001 to 25,000	1,701	1,996
25,001 to 50,000	2,224	1,611
50,001 to 100,000	3,101	2,929
100,001 to 200,000	3,633	3,241
200,001 to 500,000	3,259	2,677
Over 500,000 6,628 5,143 6,544 4,336	4,397	3,882
Principal Building Activity		
Education	3,761	2,302
Food Sales	Q	Q
Food Service	Q	558
Health Care 2,918 2,918 2,246 2,881 1,712	943	1,350
Inpatient	782	1,009
Outpatient	Q	341
Lodging	933	1,686
Mercantile	2,494	3,058
Retail (Other Than Mall)	767	790
Enclosed and Strip Malls	1,727	2,268
Office	2,946	4,034
Public Assembly	1,594	980
	319	960 Q
Religious Worship	490	965
Service	1,163	384
Warehouse and Storage	3,870	1,830
Other 1,222 1,176 644 1,142 300 Vacant 1,908 506 Q 483 Q	382 Q	Q
Year Constructed 1919 or Before	682	871
		921
	1,530	
1946 to 1959 9,127 8,544 4,951 8,031 2,019 1960 to 1969 10,866 10,541 6,268 9,939 3,445	1,981 2,986	1,861 2,916
1970 to 1979	3,413	3,511
1980 to 1989	4,166 4,464	4,272 3,574
Census Region		
Northeast	4,382	3,625
Midwest 16,761 15,996 9,903 14,840 5,518 South 23,485 22,365 12,970 20,850 6,427	5,513	4,405 5,947
South 23,485 22,365 12,970 20,850 6,427 West 14,731 14,156 8,236 13,305 4,781	5,874 3,454	5,847 4,049
	-, . • ·	.,510
Workers (main shift)	4.0.0	
Fewer than 5	1,348	1,448
5 to 9	990	880
10 to 19	1,233	1,482
20 to 49	2,984	2,585
50 to 99	3,306	2,539
100 to 249	3,551	3,003
250 or More	5,812	5,989

Table B39. Lighting Equipment, Floorspace, 1999

			Total Floo	orspace (million s	square feet)			
	All Buildings		Lighting Equipment (more than one may apply)					
		All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen	
Weekly Operating Hours								
39 or Fewer	6,596	4,087	2,569	3,355	401	421	596	
40 to 48		13,061	6,904	12,064	2,607		1,955	
49 to 60		14,170	8,181	13,256	4,298		3,615	
61 to 84		12,316	7,649	11,978	4,613		4,576	
85 to 167	,	8,905	4,873	8,525	2,769		2,616	
Open Continuously	,	11,784	7,980	11,166	5,978		4,568	
Space in Building Vecent for at								
Space in Building Vacant for at Least Three Consecutive Months								
Completely Vacant	953	Q	Q	Q	Q	N	Q	
Mostly Vacant	956	409	Q	386	Q	Q	Q	
Partially Vacant	15,520	14,697	9,454	14,140	6,349	4,888	5,590	
Not At All Vacant	49,910	49,118	28,480	45,721	14,208	14,322	12,290	
Multibuilding Facility Activity								
Not Part of a Multibuilding								
Facility	41,289	39,447	23,311	36,819	12,015	,	10,585	
College or University	2,605	2,597	1,427	2,498	1,046		560	
Primary or Secondary School	3,388	3,338	1,945	3,169	927		840	
Office Complex	3,353	3,273	1,978	3,213	1,583	899	1,200	
Retail Complex	3,555	3,487	2,068	3,381	1,083	994	1,383	
Religious Campus or Complex	1,907	1,887	1,310	1,800	393	Q	557	
Health Care Complex	2,339	2,309	1,635	2,273	1,311	823	919	
Government Complex	1,513	1,341	683	1,319	507	484	Q	
Other	7,389	6,643	3,798	5,872	1,801	2,501	1,655	
Energy Sources (more than								
one may apply)								
Electricity	65,716	64,321	38,156	60,344	20,666	19,223	17,926	
Natural Gas	45,525	45,043	27,997	42,436	15,294	14,854	14,031	
Fuel Oil	13,285	13,192	9,076	12,874	6,857	6,227	5,840	
District Heat	5,891	5,891	3,779	5,649	3,111	2,158	1,866	
District Chilled Water	2,750	2,750	1,578	2,703	1,541	900	864	
Propane	6,290	6,255	3,341	5,852	1,593	2,062	1,629	
Other	2,322	2,318	1,638	2,212	860	1,001	916	
Energy End Uses (more than								
one may apply)								
Buildings with Space Heating	61,602	61,017	36,640	57,516	20,127	18,821	17,373	
Buildings with Cooling	58,474	58,077	34,584	55,007	19,829	18,076	17,093	
Buildings with Water Heating	56,115	55,746	34,373	52,823	19,339	17,681	16,757	
Buildings with Cooking	24,681	24,681	17,469	23,810	11,262	9,908	10,335	
Buildings with Manufacturing	3,126	3,069	1,509	2,926	800	1,207	911	
Buildings with Electricity								
Generation	11,882	11,877	8,413	11,585	7,132	6,086	6,201	
Percent Lit When Open								
Zero	173	Q	N	N	N		N	
1 to 50	-, -	9,187	5,551	8,127	1,878		1,784	
51 to 99	,	20,665	14,573	19,430	8,141		6,977	
100	34,233	34,233	17,940	32,575	10,615	11,148	9,135	
Building Never Open/ Electricity Not Used	3,080	232	Q	213	Q	N	Q	
•	3,000	202	Q	213	Q	IV	Q	
Percent Lit When Closed Zero	20,771	19,428	9,760	17,697	3,314	4,052	2,966	
1 to 50		30,950	19,364	29,535	3,31 4 10,581		2,966 9,732	
51 to 100	,				794		9,732	
Building Never Closed/	2,160	2,160	1,052	1,946	194	645	000	
•	10 457	44 704	7.000	14 160	E 070	4 240	4 500	
Electricity Not Used	13,457	11,784	7,980	11,166	5,978	4,319	4,568	

Table B39. Lighting Equipment, Floorspace, 1999

	Total Floorspace (million square feet)							
			Lighting Equipment (more than one may apply)					
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen	
Lighting Equipment Types								
(more than one may apply)								
Incandescent	38,156	38,156	38,156	35,707	15,682	12,726	14,037	
Standard Fluorescent	60,344	60,344	35,707	60,344	19,242	18,465	17,171	
Compact Fluorescent	20,666	20,666	15,682	19,242	20,666	9,386	10,517	
High-Intensity Discharge	19,223	19,223	12,726	18,465	9,386	19,223	8,832	
Halogen	17,926	17,926	14,037	17,171	10,517	8,832	17,926	
Other	1,004	1,004	697	862	525	461	553	
Lighting Conservation Features								
(more than one may apply)								
Specular Reflectors	19,994	19,994	12,721	19,994	8,935	8,144	7,855	
Electronic Ballasts	42,035	42,035	24,967	41,473	16,117	15,009	13,717	
Skylights or Atriums	18,286	17,885	11,615	16,957	7,793	8,306	7,398	
Off-Hour Equipment Reduction								
(more than one may apply)								
Heating	39,969	39,632	23,293	37,533	11,971	11,677	10,516	
Cooling	39,161	38,842	22,573	36,804	11,882	11,390	10,549	
Lighting	51,083	51,083	29,489	47,891	14,346	14,631	13,044	
Office Equipment	9,063	9,052	5,132	8,742	3,264	3,668	2,760	

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.