

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Building Floorspace (Square Feet)											
1,001 to 5,000	672	207	45	18	48	93	48	137	8	12	55
5,001 to 10,000	516	198	36	17	40	83	35	56	6	9	39
10,001 to 25,000	776	324	47	44	43	151	25	53	9	19	62
25,001 to 50,000	673	262	57	50	55	121	13	34	7	16	58
50,001 to 100,000	759	293	59	65	55	158	11	29	6	18	64
100,001 to 200,000	934	374	64	80	72	195	8	24	Q	31	73
200,001 to 500,000	725	280	55	54	67	162	14	9	8	19	58
Over 500,000	766	265	68	56	69	181	13	12	Q	23	70
Principal Building Activity											
Education	820	389	79	83	57	113	8	16	4	32	39
Food Sales	251	36	12	7	4	46	11	119	2	2	11
Food Service	427	71	29	24	67	42	105	70	2	2	16
Health Care	594	223	44	42	95	105	11	8	4	10	51
Inpatient	475	175	35	38	92	76	11	4	2	7	34
Outpatient	119	48	9	4	3	28	Q	4	2	3	17
Lodging	510	113	25	14	160	124	16	12	Q	6	36
Retail (Other Than Mall).....	319	107	25	16	5	111	3	22	3	4	24
Office	1,134	400	109	63	24	281	4	35	32	74	110
Public Assembly	370	196	38	63	4	27	3	9	Q	Q	26
Public Order and Safety	126	54	10	10	15	18	1	3	1	2	12
Religious Worship	163	98	11	5	3	17	3	6	(*)	1	19
Service	312	145	16	24	4	63	Q	9	1	3	46
Warehouse and Storage	456	194	14	20	6	132	Q	36	2	5	48
Other	286	138	18	11	4	59	Q	10	Q	5	33
Vacant	54	37	2	1	(*)	4	Q	Q	Q	(*)	8
Year Constructed											
Before 1920	302	180	7	11	17	34	17	Q	2	4	15
1920 to 1945	620	315	25	30	42	89	20	26	3	8	62
1946 to 1959	565	277	31	34	44	87	13	26	4	11	38
1960 to 1969	737	336	45	50	64	113	12	40	6	18	52
1970 to 1979	1,023	356	79	74	90	220	26	58	12	27	80
1980 to 1989	1,034	315	95	66	86	236	26	66	15	37	92
1990 to 1999	1,098	317	104	88	70	246	36	85	17	35	100
2000 to 2003	441	106	45	32	35	116	18	38	4	9	38
Census Region and Division											
Northeast	1,271	634	48	67	84	206	34	58	12	30	98
New England	294	167	8	12	16	42	Q	19	2	6	16
Middle Atlantic	978	467	40	55	68	164	28	39	10	24	81
Midwest	1,690	830	62	103	101	287	35	89	15	35	133
East North Central	1,254	643	42	77	72	208	25	59	11	27	90
West North Central	436	187	20	25	29	79	10	29	4	9	43
South	1,948	473	251	153	166	449	70	154	18	55	159
South Atlantic	1,064	249	132	85	86	258	35	87	11	35	85
East South Central	309	107	23	22	29	63	7	24	2	5	26
West South Central	575	117	96	46	50	128	28	43	5	14	49
West	911	266	70	61	97	200	28	53	19	28	88
Mountain	381	149	26	23	36	78	5	18	Q	8	32
Pacific	530	117	44	38	61	122	24	35	Q	20	56

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	990	517	24	60	61	157	18	59	8	18	68
5,500-7,000 HDD	1,761	853	66	98	116	309	42	88	16	39	132
4,000-5,499 HDD	1,134	431	70	69	87	230	32	61	18	31	104
Fewer than 4,000 HDD	1,213	302	119	94	120	275	48	93	14	33	115
2,000 CDD or More and --											
Fewer than 4,000 HDD	724	99	152	62	65	172	27	53	7	27	59
Number of Floors											
One	1,937	649	159	110	116	384	84	230	17	34	154
Two	1,311	516	91	98	81	254	32	70	18	32	120
Three	619	277	34	40	48	113	16	22	7	16	48
Four to Nine	1,336	571	95	99	130	240	24	25	13	41	100
Ten or More	617	191	52	38	73	152	12	8	Q	25	57
Elevators and Escalators (more than one may apply)											
Any Elevators	2,826	1,081	223	221	257	581	41	53	38	96	235
Number of Elevators											
One	732	341	48	61	37	134	7	20	7	22	54
Two to Five	1,157	438	86	89	115	234	17	22	19	43	96
Six or More	937	303	88	70	104	214	18	12	12	31	85
Any Escalators	282	53	35	30	Q	80	6	4	Q	11	31
Number of Workers (main shift)											
Fewer than 5	817	396	39	28	39	119	18	92	3	5	77
5 to 9	468	168	33	21	39	78	30	56	4	6	34
10 to 19	594	223	40	31	53	103	39	52	5	9	40
20 to 49	1,050	419	73	69	77	191	36	67	Q	21	83
50 to 99	728	261	58	67	57	151	14	37	8	19	55
100 to 249	838	310	70	68	65	188	11	27	9	25	64
250 or More	1,325	425	119	100	118	313	19	22	20	63	124
Weekly Operating Hours											
Fewer than 40	228	130	17	7	7	22	5	12	1	2	25
40 to 48	773	364	71	42	18	133	7	33	10	25	70
49 to 60	1,179	529	85	71	36	229	20	50	15	34	111
61 to 84	924	352	66	67	44	184	35	64	9	24	78
85 to 167	889	280	55	77	50	167	55	119	5	22	57
Open Continuously	1,827	547	137	119	292	408	44	76	23	41	137
Ownership and Occupancy											
Nongovernment Owned.....	4,203	1,438	303	224	347	897	151	319	54	102	368
Owner Occupied	2,060	786	150	116	141	424	47	135	28	51	183
Nonowner Occupied	2,115	632	152	108	207	471	104	184	25	51	181
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	1,617	765	129	160	101	246	16	35	10	47	110
Federal	303	161	14	24	9	63	Q	3	2	5	21
State	513	271	27	53	31	62	3	9	3	20	33
Local	800	333	88	83	61	120	11	23	5	21	56
Vacancy Status											
Completely Vacant	37	28	Q	(*)	Q	3	Q	Q	Q	Q	5
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	1,086	432	89	68	61	240	17	30	13	42	95
Not At All Vacant	4,681	1,733	341	315	387	899	149	324	51	107	375

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Number of Establishments											
One	4,167	1,562	289	272	362	790	139	290	42	87	334
2 to 5	992	412	70	64	62	199	21	49	12	24	79
6 to 10	216	93	16	14	7	43	Q	5	3	16	16
11 to 20	152	50	16	12	Q	37	Q	Q	2	7	15
More than 20	257	57	39	22	11	72	2	5	5	15	29
Currently Unoccupied	37	28	Q	(*)	Q	3	Q	Q	Q	Q	5
Predominant Exterior Wall Material											
Brick, Stone or Stucco	3,186	1,307	229	207	276	530	109	180	30	73	244
Concrete (Block or Poured)	974	339	78	62	81	202	26	72	Q	18	83
Concrete Panels	667	219	52	46	Q	185	10	22	10	28	58
Siding or Shingles	276	104	17	14	24	49	12	29	3	6	20
Metal Panels	463	151	28	35	12	120	Q	44	4	11	52
Window Glass	95	24	11	7	5	25	Q	2	2	6	10
Other	121	48	10	7	11	25	Q	4	1	4	8
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	2,083	781	158	134	184	405	56	107	23	57	178
Shingles (Not Wood)	823	326	54	41	68	134	33	79	9	15	63
Metal Surfacing	630	211	49	48	23	150	17	47	5	13	68
Synthetic or Rubber	1,649	607	126	126	127	329	38	91	22	53	130
Slate or Tile	207	79	16	11	19	34	11	17	2	4	13
Wooden Materials	68	23	6	4	9	14	Q	4	1	1	5
Concrete	236	121	11	13	13	48	Q	5	1	3	14
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	40	15	3	4	2	6	Q	2	(*)	Q	3
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	1,766	767	103	112	158	298	47	88	15	42	136
Addition or Annex	733	316	42	55	79	121	16	31	4	14	55
Reduction In Floorspace	117	46	5	9	14	22	Q	2	1	3	10
Cosmetic Improvements	1,317	557	79	84	114	230	38	70	12	33	99
Wall or Roof Replacement	777	341	47	53	67	140	16	27	7	22	57
Interior Wall											
Re-Configuration	911	399	57	61	80	162	17	32	8	24	71
HVAC Equipment Upgrade.....	1,156	470	73	81	117	206	29	45	11	32	92
Lighting Upgrade	1,085	485	62	75	92	184	24	49	10	28	76
Window Replacement	613	288	32	37	54	100	13	26	5	16	41
Plumbing System Upgrade	748	334	42	50	69	129	19	25	5	19	55
Insulation Upgrade	381	167	23	30	28	64	11	15	3	11	28
Other Renovation	50	22	Q	2	5	7	Q	2	(*)	1	4
No Renovations Since 1980.....	1,482	698	84	87	99	246	41	78	12	26	112
Building Newer than 1980	2,573	738	245	185	191	599	79	188	36	80	231
Energy Sources (more than one may apply)											
Electricity	5,820	2,202	431	384	448	1,143	167	354	64	148	478
Natural Gas	4,492	1,731	301	295	399	842	160	239	43	108	373
Fuel Oil	1,760	657	128	121	195	359	33	43	24	51	148
District Heat	1,017	606	32	69	59	147	Q	12	5	29	49
District Chilled Water	538	308	16	49	34	68	Q	7	3	20	26
Propane	584	201	38	40	39	141	9	51	5	9	50
Other	139	48	Q	Q	11	30	2	6	2	4	11

CONTINUED

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Space-Heating Energy Sources^a (more than one may apply)											
Electricity	2,354	617	238	155	216	571	72	164	36	70	215
Natural Gas	3,679	1,432	244	245	299	705	112	204	37	83	319
Fuel Oil	591	305	29	33	55	80	14	18	3	10	43
District Heat	994	599	30	67	59	140	Q	11	5	28	46
Propane	160	26	14	14	16	39	3	24	Q	4	18
Other	61	16	Q	Q	3	17	Q	4	(*)	1	6
Primary Space-Heating Energy Source											
Electricity	1,089	142	153	68	108	303	44	111	21	37	100
Natural Gas	3,280	1,286	216	219	262	620	98	179	34	75	291
Fuel Oil	294	190	7	13	17	29	10	13	1	4	11
District Heat	951	580	26	65	50	135	Q	11	4	27	43
Propane	71	2	7	9	1	18	Q	19	Q	Q	11
Other	19	3	1	2	Q	7	(*)	2	Q	Q	3
Cooling Energy Sources^b (more than one may apply)											
Electricity	5,020	1,745	420	326	399	1,032	158	335	61	126	418
Natural Gas	159	43	30	Q	16	26	2	3	1	3	19
District Chilled Water	538	308	16	49	34	68	Q	7	3	20	26
Water-Heating Energy Sources (more than one may apply)											
Electricity	2,145	727	205	142	87	487	46	157	33	66	196
Natural Gas	3,206	1,170	222	221	348	587	119	171	30	75	262
Fuel Oil	206	109	7	9	23	25	9	7	1	3	13
District Heat	563	293	26	43	52	88	Q	7	3	15	30
Propane	81	17	9	9	1	18	Q	14	Q	Q	8
Cooking Energy Sources (more than one may apply)											
Electricity	1,579	510	131	125	181	294	73	103	14	36	112
Natural Gas	2,074	647	157	152	279	367	155	122	16	37	140
Propane	114	26	12	10	10	24	2	18	Q	Q	8
Energy End Uses (more than one may apply)											
Buildings with Space Heating	5,705	2,203	411	376	440	1,113	160	335	63	146	458
Buildings with Cooling	5,464	1,982	431	369	428	1,095	162	341	63	147	447
Buildings with Water Heating	5,498	2,025	416	370	448	1,080	166	336	62	145	450
Buildings with Cooking	2,712	868	218	203	320	487	167	184	23	55	188
Buildings with Manufacturing	254	77	10	17	7	64	Q	10	2	6	56
Buildings with Electricity Generation	1,693	553	139	129	178	367	24	42	28	56	176
Percent of Floorspace Heated											
Not Heated	115	(*)	20	8	8	29	Q	19	1	2	20
1 to 50	299	82	14	18	14	69	Q	39	Q	4	40
51 to 99	746	264	56	49	61	152	29	54	6	16	60
100	4,660	1,857	341	309	365	892	121	242	49	127	357
Percent of Floorspace Cooled											
Not Cooled	356	221	(*)	15	20	48	4	14	1	2	31
1 to 50	1,026	503	25	56	44	195	20	64	5	12	102
51 to 99	1,413	513	107	97	112	273	46	104	13	38	110
100	3,026	965	300	215	272	627	97	173	45	96	235

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	540	256	33	29	52	63	15	28	Q	6	50
51 to 99	1,736	666	130	125	135	328	46	87	21	58	140
100	3,490	1,245	267	230	260	747	104	236	35	85	281
Building Never Open/ Electricity Not Used	46	33	1	(*)	Q	4	Q	1	Q	Q	7
Percent Lit When Closed											
Zero	1,132	524	75	69	42	173	40	74	10	30	95
1 to 50	2,626	1,057	203	181	107	487	76	180	29	72	233
51 to 100	235	73	16	14	7	75	6	24	2	5	13
Building Never Closed/ Electricity Not Used	1,827	548	137	119	292	408	44	76	23	41	137
Heating Equipment (more than one may apply)											
Heat Pumps	805	188	95	53	93	201	20	46	12	25	72
Packaged Heat Pumps	523	102	64	33	61	141	13	33	Q	17	49
Split-System Heat Pumps	198	49	25	18	16	51	Q	11	2	5	18
Individual Room Heat Pumps ..	255	67	30	17	39	60	7	7	2	8	18
Furnaces	1,493	588	86	84	103	287	56	123	13	27	126
Individual Space Heaters	1,024	379	67	65	79	225	18	61	10	26	94
District Heat	986	594	30	66	58	139	Q	11	4	28	46
Boilers	2,244	906	150	168	226	405	50	59	24	56	200
Packaged Heating Units	1,729	512	163	119	142	383	64	134	24	47	138
Other	231	62	22	20	8	64	3	18	3	8	22
Cooling Equipment (more than one may apply)											
Residential-Type Central											
Air Conditioners	924	355	67	67	77	158	40	59	8	15	78
Heat Pumps	837	195	99	55	92	209	22	54	12	25	75
Packaged Heat Pumps	529	109	62	32	60	142	13	36	9	17	50
Split-System Heat Pumps	204	50	26	19	16	50	Q	13	2	5	19
Individual Room Heat Pumps ..	278	67	35	19	39	68	7	11	3	8	20
Individual Air Conditioners	1,080	474	69	62	119	196	19	44	7	18	71
District Chilled Water	538	308	16	49	34	68	Q	7	3	20	26
Central Chillers	1,531	482	152	140	148	338	22	27	24	50	148
Packaged Air Conditioning											
Units	2,862	992	235	179	218	595	103	205	30	72	232
Swamp Coolers	158	52	9	9	21	28	8	12	1	2	16
Other	142	49	13	10	16	28	2	Q	1	4	9
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	1,367	505	96	84	122	258	42	83	17	37	122
Cooling	1,949	743	138	120	177	363	58	110	23	55	162
Water Heating Equipment											
Centralized System	3,432	1,281	238	227	298	630	123	250	35	79	272
Distributed System	835	314	77	54	33	179	24	52	9	23	70
Combination of Centralized and Distributed System	1,231	430	100	88	117	271	20	34	19	43	108

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
Lighting Equipment Types (more than one may apply)											
Incandescent	3,916	1,439	287	257	357	803	125	193	44	105	306
Standard Fluorescent	5,644	2,130	421	378	434	1,103	159	344	63	147	464
Compact Fluorescent	3,208	1,139	250	238	310	652	92	139	40	88	261
High Intensity Discharge	2,141	813	152	170	156	472	38	82	22	61	175
Halogen	1,982	666	153	139	185	453	60	94	22	50	159
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	5,213	1,880	392	350	430	1,030	166	354	59	137	415
Commercial Refrigeration	3,336	1,068	265	236	337	651	159	283	28	70	239
Walk-In Units	2,766	843	220	198	300	539	149	250	22	56	189
Cases or Cabinets	2,703	865	219	185	271	522	133	239	23	54	191
Residential-Type Units	3,466	1,354	265	236	288	681	70	161	34	98	278
Vending Machines	3,721	1,326	289	275	327	784	66	183	45	110	314
No Refrigeration	607	323	39	34	18	112	Q	(*)	5	11	63
Office Equipment (more than one may apply)											
Computers	5,376	2,022	411	370	409	1,077	141	299	63	148	434
With Flat Screen Monitors	2,966	1,071	243	223	234	614	61	112	46	109	253
Dedicated Servers	3,760	1,355	302	279	290	797	72	164	57	124	321
Laser Printers	3,009	1,149	227	197	243	569	80	182	38	76	248
Inkjet Printers	3,302	1,196	281	242	234	717	62	158	39	102	271
FAX Machines	5,092	1,885	392	352	390	1,036	140	277	62	142	414
Photocopiers	4,466	1,710	354	327	326	928	67	187	60	136	371
Number of Computers											
None	444	181	20	14	39	66	26	55	1	(*)	44
1 to 4	1,015	388	60	45	75	166	68	133	5	5	70
5 to 9	546	207	39	28	49	102	20	40	4	6	50
10 to 19	515	191	40	33	34	108	13	40	5	9	43
20 to 49	707	254	55	56	46	161	9	38	Q	16	59
50 to 99	513	209	39	38	43	108	8	11	6	14	37
100 to 249	714	292	59	61	53	142	7	16	7	25	52
250 or More	1,366	481	119	109	110	291	17	21	22	73	124
Number of Dedicated Servers											
None	2,060	847	129	105	158	346	95	191	7	25	158
1 to 4	2,234	840	170	156	189	451	53	128	17	48	182
5 to 9	405	118	41	40	21	100	Q	11	6	17	42
10 to 19	432	182	33	35	26	83	3	12	5	23	30
20 to 49	307	94	34	26	24	71	3	6	6	14	29
50 or More	382	122	24	23	Q	92	Q	7	22	21	38
Number of Photocopiers											
None	1,355	493	77	57	122	215	100	167	4	12	107
One	1,130	453	78	66	71	224	24	92	9	16	97
2 to 4	1,334	522	102	104	100	270	17	59	19	34	106
5 to 9	612	246	47	52	40	121	8	14	8	29	46
10 or More	1,389	489	127	105	115	312	17	21	25	56	122
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	2,711	868	218	203	320	486	167	184	23	55	187
Activities with Large Amounts of Hot Water	2,465	853	179	174	327	463	111	99	18	50	192
Separate Computer Area	2,895	1,054	248	232	237	615	44	85	45	101	234

Table E1. Major Fuel Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Major Fuel Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	5,820	2,203	431	384	448	1,143	167	354	64	148	478
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	2,380	857	206	176	190	498	48	71	35	85	213
Economizer Cycle	2,589	923	205	206	206	556	47	97	37	91	221
HVAC Maintenance	5,170	1,942	395	360	412	1,030	143	282	59	137	411
Energy Management and Control System (EMCS)	1,782	654	158	160	134	368	27	40	27	61	153
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	3,929	1,501	269	263	330	774	110	222	46	98	316
Tinted Window Glass	3,098	1,122	256	221	228	663	71	135	41	95	264
Reflective Window Glass	927	302	85	71	84	211	18	33	11	29	82
External Overhangs or Awnings	1,737	553	129	121	167	339	78	140	25	47	138
Skylights or Atriums	1,307	481	94	96	124	273	31	35	20	33	119
Daylighting Sensors	377	112	31	30	43	79	9	12	Q	12	37
Specular Reflectors	2,829	1,071	219	207	210	596	58	113	34	81	240
Electronic Ballasts	4,746	1,783	365	336	366	937	115	262	56	132	393
Energy Management and Control System (EMCS) For Lighting	538	181	55	44	30	125	9	15	Q	19	50
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	3,740	1,443	278	262	268	717	110	193	49	101	320
Cooling	3,844	1,430	304	275	275	755	122	198	45	111	330
Lighting	3,818	1,585	282	255	151	693	119	265	40	104	325
Office Equipment	1,465	668	112	97	57	258	33	81	13	26	120

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Data in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

^a Totals in the "Electricity" and "Natural Gas" rows have been revised and values do not match published values in consumption Table C1 (http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html).

^b The total in the "Electricity" row has been revised and does not match published value in consumption Table C1.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Building Floorspace (Square Feet)											
1,001 to 5,000	98.9	30.5	6.7	2.7	7.1	13.7	7.1	20.2	1.2	1.0	8.1
5,001 to 10,000	78.3	30.0	5.4	2.6	6.1	12.5	5.2	8.4	0.8	1.0	5.9
10,001 to 25,000	67.3	28.1	4.1	3.9	3.7	13.1	2.1	4.6	0.8	1.0	5.3
25,001 to 50,000	77.6	30.2	6.6	5.8	6.3	13.9	1.6	3.9	0.8	1.0	6.7
50,001 to 100,000	83.8	32.4	6.5	7.2	6.0	17.4	1.2	3.3	0.7	1.0	7.1
100,001 to 200,000	103.0	41.3	7.1	8.8	7.9	21.5	0.9	2.7	Q	1.0	8.0
200,001 to 500,000	101.0	39.0	7.6	7.5	9.4	22.6	1.9	1.2	1.1	1.0	8.1
Over 500,000	129.7	44.9	11.5	9.5	11.7	30.6	2.2	2.1	Q	1.0	11.9
Principal Building Activity											
Education	83.1	39.4	8.0	8.4	5.8	11.5	0.8	1.6	0.4	1.0	4.0
Food Sales	199.7	28.9	9.8	5.9	2.9	36.7	8.6	94.8	1.6	1.0	9.1
Food Service	258.3	43.1	17.4	14.8	40.4	25.4	63.5	42.1	1.0	1.0	9.5
Health Care	187.7	70.4	14.1	13.3	30.2	33.1	3.5	2.6	1.2	1.0	16.1
Inpatient	249.2	91.8	18.6	20.0	48.4	40.1	5.6	2.0	1.1	1.0	18.1
Outpatient	94.6	38.1	7.2	3.3	2.5	22.6	Q	3.5	1.3	1.0	13.2
Lodging	100.0	22.2	4.9	2.7	31.4	24.3	3.2	2.3	Q	1.0	7.0
Retail (Other Than Mall).....	73.9	24.8	5.9	3.7	1.1	25.7	0.6	5.0	0.6	1.0	5.6
Office	92.9	32.8	8.9	5.2	2.0	23.1	0.3	2.9	2.6	1.0	9.0
Public Assembly	93.9	49.7	9.6	15.9	1.0	7.0	0.8	2.2	Q	1.0	6.5
Public Order and Safety	115.8	49.9	8.9	9.5	14.0	16.5	1.3	2.9	0.6	1.0	10.6
Religious Worship	43.5	26.2	2.9	1.4	0.8	4.4	0.8	1.7	0.1	1.0	4.9
Service	77.0	35.9	3.8	6.0	1.0	15.6	Q	2.1	0.3	1.0	11.4
Warehouse and Storage	45.2	19.3	1.3	2.0	0.6	13.1	Q	3.5	0.2	1.0	4.8
Other	164.4	79.4	10.5	6.1	2.1	34.1	Q	6.0	Q	1.0	18.9
Vacant	20.9	14.4	0.6	0.4	0.1	1.7	Q	Q	Q	1.0	Q
Year Constructed											
Before 1920	80.2	47.8	1.8	2.9	4.4	9.1	4.4	4.5	0.5	1.0	3.9
1920 to 1945	90.3	45.9	3.7	4.3	6.2	12.9	2.9	3.7	0.4	1.0	9.0
1946 to 1959	80.3	39.4	4.3	4.8	6.3	12.4	1.8	3.6	0.6	1.0	5.5
1960 to 1969	90.9	41.5	5.5	6.1	7.9	14.0	1.5	4.9	0.8	1.0	6.4
1970 to 1979	95.0	33.0	7.4	6.9	8.3	20.4	2.4	5.4	1.2	1.0	7.4
1980 to 1989	100.1	30.5	9.2	6.4	8.4	22.9	2.5	6.4	1.5	1.0	8.9
1990 to 1999	88.8	25.6	8.4	7.1	5.7	19.9	2.9	6.9	1.4	1.0	8.1
2000 to 2003	79.7	19.2	8.2	5.7	6.3	21.0	3.2	6.8	0.7	1.0	6.9
Census Region and Division											
Northeast	98.5	49.1	3.7	5.2	6.5	15.9	2.6	4.5	0.9	1.0	7.6
New England	99.0	56.2	2.7	4.0	5.3	14.1	1.8	6.5	0.7	1.0	5.5
Middle Atlantic	98.3	47.0	4.0	5.5	6.9	16.5	2.9	3.9	1.0	1.0	8.2
Midwest	98.9	48.6	3.6	6.0	5.9	16.8	2.0	5.2	0.9	1.0	7.8
East North Central	108.1	55.4	3.6	6.7	6.2	18.0	2.1	5.1	1.0	1.0	7.7
West North Central	79.5	34.2	3.7	4.6	5.3	14.4	1.8	5.4	0.6	1.0	7.9
South	82.9	20.1	10.7	6.5	7.1	19.1	3.0	6.6	0.8	1.0	6.8
South Atlantic	86.8	20.3	10.7	6.9	7.0	21.1	2.9	7.1	0.9	1.0	6.9
East South Central	91.1	31.4	6.9	6.6	8.7	18.6	2.2	7.1	0.6	1.0	7.6
West South Central	73.4	14.9	12.3	5.9	6.4	16.3	3.5	5.5	0.6	1.0	6.2
West	80.6	23.5	6.2	5.4	8.6	17.7	2.5	4.7	1.7	1.0	7.8
Mountain	103.8	40.7	7.0	6.3	9.9	21.3	1.3	4.9	Q	1.0	8.6
Pacific	69.4	15.3	5.7	5.0	8.0	16.0	3.1	4.6	Q	1.0	7.4

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	93.2	48.7	2.2	5.7	5.7	14.8	1.7	5.5	0.8	1.0	6.4
5,500-7,000 HDD	101.6	49.2	3.8	5.7	6.7	17.8	2.4	5.1	0.9	1.0	7.6
4,000-5,499 HDD	98.5	37.5	6.1	6.0	7.5	20.0	2.8	5.3	1.6	1.0	9.0
Fewer than 4,000 HDD	77.0	19.2	7.6	6.0	7.6	17.5	3.0	5.9	0.9	1.0	7.3
2,000 CDD or More and --											
Fewer than 4,000 HDD	75.5	10.3	15.9	6.5	6.8	17.9	2.8	5.5	0.8	1.0	6.2
Number of Floors											
One	74.6	25.0	6.1	4.2	4.5	14.8	3.2	8.9	0.6	1.0	5.9
Two	80.6	31.7	5.6	6.0	5.0	15.6	2.0	4.3	1.1	1.0	7.4
Three	82.6	36.9	4.5	5.3	6.4	15.0	2.1	2.9	1.0	1.0	6.4
Four to Nine	132.5	56.6	9.4	9.8	12.8	23.8	2.3	2.5	1.2	1.0	9.9
Ten or More	124.6	38.6	10.6	7.6	14.9	30.7	2.3	1.5	Q	1.0	11.5
Elevators and Escalators (more than one may apply)											
Any Elevators	114.8	43.9	9.0	9.0	10.4	23.6	1.7	2.2	1.6	1.0	9.6
Number of Elevators											
One	89.0	41.4	5.9	7.4	4.5	16.3	0.8	2.5	0.9	1.0	6.6
Two to Five	114.3	43.2	8.5	8.8	11.4	23.1	1.7	2.1	1.8	1.0	9.5
Six or More	149.5	48.3	14.1	11.2	16.6	34.1	2.8	1.9	2.0	1.0	13.5
Any Escalators	120.0	22.7	14.9	12.7	Q	33.9	2.5	1.8	Q	1.0	13.3
Number of Workers (main shift)											
Fewer than 5	52.8	25.6	2.5	1.8	2.5	7.7	1.2	6.0	0.2	1.0	5.0
5 to 9	76.0	27.3	5.3	3.5	6.3	12.6	4.8	9.1	0.7	1.0	5.5
10 to 19	76.2	28.6	5.1	3.9	6.8	13.2	5.0	6.7	0.6	1.0	5.1
20 to 49	95.6	38.1	6.6	6.3	7.0	17.4	3.2	6.1	Q	1.0	7.6
50 to 99	91.7	32.9	7.3	8.4	7.1	19.1	1.8	4.7	1.0	1.0	7.0
100 to 249	121.9	45.1	10.2	9.8	9.4	27.3	1.7	4.0	1.3	1.0	9.4
250 or More	139.0	44.6	12.5	10.5	12.4	32.9	2.0	2.3	2.1	1.0	13.0
Weekly Operating Hours											
Fewer than 40	33.2	18.9	2.5	1.0	1.1	3.2	0.7	1.7	0.1	1.0	3.6
40 to 48	66.5	31.3	6.1	3.6	1.6	11.4	0.6	2.8	0.9	1.0	6.1
49 to 60	75.0	33.6	5.4	4.5	2.3	14.5	1.3	3.2	1.0	1.0	7.1
61 to 84	89.4	34.1	6.4	6.5	4.2	17.8	3.4	6.2	0.9	1.0	7.5
85 to 167	125.4	39.5	7.8	10.9	7.1	23.5	7.8	16.8	0.7	1.0	8.1
Open Continuously	138.9	41.6	10.4	9.1	22.2	31.1	3.4	5.8	1.8	1.0	10.4
Ownership and Occupancy											
Nongovernment Owned.....	85.1	29.1	6.1	4.5	7.0	18.2	3.1	6.5	1.1	1.0	7.5
Owner Occupied	87.3	33.3	6.3	4.9	6.0	18.0	2.0	5.7	1.2	1.0	7.7
Nonowner Occupied	88.4	26.4	6.4	4.5	8.6	19.7	4.3	7.7	1.1	1.0	7.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	105.3	49.8	8.4	10.4	6.5	16.0	1.0	2.3	0.6	1.0	7.2
Federal	155.0	82.1	6.9	12.2	4.6	32.5	Q	1.6	0.8	1.0	10.6
State	134.8	71.3	7.1	14.0	8.1	16.2	0.8	2.5	0.8	1.0	8.8
Local	83.4	34.6	9.2	8.7	6.3	12.5	1.1	2.4	0.5	1.0	5.8
Vacancy Status											
Completely Vacant	17.2	12.8	Q	0.1	(*)	1.2	Q	Q	Q	1.0	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	87.7	34.9	7.2	5.5	4.9	19.3	1.4	2.4	1.0	1.0	7.7
Not At All Vacant	93.9	34.8	6.8	6.3	7.8	18.0	3.0	6.5	1.0	1.0	7.5

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Number of Establishments											
One	92.3	34.6	6.4	6.0	8.0	17.5	3.1	6.4	0.9	1.0	7.4
2 to 5	90.6	37.6	6.4	5.8	5.7	18.1	1.9	4.5	1.1	1.0	7.2
6 to 10	110.1	47.5	8.2	7.1	3.6	22.1	Q	2.4	1.4	1.0	8.1
11 to 20	77.6	25.9	8.2	6.3	2.9	19.1	Q	Q	1.0	1.0	7.7
More than 20	98.5	22.0	15.0	8.4	4.2	27.4	0.9	1.8	2.0	1.0	11.0
Currently Unoccupied	17.2	12.8	Q	0.1	(*)	1.2	Q	Q	Q	1.0	Q
Predominant Exterior Wall Material											
Brick, Stone or Stucco	97.1	39.8	7.0	6.3	8.4	16.1	3.3	5.5	0.9	1.0	7.4
Concrete (Block or Poured)	89.9	31.3	7.2	5.8	7.5	18.6	2.4	6.7	Q	1.0	7.7
Concrete Panels	101.7	33.3	8.0	7.1	5.5	28.3	1.5	3.3	1.6	1.0	8.8
Siding or Shingles	67.1	25.2	4.1	3.3	5.8	11.9	2.8	7.0	0.8	1.0	4.9
Metal Panels	58.5	19.0	3.5	4.4	1.5	15.2	Q	5.6	0.5	1.0	6.6
Window Glass	92.3	23.7	10.4	7.2	4.9	24.7	Q	2.0	1.9	1.0	10.0
Other	108.7	43.1	8.7	5.9	10.1	22.8	2.1	3.7	1.3	1.0	7.2
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	98.4	36.9	7.5	6.3	8.7	19.1	2.6	5.1	1.1	1.0	8.4
Shingles (Not Wood)	80.7	32.0	5.3	4.0	6.7	13.2	3.2	7.7	0.9	1.0	6.2
Metal Surfacing	52.7	17.6	4.1	4.0	1.9	12.6	1.5	3.9	0.4	1.0	5.7
Synthetic or Rubber	112.0	41.2	8.6	8.6	8.6	22.3	2.6	6.2	1.5	1.0	8.8
Slate or Tile	84.2	32.3	6.6	4.4	7.7	13.9	Q	6.8	0.8	1.0	5.4
Wooden Materials	77.0	26.3	6.3	4.4	9.8	16.0	Q	4.7	0.7	1.0	5.2
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	69.9	27.0	4.9	6.6	4.3	10.8	Q	Q	0.7	1.0	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	99.0	43.0	5.8	6.3	8.9	16.7	2.6	4.9	0.9	1.0	7.6
Addition or Annex	111.9	48.3	6.5	8.4	12.0	18.5	2.5	4.7	0.6	1.0	8.4
Reduction In Floorspace	115.2	45.5	5.4	8.9	14.3	22.0	2.5	2.3	0.9	1.0	10.3
Cosmetic Improvements	100.4	42.4	6.0	6.4	8.7	17.6	2.9	5.3	0.9	1.0	7.5
Wall or Roof Replacement	96.3	42.3	5.9	6.6	8.3	17.3	1.9	3.4	0.8	1.0	7.0
Interior Wall											
HVAC Equipment	107.0	46.8	6.7	7.2	9.4	19.0	2.0	3.8	0.9	1.0	8.4
HVAC Equipment Upgrade	107.4	43.6	6.7	7.5	10.9	19.1	2.7	4.2	1.1	1.0	8.6
Lighting Upgrade	105.6	47.2	6.1	7.3	9.0	17.9	2.3	4.7	1.0	1.0	7.4
Window Replacement	96.5	45.4	5.1	5.9	8.6	15.7	2.0	4.0	0.7	1.0	6.5
Plumbing System Upgrade	104.7	46.8	5.9	7.0	9.7	18.1	2.7	3.5	0.7	1.0	7.7
Insulation Upgrade	94.8	41.6	5.7	7.5	6.9	16.1	2.7	3.8	0.8	1.0	7.1
Other Renovation	94.9	42.8	Q	4.3	Q	13.8	Q	3.4	0.3	1.0	Q
No Renovations Since 1980	79.2	37.3	4.5	4.6	5.3	13.1	2.2	4.2	0.7	1.0	6.0
Building Newer than 1980	91.1	26.1	8.7	6.6	6.8	21.2	2.8	6.7	1.3	1.0	8.2
Energy Sources (more than one may apply)											
Electricity	91.9	34.8	6.8	6.1	7.1	18.1	2.6	5.6	1.0	1.0	7.6
Natural Gas	103.3	39.8	6.9	6.8	9.2	19.4	3.7	5.5	1.0	1.0	8.6
Fuel Oil	116.1	43.3	8.5	8.0	12.9	23.7	2.2	2.8	1.6	1.0	9.8
District Heat	186.8	111.3	5.9	12.8	10.9	26.9	Q	2.2	0.8	1.0	9.0
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	1.0	9.1
Propane	82.6	28.5	5.4	5.7	5.6	19.9	1.3	7.2	0.7	1.0	7.1
Other	99.2	34.4	Q	10.0	7.8	21.6	1.3	4.6	1.8	1.0	8.2

CONTINUED

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Space-Heating Energy Sources^a (more than one may apply)											
Electricity	82.5	21.6	8.3	5.4	7.6	20.0	2.5	5.7	1.3	1.0	7.5
Natural Gas	99.6	38.7	6.6	6.6	8.1	19.1	3.0	5.5	1.0	1.0	8.6
Fuel Oil	98.6	50.9	4.8	5.6	9.3	13.4	2.3	2.9	0.5	1.0	7.2
District Heat	191.2	115.2	5.9	13.0	11.3	26.9	Q	2.1	0.9	1.0	8.9
Propane	49.9	8.1	4.5	4.5	4.9	12.1	0.9	7.5	Q	1.0	5.6
Other	72.6	19.0	Q	Q	3.3	20.1	Q	4.3	0.6	1.0	7.7
Primary Space-Heating Energy Source											
Electricity	68.1	8.9	9.6	4.3	6.8	19.0	2.8	6.9	1.3	1.0	6.2
Natural Gas	99.5	39.0	6.6	6.6	8.0	18.8	3.0	5.4	1.0	1.0	8.8
Fuel Oil	77.1	49.8	1.8	3.4	4.5	7.5	2.5	3.3	0.3	1.0	2.8
District Heat	193.8	118.3	5.3	13.3	10.3	27.6	Q	2.2	0.9	1.0	8.8
Propane	36.6	0.9	3.8	4.4	0.5	9.3	Q	9.8	Q	1.0	5.5
Other	50.6	7.5	2.7	4.7	Q	19.4	0.7	5.8	0.5	1.0	Q
Cooling Energy Sources^b (more than one may apply)											
Electricity	92.5	32.1	7.7	6.0	7.3	19.0	2.9	6.2	1.1	1.0	7.7
Natural Gas	156.3	42.3	29.6	Q	16.1	25.9	2.4	3.1	0.8	1.0	18.4
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	1.0	9.1
Water-Heating Energy Sources (more than one may apply)											
Electricity	78.0	26.4	7.4	5.2	3.2	17.7	1.7	5.7	1.2	1.0	7.1
Natural Gas	111.2	40.6	7.7	7.7	12.1	20.4	4.1	6.0	1.0	1.0	9.1
Fuel Oil	109.7	57.8	3.9	4.9	12.3	13.2	4.6	3.8	0.7	1.0	6.8
District Heat	182.3	94.9	8.3	13.9	16.9	28.4	Q	2.2	0.9	1.0	9.6
Propane	56.7	11.9	6.1	6.1	0.8	12.6	Q	10.2	Q	1.0	5.7
Cooking Energy Sources (more than one may apply)											
Electricity	120.0	38.8	9.9	9.5	13.7	22.3	5.5	7.8	1.1	1.0	8.5
Natural Gas	134.3	41.9	10.2	9.9	18.1	23.8	10.0	7.9	1.0	1.0	9.1
Propane	78.3	17.6	7.9	7.1	6.9	16.5	1.4	12.4	Q	1.0	5.5
Energy End Uses (more than one may apply)											
Buildings with Space Heating	95.0	36.7	6.8	6.3	7.3	18.5	2.7	5.6	1.0	1.0	7.6
Buildings with Cooling	96.0	34.8	7.6	6.5	7.5	19.2	2.9	6.0	1.1	1.0	7.9
Buildings with Water Heating	97.4	35.9	7.4	6.5	7.9	19.1	2.9	6.0	1.1	1.0	8.0
Buildings with Cooking	122.0	39.0	9.8	9.1	14.4	21.9	7.5	8.3	1.0	1.0	8.5
Buildings with Manufacturing	81.1	24.5	3.1	5.4	2.3	20.5	Q	3.2	0.6	1.0	18.0
Buildings with Electricity Generation	132.1	43.1	10.8	10.1	13.9	28.6	1.9	3.3	2.2	1.0	13.7
Percent of Floorspace Heated											
Not Heated	24.2	(*)	4.2	1.6	1.8	6.2	Q	4.0	0.2	1.0	4.3
1 to 50	43.6	12.0	2.0	2.7	2.0	10.1	Q	5.6	Q	1.0	5.8
51 to 99	92.1	32.5	6.9	6.0	7.5	18.7	3.6	6.7	0.8	1.0	7.4
100	103.4	41.2	7.6	6.9	8.1	19.8	2.7	5.4	1.1	1.0	7.9

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Percent of Floorspace Cooled											
Not Cooled	45.4	28.2	(*)	2.0	2.6	6.1	0.6	1.7	0.1	1.0	4.0
1 to 50	61.8	30.3	1.5	3.4	2.7	11.8	1.2	3.8	0.3	1.0	6.1
51 to 99	106.9	38.8	8.1	7.4	8.5	20.7	3.5	7.9	1.0	1.0	8.3
100	111.5	35.6	11.0	7.9	10.0	23.1	3.6	6.4	1.7	1.0	8.7
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	52.9	25.1	3.2	2.8	5.1	6.2	1.5	2.8	Q	1.0	4.9
51 to 99	94.9	36.4	7.1	6.8	7.4	18.0	2.5	4.8	1.1	1.0	7.6
100	106.4	38.0	8.1	7.0	7.9	22.8	3.2	7.2	1.1	1.0	8.6
Building Never Open/ Electricity Not Used	14.4	10.3	0.4	0.1	0.1	1.1	Q	0.2	Q	1.0	Q
Percent Lit When Closed											
Zero	65.1	30.2	4.3	4.0	2.4	10.0	2.3	4.2	0.5	1.0	5.5
1 to 50	84.9	34.2	6.6	5.8	3.4	15.7	2.5	5.8	1.0	1.0	7.5
51 to 100	112.3	35.0	7.8	6.8	3.2	35.6	3.0	11.5	0.8	1.0	6.4
Building Never Closed/ Electricity Not Used	127.2	38.2	9.5	8.3	20.4	28.5	3.1	5.3	1.6	1.0	9.5
Heating Equipment (more than one may apply)											
Heat Pumps	91.3	21.3	10.8	6.0	10.5	22.8	2.3	5.2	1.3	1.0	8.1
Packaged Heat Pumps	96.0	18.8	11.7	6.1	11.3	25.9	2.4	6.0	1.6	1.0	9.0
Split-System Heat Pumps	76.8	19.0	9.8	7.0	6.2	19.6	Q	4.3	0.8	1.0	6.9
Individual Room Heat Pumps ..	94.7	25.0	11.1	6.2	14.5	22.3	2.6	2.7	0.8	1.0	6.6
Furnaces	76.1	30.0	4.4	4.3	5.2	14.6	2.9	6.3	0.7	1.0	6.4
Individual Space Heaters	81.6	30.2	5.3	5.1	6.3	18.0	1.5	4.9	0.8	1.0	7.5
District Heat	190.8	115.1	5.8	12.8	11.2	26.9	Q	2.1	0.9	1.0	8.9
Boilers	109.9	44.4	7.3	8.2	11.1	19.9	2.5	2.9	1.2	1.0	9.8
Packaged Heating Units	95.9	28.4	9.1	6.6	7.9	21.3	3.6	7.4	1.4	1.0	7.7
Other	70.7	19.0	6.8	6.1	2.5	19.7	0.8	5.6	0.8	1.0	6.9
Cooling Equipment (more than one may apply)											
Residential-Type Central Air Conditioners	83.7	32.1	6.1	6.1	7.0	14.3	3.7	5.3	0.7	1.0	7.0
Heat Pumps	92.6	21.5	11.0	6.0	10.1	23.1	2.4	6.0	1.3	1.0	8.3
Packaged Heat Pumps	97.4	20.1	11.4	5.8	11.1	26.2	2.4	6.6	1.6	1.0	9.2
Split-System Heat Pumps	78.4	19.1	10.1	7.2	6.1	19.2	Q	5.0	0.8	1.0	7.1
Individual Room Heat Pumps ..	94.4	22.7	11.8	6.6	13.3	23.3	2.4	3.7	0.9	1.0	7.0
Individual Air Conditioners	86.0	37.8	5.5	5.0	9.5	15.6	1.5	3.5	0.5	1.0	5.7
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	1.0	9.1
Central Chillers	131.6	41.4	13.0	12.0	12.7	29.1	1.9	2.3	2.0	1.0	12.7
Packaged Air Conditioning Units	95.5	33.1	7.9	6.0	7.3	19.9	3.5	6.8	1.0	1.0	7.7
Swamp Coolers	101.1	33.2	5.5	5.8	13.4	18.1	5.0	7.7	0.5	1.0	10.5
Other	115.1	39.8	10.3	8.4	13.4	23.0	1.7	Q	1.1	1.0	7.5
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	83.4	30.8	5.9	5.2	7.5	15.7	2.6	5.1	1.0	1.0	7.5
Cooling	92.8	35.4	6.6	5.7	8.4	17.3	2.8	5.2	1.1	1.0	7.7

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Water Heating Equipment											
Centralized System	99.0	36.9	6.9	6.6	8.6	18.2	3.5	7.2	1.0	1.0	7.8
Distributed System	72.4	27.2	6.7	4.7	2.9	15.5	2.1	4.5	0.8	1.0	6.1
Combination of Centralized and Distributed System	119.9	41.9	9.7	8.6	11.4	26.4	2.0	3.3	1.8	1.0	10.5
Lighting Equipment Types (more than one may apply)											
Incandescent	101.6	37.4	7.4	6.7	9.3	20.9	3.2	5.0	1.2	1.0	7.9
Standard Fluorescent	94.6	35.7	7.1	6.3	7.3	18.5	2.7	5.8	1.1	1.0	7.8
Compact Fluorescent	116.4	41.3	9.1	8.6	11.2	23.6	3.3	5.0	1.5	1.0	9.4
High Intensity Discharge	103.7	39.4	7.4	8.2	7.6	22.9	1.8	4.0	1.1	1.0	8.5
Halogen	111.9	37.6	8.6	7.8	10.5	25.6	3.4	5.3	1.2	1.0	9.0
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	98.4	35.5	7.4	6.6	8.1	19.5	3.1	6.7	1.1	1.0	7.8
Commercial Refrigeration	124.6	39.9	9.9	8.8	12.6	24.3	5.9	10.6	1.0	1.0	8.9
Walk-In Units	136.6	41.6	10.9	9.8	14.8	26.6	7.4	12.3	1.1	1.0	9.3
Cases or Cabinets	132.3	42.3	10.7	9.1	13.3	25.6	6.5	11.7	1.1	1.0	9.4
Residential-Type Units	89.1	34.8	6.8	6.1	7.4	17.5	1.8	4.1	0.9	1.0	7.2
Vending Machines	105.3	37.5	8.2	7.8	9.2	22.2	1.9	5.2	1.3	1.0	8.9
No Refrigeration	51.4	27.3	3.3	2.9	1.6	9.5	Q	(*)	0.4	1.0	5.3
Office Equipment (more than one may apply)											
Computers	96.6	36.4	7.4	6.6	7.4	19.4	2.5	5.4	1.1	1.0	7.8
With Flat Screen Monitors	112.3	40.6	9.2	8.5	8.9	23.2	2.3	4.2	1.7	1.0	9.6
Dedicated Servers	103.5	37.3	8.3	7.7	8.0	21.9	2.0	4.5	1.6	1.0	8.8
Laser Printers	91.2	34.8	6.9	6.0	7.4	17.2	2.4	5.5	1.2	1.0	7.5
Inkjet Printers	102.5	37.1	8.7	7.5	7.3	22.3	1.9	4.9	1.2	1.0	8.4
FAX Machines	97.2	36.0	7.5	6.7	7.5	19.8	2.7	5.3	1.2	1.0	7.9
Photocopiers	96.5	37.0	7.6	7.1	7.1	20.1	1.4	4.0	1.3	1.0	8.0
Number of Computers											
None	48.5	19.7	2.2	1.6	4.2	7.2	2.8	6.0	0.1	.	N
1 to 4	81.9	31.3	4.9	3.6	6.0	13.4	5.5	10.7	0.4	1.0	5.6
5 to 9	76.0	28.8	5.4	3.8	6.8	14.1	2.8	5.6	0.6	1.0	7.0
10 to 19	77.9	28.9	6.0	5.0	5.2	16.3	1.9	6.0	0.7	1.0	6.4
20 to 49	95.3	34.3	7.4	7.6	6.2	21.7	1.2	5.1	Q	1.0	7.9
50 to 99	95.4	38.8	7.2	7.1	8.0	20.1	1.5	2.1	1.1	1.0	6.8
100 to 249	106.7	43.7	8.8	9.2	7.9	21.2	1.0	2.4	1.0	1.0	7.8
250 or More	137.1	48.2	12.0	11.0	11.0	29.2	1.7	2.1	2.2	1.0	12.4
Number of Dedicated Servers											
None	72.4	29.8	4.5	3.7	5.6	12.2	3.3	6.7	0.3	1.0	5.5
1 to 4	92.6	34.8	7.0	6.5	7.8	18.7	2.2	5.3	0.7	1.0	7.5
5 to 9	104.9	30.5	10.7	10.3	5.5	25.8	Q	2.9	1.6	1.0	10.9
10 to 19	142.7	60.0	10.8	11.7	8.7	27.5	1.0	3.9	1.6	1.0	10.0
20 to 49	118.9	36.4	13.3	9.9	9.2	27.3	1.3	2.2	2.4	1.0	11.1
50 or More	139.0	44.3	8.8	8.3	Q	33.6	Q	2.4	7.9	1.0	13.7
Number of Photocopiers											
None	73.1	26.6	4.2	3.1	6.6	11.6	5.4	9.0	0.2	1.0	5.8
One	73.0	29.3	5.0	4.3	4.6	14.5	1.6	6.0	0.6	1.0	6.3
2 to 4	88.5	34.6	6.8	6.9	6.6	17.9	1.1	3.9	1.3	1.0	7.0
5 to 9	110.9	44.5	8.5	9.4	7.3	22.0	1.5	2.6	1.4	1.0	8.4
10 or More	136.4	48.0	12.5	10.3	11.3	30.6	1.7	2.1	2.4	1.0	12.0

Table E2. Major Fuel Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Major Fuel Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	89.8	34.0	6.7	5.9	6.9	17.6	2.6	5.5	1.0	1.0	7.4
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	122.0	39.1	9.8	9.1	14.4	21.9	7.5	8.3	1.0	1.0	8.4
Activities with Large Amounts of Hot Water	126.6	43.8	9.2	8.9	16.8	23.8	5.7	5.1	0.9	1.0	9.8
Separate Computer Area	107.7	39.2	9.2	8.6	8.8	22.9	1.6	3.2	1.7	1.0	8.7
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	121.4	43.7	10.5	9.0	9.7	25.4	2.5	3.6	1.8	1.0	10.9
Economizer Cycle	122.6	43.7	9.7	9.7	9.8	26.4	2.2	4.6	1.7	1.0	10.5
HVAC Maintenance	101.1	37.9	7.7	7.0	8.1	20.1	2.8	5.5	1.1	1.0	8.0
Energy Management and Control System (EMCS)	114.0	41.8	10.1	10.2	8.6	23.6	1.7	2.6	1.7	1.0	9.8
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	101.0	38.6	6.9	6.8	8.5	19.9	2.8	5.7	1.2	1.0	8.1
Tinted Window Glass	103.6	37.5	8.6	7.4	7.6	22.2	2.4	4.5	1.4	1.0	8.8
Reflective Window Glass	108.5	35.4	9.9	8.3	9.8	24.7	2.1	3.9	1.3	1.0	9.6
External Overhangs or Awnings	100.7	32.1	7.5	7.0	9.7	19.7	4.5	8.1	1.4	1.0	8.0
Skylights or Atriums	104.2	38.3	7.5	7.7	9.9	21.8	2.5	2.8	1.6	1.0	9.5
Daylighting Sensors	131.4	38.9	10.7	10.3	15.0	27.7	3.1	4.3	Q	1.0	13.1
Specular Reflectors	108.3	41.0	8.4	7.9	8.0	22.8	2.2	4.3	1.3	1.0	9.2
Electronic Ballasts	101.2	38.0	7.8	7.2	7.8	20.0	2.5	5.6	1.2	1.0	8.4
Energy Management and Control System (EMCS) For Lighting	112.6	37.8	11.5	9.1	6.2	26.1	1.9	3.1	Q	1.0	10.5
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	87.6	33.8	6.5	6.1	6.3	16.8	2.6	4.5	1.1	1.0	7.5
Cooling	89.0	33.1	7.0	6.4	6.4	17.5	2.8	4.6	1.0	1.0	7.6
Lighting	81.3	33.7	6.0	5.4	3.2	14.8	2.5	5.6	0.8	1.0	6.9
Office Equipment	75.5	34.4	5.8	5.0	3.0	13.3	1.7	4.2	0.7	1.0	6.2

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Data in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

^a The total in the "Electricity" row has been revised and does not match published value in consumption Table C3 (http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html).

^b The total in the "Electricity" row has been revised and does not match published value in consumption Table C3.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Building Floorspace (Square Feet)											
1,001 to 5,000	386	19	43	18	11	93	7	137	8	12	38
5,001 to 10,000	262	12	35	17	5	83	4	56	6	9	35
10,001 to 25,000	407	20	46	44	8	151	3	53	9	19	54
25,001 to 50,000	350	15	55	50	9	121	2	34	7	16	42
50,001 to 100,000	405	16	57	65	7	158	2	29	6	18	45
100,001 to 200,000	483	16	62	80	5	195	1	24	Q	31	56
200,001 to 500,000	361	8	51	54	5	162	1	9	8	19	43
Over 500,000	383	8	47	56	3	181	2	12	8	23	43
Principal Building Activity											
Education	371	15	74	83	11	113	2	16	4	32	21
Food Sales	208	6	12	7	Q	46	2	119	2	2	10
Food Service	217	10	28	24	10	42	13	70	2	2	15
Health Care	248	6	34	42	2	105	1	8	4	10	36
Inpatient	178	3	25	38	2	76	1	4	2	7	21
Outpatient	69	3	9	4	(*)	28	(*)	4	2	3	15
Lodging	235	14	24	14	12	124	2	12	Q	6	24
Retail (Other Than Mall).....	211	6	25	16	2	111	(*)	22	3	4	22
Office	719	33	101	63	7	281	1	35	32	74	91
Public Assembly	167	5	35	63	(*)	27	(*)	9	Q	3	23
Public Order and Safety	57	2	8	10	3	18	(*)	3	1	2	10
Religious Worship	62	3	11	5	(*)	17	(*)	6	(*)	1	18
Service	149	6	15	24	(*)	63	Q	9	1	3	28
Warehouse and Storage	244	5	13	20	2	132	Q	36	2	5	30
Other	133	2	16	11	Q	59	Q	10	Q	5	22
Vacant	15	1	2	1	Q	4	Q	(*)	Q	(*)	7
Year Constructed											
Before 1920	90	2	6	11	Q	34	1	17	2	4	12
1920 to 1945	208	4	16	30	2	89	1	26	3	8	30
1946 to 1959	231	8	26	34	5	87	2	26	4	11	28
1960 to 1969	327	12	43	50	5	113	1	40	6	18	39
1970 to 1979	572	27	72	74	10	220	4	58	12	27	67
1980 to 1989	627	28	91	66	12	236	4	66	15	37	72
1990 to 1999	690	24	99	88	12	246	6	85	17	35	78
2000 to 2003	293	10	45	32	4	116	3	38	4	9	32
Census Region and Division											
Northeast	503	20	37	67	6	206	2	58	12	30	64
New England	108	5	6	12	2	42	1	19	2	6	13
Middle Atlantic	395	15	31	55	4	164	1	39	10	24	51
Midwest	737	44	52	103	11	287	5	89	15	35	96
East North Central	524	28	34	77	6	208	4	59	11	27	68
West North Central	213	16	18	25	4	79	1	29	4	9	27
South	1,278	33	242	153	28	449	12	154	18	55	134
South Atlantic	717	20	124	85	19	258	7	87	11	35	71
East South Central	171	6	23	22	3	63	1	24	2	5	21
West South Central	390	8	96	46	6	128	3	43	5	14	41
West	519	18	66	61	7	200	3	53	19	28	64
Mountain	191	7	25	23	2	78	Q	18	Q	8	22
Pacific	329	11	41	38	5	122	2	35	13	20	42

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	408	23	22	60	5	157	3	59	8	18	53
5,500-7,000 HDD	763	44	55	98	11	309	6	88	16	39	97
4,000-5,499 HDD	567	22	58	69	8	230	3	61	18	31	66
Fewer than 4,000 HDD	748	16	113	94	17	275	6	93	14	33	87
2,000 CDD or More and --											
Fewer than 4,000 HDD	549	9	149	62	11	172	5	53	7	27	53
Number of Floors											
One	1,140	50	155	110	23	384	13	230	17	34	125
Two	689	25	88	98	16	254	5	70	18	32	85
Three	286	13	32	40	4	113	1	22	7	16	38
Four to Nine	595	16	81	99	6	240	2	25	13	41	72
Ten or More	327	10	41	38	4	152	1	8	9	25	38
Elevators and Escalators (more than one may apply)											
Any Elevators	1,421	46	193	221	18	581	5	53	38	96	169
Number of Elevators.....											
One	354	13	47	61	6	134	1	20	7	22	42
Two to Five	585	22	79	89	7	234	2	22	19	43	70
Six or More	481	10	68	70	5	214	2	12	12	31	57
Any Escalators	193	5	32	30	2	80	Q	4	Q	11	22
Number of Workers (main shift)											
Fewer than 5	372	18	39	28	7	119	3	92	3	5	57
5 to 9	248	12	31	21	6	78	4	56	4	6	31
10 to 19	303	17	40	31	8	103	5	52	5	9	35
20 to 49	524	18	71	69	9	191	4	67	14	21	59
50 to 99	403	16	55	67	7	151	2	37	8	19	41
100 to 249	460	16	67	68	8	188	2	27	9	25	49
250 or More	727	18	95	100	7	313	2	22	20	63	85
Weekly Operating Hours											
Fewer than 40	90	5	17	7	1	22	1	12	1	2	22
40 to 48	397	22	66	42	6	133	1	33	10	25	60
49 to 60	598	23	83	71	7	229	2	50	15	34	84
61 to 84	497	19	62	67	9	184	4	64	9	24	55
85 to 167	523	16	54	77	9	167	9	119	5	22	44
Open Continuously	932	30	116	119	20	408	4	76	23	41	93
Ownership and Occupancy											
Nongovernment Owned.....	2,300	91	280	224	38	897	19	319	54	102	276
Owner Occupied	1,086	38	136	116	16	424	5	135	28	51	138
Nonowner Occupied	1,205	52	144	108	22	471	14	184	25	51	134
Unoccupied	8	Q	Q	(*)	Q	2	(*)	Q	Q	Q	4
Government Owned	737	24	117	160	14	246	3	35	10	47	81
Federal	131	2	13	24	(*)	63	Q	3	2	5	19
State	204	3	25	53	3	62	(*)	9	3	Q	24
Local	402	19	79	83	11	120	3	23	5	21	38
Vacancy Status											
Completely Vacant	9	Q	Q	(*)	Q	3	Q	Q	Q	Q	5
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	575	25	76	68	7	240	2	30	13	42	74
Not At All Vacant	2,446	89	320	315	45	899	20	324	51	107	277

CONTINUED

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Number of Establishments											
One	2,138	82	272	272	43	790	19	290	42	87	242
2 to 5	502	16	67	64	5	199	2	49	12	24	64
6 to 10	115	5	15	14	2	43	(*)	5	3	Q	13
11 to 20	98	5	15	12	1	37	(*)	5	2	7	13
More than 20	174	5	29	22	2	72	(*)	5	5	15	20
Currently Unoccupied	9	Q	Q	(*)	Q	3	Q	Q	Q	Q	5
Predominant Exterior Wall Material											
Brick, Stone or Stucco	1,507	58	208	207	31	530	13	180	30	73	176
Concrete (Block or Poured)	530	19	72	62	9	202	4	72	Q	18	60
Concrete Panels	399	9	50	46	4	185	1	22	10	28	43
Siding or Shingles	150	9	17	14	4	49	2	29	3	6	18
Metal Panels	297	12	24	35	3	120	Q	44	4	11	42
Window Glass	67	3	11	7	1	25	(*)	2	2	6	9
Other	63	3	10	7	(*)	25	1	4	1	4	7
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	1,041	30	143	134	17	405	8	107	23	57	117
Shingles (Not Wood)	413	19	50	41	13	134	4	79	9	15	50
Metal Surfacing	392	18	47	48	7	150	Q	47	5	13	55
Synthetic or Rubber	890	37	116	126	12	329	6	91	22	53	99
Slate or Tile	104	4	16	11	2	34	1	17	2	4	12
Wooden Materials	37	2	6	4	1	14	Q	4	1	1	4
Concrete	99	Q	11	Q	1	Q	Q	5	1	3	13
Other	41	Q	6	3	Q	22	(*)	3	(*)	1	4
No One Major Type	20	Q	3	4	Q	6	Q	2	(*)	Q	3
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	780	30	85	112	14	298	5	88	15	42	90
Addition or Annex	315	13	35	55	5	121	3	31	4	14	35
Reduction In Floorspace	52	2	5	9	Q	22	(*)	2	1	3	7
Cosmetic Improvements	600	23	64	84	11	230	4	70	12	33	68
Wall or Roof Replacement	347	12	38	53	7	140	2	27	7	22	39
Interior Wall											
Re-Configuration	401	15	44	61	5	162	2	32	8	24	49
HVAC Equipment Upgrade.....	527	21	59	81	9	206	3	45	11	32	60
Lighting Upgrade	478	18	50	75	7	184	2	49	10	28	55
Window Replacement	251	9	23	37	4	100	2	26	5	16	29
Plumbing System Upgrade	314	10	32	50	5	129	2	25	5	19	36
Insulation Upgrade	174	6	20	30	2	64	1	15	3	11	21
Other Renovation	16	1	1	2	Q	7	Q	2	(*)	1	2
No Renovations Since 1980.....	647	22	78	87	10	246	4	78	12	26	85
Building Newer than 1980	1,609	62	234	185	29	599	13	188	36	80	182
Energy Sources (more than one may apply)											
Electricity	3,037	115	397	384	52	1,143	22	354	64	148	357
Natural Gas	2,161	62	269	295	30	842	17	239	43	108	256
Fuel Oil	854	29	109	121	12	359	4	43	24	51	102
District Heat	335	3	24	69	3	147	1	12	5	29	42
District Chilled Water	192	2	16	49	2	68	1	7	3	Q	23
Propane	339	9	36	40	5	141	2	51	5	9	40
Other	77	2	8	14	1	30	(*)	6	Q	4	10

Energy Information Administration

2003 Commercial Buildings Energy Consumption Survey: Energy End-Use Consumption Tables

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Space-Heating Energy Sources^a											
Electricity	1,553	115	225	155	37	571	12	164	36	70	168
Electricity Main	907	92	151	68	28	303	8	111	21	37	88
Electricity Secondary	646	23	74	87	9	267	5	53	15	33	80
Other Excluding Electricity	1,390	(*)	152	221	14	543	9	171	26	76	177
Buildings without Heating	93	(*)	20	8	1	29	1	19	1	2	11
Primary Space-Heating Energy Source											
Electricity	907	92	151	68	28	303	8	111	21	37	88
Natural Gas	1,565	19	192	219	18	620	11	179	34	75	197
Fuel Oil	77	1	6	13	1	29	(*)	13	1	4	9
District Heat	310	2	21	65	3	135	1	11	4	27	40
Propane	70	1	7	9	1	18	Q	19	Q	Q	10
Other	16	Q	1	2	(*)	7	(*)	2	Q	Q	2
Cooling Energy Source^b											
Electricity	2,776	110	397	326	50	1,032	21	335	61	126	318
Other Excluding Electricity	157	Q	(*)	42	2	63	(*)	6	3	Q	19
Buildings without Cooling	104	4	(*)	15	1	48	(*)	14	1	2	20
Water-Heating Energy Source											
Electricity	1,373	72	196	142	52	487	9	157	33	66	159
Other Excluding Electricity	1,519	38	186	228	(*)	593	13	179	29	79	174
Bldgs without Water Heating	144	4	16	15	(*)	63	Q	18	2	3	24
Cooking Energy Source											
Electricity	848	37	117	125	21	294	22	103	14	36	78
Other Excluding Electricity	529	15	76	78	8	193	(*)	81	9	18	52
Buildings without Cooking	1,659	63	205	181	23	656	(*)	170	41	93	227
Energy End Uses (more than one may apply)											
Buildings with Space Heating	2,944	115	377	376	51	1,113	21	335	63	146	346
Buildings with Cooling	2,933	111	397	369	52	1,095	22	341	63	147	337
Buildings with Water Heating	2,892	110	382	370	52	1,080	22	336	62	145	333
Buildings with Cooking	1,377	51	193	203	30	487	22	184	23	55	130
Buildings with Manufacturing	141	4	9	17	Q	64	Q	10	2	6	25
Buildings with Electricity Generation	890	30	117	129	13	367	4	42	28	56	103
Percent of Floorspace Heated											
Not Heated	93	(*)	20	8	1	29	1	19	1	2	11
1 to 50	187	6	14	18	4	69	Q	39	Q	4	25
51 to 99	395	14	49	49	7	152	3	54	6	16	46
100	2,361	95	314	309	41	892	17	242	49	127	275
Percent of Floorspace Cooled											
Not Cooled	104	4	(*)	15	1	48	(*)	14	1	2	20
1 to 50	444	15	23	56	7	195	Q	64	5	12	63
51 to 99	746	29	93	97	11	273	5	104	13	38	82
100	1,744	67	281	215	34	627	14	173	45	96	191

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	225	12	32	29	6	63	2	28	Q	6	40
51 to 99	894	34	116	125	16	328	5	87	21	58	104
100	1,901	68	248	230	31	747	15	236	35	85	207
Building Never Open/ Electricity Not Used	12	Q	1	(*)	Q	4	Q	1	Q	Q	6
Percent Lit When Closed											
Zero	543	21	71	69	7	173	4	74	10	30	84
1 to 50	1,407	58	195	181	23	487	13	180	29	72	169
51 to 100	155	5	16	14	Q	75	1	24	2	5	11
Building Never Closed/ Electricity Not Used	932	30	116	119	20	408	4	76	23	41	93
Heating Equipment (more than one may apply)											
Heat Pumps	523	27	87	53	13	201	4	46	12	25	55
Packaged Heat Pumps	359	18	61	33	8	141	2	33	9	17	37
Split-System Heat Pumps	136	6	23	18	4	51	Q	11	2	5	15
Individual Room Heat Pumps ..	148	8	25	17	5	60	1	7	2	8	14
Furnaces	761	35	78	84	13	287	6	123	13	27	95
Individual Space Heaters	563	37	61	65	11	225	2	61	10	26	66
District Heat	317	2	22	66	3	139	1	11	4	28	40
Boilers	1,009	27	126	168	13	405	4	59	24	56	126
Packaged Heating Units	1,058	51	156	119	21	383	10	134	24	47	112
Other	168	10	21	20	3	64	1	18	3	8	20
Cooling Equipment (more than one may apply)											
Residential-Type Central											
Air Conditioners	455	19	58	67	11	158	4	59	8	15	56
Heat Pumps	547	26	91	55	13	209	4	54	12	25	58
Packaged Heat Pumps	360	18	59	32	8	142	2	36	9	17	38
Split-System Heat Pumps	139	5	24	19	4	50	Q	13	2	5	16
Individual Room Heat Pumps ..	171	8	30	19	5	68	1	11	3	8	17
Individual Air Conditioners	479	20	63	62	13	196	3	44	7	18	53
District Chilled Water	192	2	16	49	2	68	1	7	3	Q	23
Central Chillers	836	22	122	140	10	338	3	27	24	50	99
Packaged Air Conditioning											
Units	1,578	64	216	179	27	595	14	205	30	72	176
Swamp Coolers	75	2	9	9	2	28	1	12	1	2	9
Other	75	3	11	10	(*)	28	(*)	Q	1	4	8
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	716	36	91	84	16	258	6	83	17	37	88
Cooling	976	41	124	120	19	363	7	110	23	55	114
Water Heating Equipment											
Centralized System	1,759	68	219	227	31	630	16	250	35	79	204
Distributed System	483	20	75	54	10	179	3	52	9	23	58
Combination of Centralized and Distributed System	651	22	88	88	12	271	3	34	19	43	71

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Lighting Equipment Types (more than one may apply)											
Incandescent	2,006	75	257	257	34	803	17	193	44	105	222
Standard Fluorescent	2,951	111	388	378	50	1,103	22	344	63	147	345
Compact Fluorescent	1,665	61	220	238	27	652	12	139	40	88	189
High Intensity Discharge	1,126	36	131	170	16	472	5	82	22	61	130
Halogen	1,069	40	132	139	18	453	8	94	22	50	114
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	2,771	104	359	350	49	1,030	22	354	59	137	307
Commercial Refrigeration	1,788	61	237	236	32	651	21	283	28	70	169
Walk-In Units	1,489	48	196	198	27	539	20	250	22	56	133
Cases or Cabinets	1,441	48	193	185	24	522	17	239	23	54	135
Residential-Type Units	1,769	71	236	236	31	681	9	161	34	98	212
Vending Machines	1,985	67	261	275	31	784	9	183	45	110	219
No Refrigeration	266	11	39	34	4	112	Q	(*)	5	11	50
Office Equipment (more than one may apply)											
Computers	2,838	107	377	370	48	1,077	19	299	63	148	328
With Flat Screen Monitors	1,589	57	213	223	22	614	8	112	46	109	187
Dedicated Servers	2,035	74	272	279	30	797	9	164	57	124	230
Laser Printers	1,550	65	208	197	27	569	11	182	38	76	177
Inkjet Printers	1,820	61	251	242	29	717	9	158	39	102	211
FAX Machines	2,701	100	359	352	45	1,036	18	277	62	142	310
Photocopiers	2,361	83	321	327	35	928	9	187	60	136	276
Number of Computers											
None	199	8	20	14	4	66	3	55	1	(*)	29
1 to 4	523	26	58	45	14	166	9	133	5	5	60
5 to 9	274	14	39	28	4	102	2	40	4	6	35
10 to 19	285	11	39	33	5	108	1	40	5	9	35
20 to 49	408	13	54	56	6	161	Q	38	Q	16	50
50 to 99	259	9	38	38	5	108	1	11	6	14	29
100 to 249	368	15	54	61	6	142	1	16	7	25	41
250 or More	722	19	96	109	8	291	2	21	22	73	79
Number of Dedicated Servers											
None	1,002	41	125	105	23	346	13	191	7	25	127
1 to 4	1,166	50	159	156	20	451	5	128	17	48	131
5 to 9	250	7	36	40	4	100	Q	11	6	17	28
10 to 19	216	5	25	35	2	83	(*)	12	5	23	25
20 to 49	183	5	32	26	2	71	1	6	6	14	21
50 or More	219	7	20	23	2	92	Q	7	22	21	25
Number of Photocopiers											
None	676	32	77	57	18	215	13	167	4	12	81
One	593	26	73	66	10	224	3	92	9	16	74
2 to 4	706	25	100	104	12	270	3	59	19	34	80
5 to 9	323	11	45	52	5	121	1	14	8	29	37
10 or More	738	21	103	105	8	312	2	21	25	56	85

CONTINUED

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	1,376	51	193	203	30	486	22	184	23	55	130
Activities with Large Amounts of Hot Water	1,167	46	158	174	27	463	12	99	18	50	120
Separate Computer Area	1,550	54	219	232	23	615	6	85	45	101	169
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	1,267	45	181	176	19	498	7	71	35	85	151
Economizer Cycle	1,408	51	182	206	21	556	7	97	37	91	161
HVAC Maintenance	2,703	98	362	360	46	1,030	20	282	59	137	310
Energy Management and Control System (EMCS)	954	30	142	160	14	368	4	40	27	61	108
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	2,024	87	244	263	34	774	16	222	46	98	239
Tinted Window Glass	1,682	56	235	221	24	663	10	135	41	95	202
Reflective Window Glass	522	20	77	71	8	211	2	33	11	29	60
External Overhangs or Awnings	961	37	120	121	19	339	11	140	25	47	101
Skylights or Atriums	645	20	81	96	8	273	3	35	20	33	75
Daylighting Sensors	206	6	29	30	2	79	1	12	Q	12	23
Specular Reflectors	1,487	52	195	207	23	596	9	113	34	81	177
Electronic Ballasts	2,498	91	335	336	41	937	17	262	56	132	291
Energy Management and Control System (EMCS) For Lighting	311	10	47	44	4	125	1	15	Q	19	35
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	1,930	73	255	262	33	717	14	193	49	101	233
Cooling	2,031	74	281	275	36	755	15	198	45	111	241
Lighting	2,006	81	270	255	31	693	17	265	40	104	251
Office Equipment	721	29	107	97	13	258	5	81	13	26	92
Annual Consumption (kilowatthours)											
10,000 or Less	13	(*)	1	1	(*)	4	(*)	2	(*)	(*)	4
10,001 to 50,000	153	8	19	10	2	55	(*)	22	3	5	29
50,001 to 100,000	176	8	22	14	4	55	1	35	4	6	27
100,001 to 500,000	715	35	84	72	16	228	10	146	14	27	81
500,001 to 1,000,000	331	14	51	44	10	115	3	43	5	13	33
1,000,001 to 5,000,000	917	34	124	145	14	347	4	78	16	55	100
Over 5,000,000	732	16	95	99	7	338	2	28	21	42	83

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (trillion Btu)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	3,037	115	397	384	52	1,143	22	354	64	148	357
Provider of Purchased Electricity (more than one may apply)											
Local Utility	2,700	104	347	340	49	1,007	21	329	53	131	319
Some Other Provider	308	9	44	42	3	122	1	25	Q	16	35

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

^a Totals in the "Electricity," "Electricity Secondary," and "Other Excluding Electricity" rows have been revised and values do not match published values in consumption Table C13

(http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html).

^b Totals in the "Electricity" and "Other Excluding Electricity" rows have been revised and do not match published value in consumption Table C13.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: • Due to rounding, data may not sum to totals. • HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Building Floorspace (Square Feet)											
1,001 to 5,000	60.8	2.9	6.8	2.9	1.7	14.6	1.1	21.6	1.2	1.9	6.0
5,001 to 10,000	42.2	2.0	5.6	2.8	0.9	13.3	0.7	9.0	0.9	1.5	5.7
10,001 to 25,000	35.8	1.7	4.1	3.9	0.7	13.3	0.3	4.6	0.8	1.7	4.7
25,001 to 50,000	41.8	1.8	6.6	6.0	1.0	14.4	0.2	4.1	0.8	1.9	5.0
50,001 to 100,000	44.8	1.8	6.4	7.2	0.8	17.5	0.3	3.3	0.7	2.0	5.0
100,001 to 200,000	53.5	1.8	6.9	8.8	0.5	21.7	0.1	2.7	Q	3.5	6.2
200,001 to 500,000	51.2	1.2	7.2	7.6	0.7	23.0	0.2	1.2	1.1	2.7	6.1
Over 500,000	64.9	1.4	7.9	9.5	0.5	30.6	0.3	2.1	1.4	3.9	7.3
Principal Building Activity											
Education	37.6	1.5	7.5	8.4	1.1	11.5	0.2	1.6	0.4	3.3	2.1
Food Sales	168.5	5.1	9.9	6.0	Q	37.2	1.9	96.1	1.6	1.5	8.1
Food Service	130.9	6.3	17.0	14.8	6.3	25.4	8.1	42.1	1.0	1.0	8.9
Health Care	78.3	1.9	10.6	13.3	0.8	33.1	0.2	2.6	1.2	3.2	11.3
Inpatient	93.7	1.6	13.0	20.0	1.1	40.1	0.4	2.0	1.1	3.6	10.9
Outpatient	55.0	2.3	7.0	3.3	0.3	22.6	0.1	3.5	1.3	2.6	12.0
Lodging	46.1	2.8	4.7	2.7	2.3	24.3	0.4	2.3	Q	1.2	4.7
Retail (Other Than Mall).....	48.8	1.5	5.9	3.7	0.4	25.7	0.1	5.0	0.6	0.9	5.1
Office	58.9	2.7	8.3	5.2	0.6	23.1	0.1	2.9	2.6	6.1	7.5
Public Assembly	42.6	1.3	8.9	15.9	0.1	7.0	0.1	2.2	Q	0.8	5.8
Public Order and Safety	52.3	1.6	7.2	9.5	3.0	16.5	0.1	2.9	0.6	1.5	9.2
Religious Worship	16.6	0.8	2.8	1.4	0.1	4.4	0.1	1.7	0.1	0.2	4.9
Service	37.5	1.4	3.8	6.1	0.1	15.8	Q	2.2	0.3	0.8	7.0
Warehouse and Storage	25.9	0.5	1.4	2.2	0.2	14.0	Q	3.8	0.2	0.5	3.2
Other	76.8	1.4	9.3	6.1	0.3	34.3	Q	6.0	Q	2.9	12.6
Vacant	8.3	0.5	0.8	0.5	Q	2.4	Q	0.2	Q	Q	3.7
Year Constructed											
Before 1920	24.1	0.5	1.7	2.9	Q	9.2	0.3	4.5	0.6	0.9	3.2
1920 to 1945	31.5	0.6	2.4	4.5	0.3	13.5	0.2	3.9	0.4	1.2	4.5
1946 to 1959	33.7	1.2	3.8	5.0	0.7	12.8	0.3	3.8	0.6	1.6	4.1
1960 to 1969	40.6	1.4	5.3	6.2	0.7	14.1	0.2	4.9	0.8	2.3	4.8
1970 to 1979	54.2	2.5	6.8	7.0	1.0	20.9	0.4	5.5	1.2	2.6	6.3
1980 to 1989	61.7	2.8	9.0	6.5	1.2	23.3	0.4	6.5	1.5	3.6	7.1
1990 to 1999	57.1	2.0	8.2	7.3	1.0	20.4	0.5	7.0	1.4	2.9	6.4
2000 to 2003	55.3	1.9	8.4	6.0	0.8	22.0	0.5	7.1	0.7	1.7	6.1
Census Region and Division											
Northeast	39.3	1.5	2.9	5.2	0.5	16.1	0.2	4.6	1.0	2.4	5.0
New England	36.7	1.6	2.0	4.1	0.7	14.2	0.3	6.5	0.7	2.1	4.4
Middle Atlantic	40.0	1.5	3.1	5.6	0.4	16.6	0.1	4.0	1.0	2.4	5.2
Midwest	44.1	2.6	3.1	6.1	0.6	17.2	0.3	5.3	0.9	2.1	5.7
East North Central	46.0	2.4	3.0	6.8	0.6	18.3	0.3	5.2	1.0	2.3	6.0
West North Central	40.0	3.0	3.4	4.8	0.8	14.8	0.2	5.5	0.7	1.6	5.1
South	56.1	1.4	10.6	6.7	1.2	19.7	0.5	6.8	0.8	2.4	5.9
South Atlantic	59.3	1.6	10.2	7.0	1.6	21.4	0.6	7.2	0.9	2.9	5.9
East South Central	53.0	1.8	7.1	6.9	0.9	19.6	Q	7.5	0.6	1.6	6.6
West South Central	52.3	1.0	12.8	6.2	0.8	17.2	0.5	5.8	0.7	1.9	5.5
West	47.1	1.6	6.0	5.6	0.6	18.2	0.3	4.8	1.7	2.5	5.8
Mountain	52.5	2.0	7.0	6.3	0.6	21.6	Q	5.0	Q	2.3	6.1
Pacific	44.4	1.5	5.5	5.2	0.7	16.5	0.3	4.7	Q	2.6	5.7

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	39.3	2.2	2.1	5.8	0.5	15.1	0.3	5.6	0.8	1.7	5.1
5,500-7,000 HDD	44.7	2.6	3.2	5.8	0.6	18.1	0.3	5.2	1.0	2.3	5.7
4,000-5,499 HDD	49.9	2.0	5.1	6.1	0.7	20.2	0.3	5.4	1.6	2.7	5.8
Fewer than 4,000 HDD	49.3	1.1	7.4	6.2	1.1	18.1	0.4	6.1	0.9	2.2	5.8
2,000 CDD or More and --											
Fewer than 4,000 HDD	59.2	1.0	16.1	6.7	1.2	18.5	0.5	5.7	0.8	2.9	5.7
Number of Floors											
One	45.7	2.0	6.2	4.4	0.9	15.4	0.5	9.2	0.7	1.4	5.0
Two	43.1	1.6	5.5	6.1	1.0	15.9	0.3	4.4	1.1	2.0	5.3
Three	38.7	1.8	4.4	5.4	0.6	15.3	0.2	2.9	1.0	2.2	5.1
Four to Nine	59.1	1.6	8.0	9.9	0.6	23.9	0.2	2.5	1.2	4.0	7.1
Ten or More	66.1	2.1	8.4	7.6	0.7	30.7	0.3	1.5	1.9	5.1	7.7
Elevators and Escalators (more than one may apply)											
Any Elevators	58.0	1.9	7.9	9.0	0.7	23.7	0.2	2.2	1.6	3.9	6.9
Number of Elevators.....											
One	43.7	1.7	5.8	7.5	0.7	16.5	0.1	2.5	0.9	2.7	5.2
Two to Five	57.8	2.2	7.8	8.8	0.7	23.1	0.2	2.1	1.8	4.2	6.9
Six or More	76.8	1.7	10.8	11.2	0.7	34.1	0.3	1.9	2.0	5.0	9.1
Any Escalators	82.2	2.1	13.4	12.7	0.7	33.9	Q	1.8	Q	4.8	9.3
Number of Workers (main shift)											
Fewer than 5	26.4	1.3	2.8	2.0	0.5	8.5	0.2	6.6	0.2	0.4	4.0
5 to 9	40.4	2.0	5.0	3.5	0.9	12.6	0.6	9.1	0.7	1.0	5.0
10 to 19	38.8	2.2	5.1	3.9	1.0	13.2	0.7	6.7	0.6	1.1	4.4
20 to 49	47.8	1.6	6.5	6.3	0.9	17.5	0.4	6.1	1.3	1.9	5.4
50 to 99	50.8	2.0	6.9	8.4	0.9	19.1	0.3	4.7	1.0	2.4	5.2
100 to 249	66.9	2.3	9.8	9.8	1.2	27.3	0.3	4.0	1.3	3.7	7.2
250 or More	76.3	1.9	10.0	10.5	0.7	32.9	0.2	2.3	2.1	6.6	9.0
Weekly Operating Hours											
Fewer than 40	15.3	0.9	2.9	1.2	0.2	3.7	0.2	1.9	0.1	0.4	3.7
40 to 48	34.3	1.9	5.7	3.6	0.5	11.5	0.1	2.9	0.9	2.2	5.2
49 to 60	38.1	1.5	5.3	4.5	0.5	14.6	0.1	3.2	1.0	2.2	5.3
61 to 84	48.2	1.8	6.0	6.5	0.8	17.9	0.4	6.2	0.9	2.3	5.3
85 to 167	75.4	2.3	7.7	11.1	1.3	24.0	1.4	17.2	0.8	3.1	6.3
Open Continuously	72.3	2.3	9.0	9.3	1.6	31.7	0.3	5.9	1.8	3.2	7.2
Ownership and Occupancy											
Nongovernment Owned.....											
Owner Occupied	46.3	1.6	5.8	4.9	0.7	18.1	0.2	5.7	1.2	2.2	5.9
Nonowner Occupied	51.8	2.2	6.2	4.6	0.9	20.3	0.6	7.9	1.1	2.2	5.8
Unoccupied	6.4	Q	Q	0.2	Q	1.7	(*)	Q	Q	Q	3.2
Government Owned											
Federal	67.1	0.9	6.5	12.2	0.2	32.5	0.1	1.6	0.8	2.8	9.5
State	53.9	0.8	6.7	14.1	0.8	16.3	0.1	2.5	0.8	5.4	6.4
Local	42.0	2.0	8.3	8.7	1.1	12.6	0.3	2.4	0.5	2.2	3.9
Vacancy Status											
Completely Vacant	6.2	Q	Q	0.2	Q	1.7	Q	Q	Q	Q	3.1
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	47.1	2.0	6.2	5.6	0.6	19.6	0.2	2.5	1.0	3.4	6.0
Not At All Vacant	49.7	1.8	6.5	6.4	0.9	18.2	0.4	6.6	1.0	2.2	5.6

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Number of Establishments											
One	48.2	1.8	6.1	6.1	1.0	17.8	0.4	6.5	0.9	2.0	5.5
2 to 5	46.0	1.5	6.1	5.9	0.5	18.2	0.2	4.5	1.1	2.2	5.8
6 to 10	58.9	2.7	7.4	7.1	0.8	22.1	0.1	2.4	1.4	8.2	6.7
11 to 20	50.1	2.8	7.4	6.3	0.5	19.1	0.1	Q	1.0	3.3	6.8
More than 20	66.8	2.0	11.0	8.4	0.6	27.4	0.1	1.8	2.0	5.7	7.7
Currently Unoccupied	6.2	Q	Q	0.2	Q	1.7	Q	Q	Q	Q	3.1
Predominant Exterior Wall Material											
Brick, Stone or Stucco	46.7	1.8	6.4	6.4	1.0	16.4	0.4	5.6	0.9	2.3	5.5
Concrete (Block or Poured)	49.3	1.7	6.7	5.8	0.8	18.8	0.3	6.7	1.2	1.7	5.6
Concrete Panels	62.6	1.4	7.8	7.3	0.6	29.0	0.2	3.4	1.6	4.5	6.7
Siding or Shingles	37.7	2.3	4.2	3.4	0.9	12.3	0.5	7.2	0.9	1.4	4.5
Metal Panels	40.3	1.6	3.3	4.8	0.5	16.3	Q	6.0	0.5	1.5	5.7
Window Glass	65.2	3.0	10.4	7.2	1.0	24.7	0.1	2.0	1.9	6.2	8.8
Other	56.8	3.1	8.6	5.9	0.3	22.9	0.7	3.7	1.3	3.9	6.4
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	50.1	1.5	6.9	6.5	0.8	19.5	0.4	5.2	1.1	2.7	5.6
Shingles (Not Wood)	41.8	1.9	5.1	4.2	1.3	13.6	0.4	8.0	0.9	1.5	5.1
Metal Surfacing	34.9	1.6	4.2	4.2	0.6	13.4	Q	4.1	0.4	1.1	4.9
Synthetic or Rubber	60.5	2.5	7.9	8.6	0.8	22.4	0.4	6.2	1.5	3.6	6.7
Slate or Tile	42.5	1.7	6.6	4.4	0.7	14.1	0.6	6.9	0.8	1.8	5.1
Wooden Materials	41.6	2.5	6.3	4.4	1.0	16.1	(*)	4.7	0.7	1.2	4.5
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	69.7	0.7	9.9	5.5	Q	37.7	Q	5.6	0.4	2.0	6.9
No One Major Type	35.5	Q	4.7	6.6	Q	10.8	Q	Q	0.7	Q	4.6
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	44.2	1.7	4.8	6.4	0.8	16.9	0.3	5.0	0.9	2.4	5.1
Addition or Annex	48.1	1.9	5.3	8.4	0.8	18.5	0.4	4.7	0.6	2.1	5.4
Reduction In Floorspace	51.8	1.7	5.2	8.9	0.9	22.0	0.2	2.3	0.9	3.0	6.7
Cosmetic Improvements	46.2	1.8	4.9	6.5	0.8	17.7	0.3	5.4	0.9	2.6	5.2
Wall or Roof Replacement	43.0	1.4	4.7	6.6	0.8	17.3	0.3	3.4	0.9	2.7	4.9
Interior Wall											
Re-Configuration	47.2	1.7	5.1	7.2	0.6	19.1	0.2	3.8	0.9	2.8	5.7
HVAC Equipment Upgrade.....	49.0	1.9	5.5	7.5	0.8	19.1	0.3	4.2	1.1	3.0	5.6
Lighting Upgrade	46.5	1.7	4.8	7.3	0.7	17.9	0.2	4.7	1.0	2.7	5.4
Window Replacement	39.9	1.5	3.6	5.9	0.7	15.9	0.2	4.1	0.7	2.6	4.7
Plumbing System Upgrade	43.9	1.4	4.5	7.0	0.7	18.1	0.2	3.5	0.7	2.6	5.1
Insulation Upgrade	43.4	1.4	4.9	7.5	0.6	16.1	0.3	3.8	0.8	2.7	5.3
Other Renovation	30.8	1.4	2.0	4.3	Q	13.8	0.3	3.4	0.3	1.0	3.7
No Renovations Since 1980.....	35.7	1.2	4.3	4.8	0.5	13.6	0.2	4.3	0.7	1.4	4.7
Building Newer than 1980	58.5	2.3	8.5	6.7	1.0	21.8	0.5	6.8	1.3	2.9	6.6
Energy Sources (more than one may apply)											
Electricity	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Natural Gas	49.7	1.4	6.2	6.8	0.7	19.4	0.4	5.5	1.0	2.5	5.9
Fuel Oil	56.4	1.9	7.2	8.0	0.8	23.7	0.2	2.8	1.6	3.4	6.7
District Heat	61.5	0.5	4.4	12.8	0.6	26.9	0.1	2.2	0.8	5.4	7.7
District Chilled Water	67.4	0.7	5.6	17.2	0.8	23.9	0.2	2.6	1.0	7.2	8.2
Propane	47.9	1.2	5.1	5.7	0.8	19.9	0.3	7.2	0.7	1.3	5.7
Other	56.0	1.4	5.5	10.1	0.5	21.9	0.2	4.6	Q	2.8	7.3

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Space-Heating Energy Sources											
Electricity	54.4	4.0	7.9	5.4	1.3	20.0	0.4	5.7	1.3	2.4	5.9
Electricity Main	56.7	5.7	9.4	4.3	1.8	19.0	0.5	6.9	1.3	2.3	5.5
Electricity Secondary	51.5	1.8	5.9	6.9	0.7	21.3	0.4	4.2	1.2	2.6	6.4
Other Excluding Electricity	44.2	(*)	4.8	7.0	0.4	17.3	0.3	5.4	0.8	2.4	5.6
Buildings without Heating	28.1	(*)	6.1	2.3	0.3	8.9	0.4	5.8	0.3	0.6	3.5
Primary Space-Heating Energy Source											
Electricity	56.7	5.7	9.4	4.3	1.8	19.0	0.5	6.9	1.3	2.3	5.5
Natural Gas	47.5	0.6	5.8	6.6	0.5	18.8	0.3	5.4	1.0	2.3	6.0
Fuel Oil	20.1	0.2	1.5	3.4	0.3	7.5	0.1	3.3	0.3	1.0	2.4
District Heat	63.1	0.4	4.2	13.3	0.6	27.6	0.1	2.2	0.9	5.6	8.1
Propane	35.8	0.5	3.8	4.4	0.5	9.3	Q	9.9	Q	Q	5.0
Other	43.1	0.5	2.8	5.0	0.4	20.5	0.1	6.1	0.5	Q	6.0
Cooling Energy Source											
Electricity	51.1	2.0	7.3	6.0	0.9	19.0	0.4	6.2	1.1	2.3	5.8
Other Excluding Electricity	59.6	Q	(*)	16.1	0.7	23.9	0.2	2.3	1.0	7.7	7.3
Buildings without Cooling	16.2	0.6	(*)	2.4	0.1	7.5	0.1	2.1	0.1	0.3	3.2
Water-Heating Energy Source											
Electricity	50.0	2.6	7.1	5.2	1.9	17.7	0.3	5.7	1.2	2.4	5.8
Other Excluding Electricity	52.4	1.3	6.4	7.9	(*)	20.5	0.4	6.2	1.0	2.7	6.0
Bldgs without Water Heating	21.1	0.6	2.3	2.1	(*)	9.1	Q	2.6	0.2	0.4	3.6
Cooking Energy Source											
Electricity	64.4	2.8	8.9	9.5	1.6	22.3	1.7	7.8	1.1	2.8	6.0
Other Excluding Electricity	58.3	1.6	8.4	8.5	0.9	21.2	(*)	8.9	1.0	2.0	5.7
Buildings without Cooking	40.4	1.5	5.0	4.4	0.6	16.0	(*)	4.1	1.0	2.3	5.5
Energy End Uses (more than one may apply)											
Buildings with Space Heating	49.1	1.9	6.3	6.3	0.9	18.6	0.3	5.6	1.0	2.4	5.8
Buildings with Cooling	51.5	2.0	7.0	6.5	0.9	19.2	0.4	6.0	1.1	2.6	5.9
Buildings with Water Heating	51.2	2.0	6.8	6.5	0.9	19.1	0.4	6.0	1.1	2.6	5.9
Buildings with Cooking	61.9	2.3	8.7	9.1	1.3	21.9	1.0	8.3	1.0	2.5	5.9
Buildings with Manufacturing	45.0	1.3	3.0	5.4	Q	20.5	Q	3.2	0.6	2.1	7.8
Buildings with Electricity Generation	69.4	2.4	9.1	10.1	1.0	28.6	0.3	3.3	2.2	4.4	8.0
Percent of Floorspace Heated											
Not Heated	28.1	(*)	6.1	2.3	0.3	8.9	0.4	5.8	0.3	0.6	3.5
1 to 50	27.4	0.8	2.0	2.7	0.6	10.1	Q	5.7	Q	0.6	3.6
51 to 99	48.7	1.7	6.1	6.0	0.8	18.7	0.3	6.7	0.8	1.9	5.6
100	52.4	2.1	7.0	6.9	0.9	19.8	0.4	5.4	1.1	2.8	6.1
Percent of Floorspace Cooled											
Not Cooled	16.2	0.6	(*)	2.4	0.1	7.5	0.1	2.1	0.1	0.3	3.2
1 to 50	26.7	0.9	1.4	3.4	0.4	11.8	Q	3.9	0.3	0.8	3.8
51 to 99	56.5	2.2	7.0	7.4	0.8	20.7	0.4	7.9	1.0	2.9	6.2
100	64.3	2.5	10.4	7.9	1.3	23.1	0.5	6.4	1.7	3.6	7.0

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	22.0	1.2	3.1	2.8	0.5	6.2	0.2	2.8	Q	0.6	3.9
51 to 99	48.9	1.9	6.3	6.8	0.9	18.0	0.3	4.8	1.1	3.1	5.7
100	58.0	2.1	7.6	7.0	0.9	22.8	0.5	7.2	1.1	2.6	6.3
Building Never Open/ Electricity Not Used	7.1	Q	0.7	0.2	Q	2.1	Q	0.3	Q	Q	3.3
Percent Lit When Closed											
Zero	31.2	1.2	4.1	4.0	0.4	10.0	0.2	4.2	0.5	1.7	4.8
1 to 50	45.5	1.9	6.3	5.8	0.7	15.7	0.4	5.8	1.0	2.3	5.5
51 to 100	74.0	2.6	7.5	6.8	1.1	35.6	0.6	11.5	0.8	2.2	5.3
Building Never Closed/ Electricity Not Used	72.3	2.3	9.0	9.3	1.6	31.7	0.3	5.9	1.8	3.2	7.2
Heating Equipment (more than one may apply)											
Heat Pumps	59.3	3.1	9.9	6.0	1.5	22.8	0.4	5.2	1.3	2.8	6.2
Packaged Heat Pumps	66.0	3.3	11.2	6.1	1.4	25.9	0.4	6.0	1.6	3.2	6.9
Split-System Heat Pumps	52.6	2.3	9.1	7.0	1.4	19.6	Q	4.3	0.8	1.8	5.8
Individual Room Heat Pumps ..	55.1	3.1	9.4	6.2	1.9	22.3	0.3	2.7	0.8	2.9	5.3
Furnaces	38.8	1.8	4.0	4.3	0.7	14.6	0.3	6.3	0.7	1.4	4.8
Individual Space Heaters	44.9	2.9	4.8	5.1	0.9	18.0	0.2	4.9	0.8	2.0	5.2
District Heat	61.4	0.5	4.2	12.8	0.6	26.9	0.1	2.1	0.9	5.5	7.8
Boilers	49.4	1.3	6.2	8.2	0.6	19.9	0.2	2.9	1.2	2.7	6.2
Packaged Heating Units	58.7	2.8	8.7	6.6	1.2	21.3	0.6	7.4	1.4	2.6	6.2
Other	51.9	3.1	6.4	6.2	1.0	19.8	0.2	5.7	0.8	2.5	6.3
Cooling Equipment (more than one may apply)											
Residential-Type Central											
Air Conditioners	41.3	1.7	5.3	6.1	1.0	14.3	0.4	5.3	0.7	1.4	5.1
Heat Pumps	60.5	2.9	10.1	6.0	1.5	23.1	0.4	6.0	1.3	2.8	6.4
Packaged Heat Pumps	66.3	3.3	10.9	5.8	1.4	26.2	0.4	6.6	1.6	3.2	7.0
Split-System Heat Pumps	53.5	2.1	9.4	7.2	1.4	19.2	Q	5.0	0.8	1.9	6.0
Individual Room Heat Pumps ..	58.3	2.9	10.3	6.6	1.7	23.3	0.3	3.7	0.9	2.9	5.8
Individual Air Conditioners	38.1	1.6	5.0	5.0	1.1	15.6	0.2	3.5	0.5	1.4	4.2
District Chilled Water	67.4	0.7	5.6	17.2	0.8	23.9	0.2	2.6	1.0	7.2	8.2
Central Chillers	71.9	1.9	10.5	12.0	0.9	29.1	0.3	2.3	2.0	4.3	8.5
Packaged Air Conditioning											
Units	52.7	2.1	7.2	6.0	0.9	19.9	0.5	6.8	1.0	2.4	5.9
Swamp Coolers	48.1	1.3	5.5	5.8	1.4	18.1	0.6	7.7	0.5	1.4	5.8
Other	61.3	2.1	9.3	8.5	0.4	23.2	0.2	Q	1.1	2.9	6.4
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	43.7	2.2	5.5	5.2	1.0	15.7	0.4	5.1	1.0	2.2	5.4
Cooling	46.5	2.0	5.9	5.7	0.9	17.3	0.3	5.2	1.1	2.6	5.4
Water Heating Equipment											
Centralized System	50.8	2.0	6.3	6.6	0.9	18.2	0.5	7.2	1.0	2.3	5.9
Distributed System	41.8	1.8	6.5	4.7	0.8	15.5	0.3	4.5	0.8	2.0	5.0
Combination of Centralized and Distributed System	63.4	2.1	8.5	8.6	1.1	26.4	0.3	3.3	1.8	4.2	6.9

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Lighting Equipment Types (more than one may apply)											
Incandescent	52.1	1.9	6.7	6.7	0.9	20.9	0.4	5.0	1.2	2.7	5.8
Standard Fluorescent	49.4	1.9	6.5	6.3	0.8	18.5	0.4	5.8	1.1	2.5	5.8
Compact Fluorescent	60.4	2.2	8.0	8.6	1.0	23.6	0.4	5.0	1.5	3.2	6.9
High Intensity Discharge	54.6	1.8	6.4	8.2	0.8	22.9	0.3	4.0	1.1	2.9	6.3
Halogen	60.4	2.3	7.4	7.8	1.0	25.6	0.4	5.3	1.2	2.8	6.4
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	52.3	2.0	6.8	6.6	0.9	19.5	0.4	6.7	1.1	2.6	5.8
Commercial Refrigeration	66.8	2.3	8.9	8.8	1.2	24.3	0.8	10.6	1.0	2.6	6.3
Walk-In Units	73.5	2.4	9.7	9.8	1.3	26.6	1.0	12.3	1.1	2.8	6.6
Cases or Cabinets	70.5	2.4	9.4	9.1	1.2	25.6	0.9	11.7	1.1	2.6	6.6
Residential-Type Units	45.5	1.8	6.1	6.1	0.8	17.5	0.2	4.1	0.9	2.5	5.5
Vending Machines	56.2	1.9	7.4	7.8	0.9	22.2	0.3	5.2	1.3	3.1	6.2
No Refrigeration	25.7	1.1	3.7	3.3	0.4	10.9	Q	(*)	0.4	1.1	4.8
Office Equipment (more than one may apply)											
Computers	51.0	1.9	6.8	6.6	0.9	19.4	0.3	5.4	1.1	2.7	5.9
With Flat Screen Monitors	60.1	2.1	8.1	8.5	0.8	23.2	0.3	4.2	1.7	4.1	7.1
Dedicated Servers	56.0	2.0	7.5	7.7	0.8	21.9	0.2	4.5	1.6	3.4	6.3
Laser Printers	47.0	2.0	6.3	6.0	0.8	17.2	0.3	5.5	1.2	2.3	5.4
Inkjet Printers	56.5	1.9	7.8	7.5	0.9	22.3	0.3	4.9	1.2	3.2	6.6
FAX Machines	51.6	1.9	6.9	6.7	0.9	19.8	0.3	5.3	1.2	2.7	5.9
Photocopiers	51.0	1.8	6.9	7.1	0.7	20.1	0.2	4.0	1.3	2.9	6.0
Number of Computers											
None	25.9	1.0	2.6	1.9	0.6	8.5	0.4	7.2	0.1	N	3.7
1 to 4	42.2	2.1	4.7	3.6	1.1	13.4	0.8	10.7	0.4	0.4	4.8
5 to 9	38.1	2.0	5.4	3.8	0.6	14.1	0.3	5.6	0.6	0.9	4.8
10 to 19	43.1	1.6	5.9	5.0	0.7	16.3	0.2	6.0	0.7	1.3	5.3
20 to 49	55.1	1.7	7.2	7.6	0.9	21.7	Q	5.1	Q	2.2	6.7
50 to 99	48.1	1.7	7.0	7.1	0.9	20.1	0.1	2.1	1.1	2.7	5.4
100 to 249	55.0	2.3	8.0	9.2	0.9	21.2	0.1	2.4	1.0	3.7	6.1
250 or More	72.4	2.0	9.7	11.0	0.8	29.2	0.2	2.1	2.2	7.3	7.9
Number of Dedicated Servers											
None	37.2	1.5	4.6	3.9	0.8	12.8	0.5	7.1	0.3	0.9	4.7
1 to 4	48.4	2.1	6.6	6.5	0.8	18.7	0.2	5.3	0.7	2.0	5.4
5 to 9	64.8	1.9	9.4	10.3	0.9	25.8	Q	2.9	1.6	4.4	7.1
10 to 19	71.4	1.8	8.3	11.7	0.7	27.5	0.2	3.9	1.6	7.6	8.3
20 to 49	70.7	1.8	12.2	9.9	0.8	27.3	0.2	2.2	2.4	5.5	8.3
50 or More	79.8	2.4	7.2	8.3	0.6	33.6	Q	2.4	7.9	7.8	9.2
Number of Photocopiers											
None	39.6	1.9	4.5	3.4	1.0	12.6	0.7	9.8	0.2	0.7	4.8
One	38.3	1.7	4.7	4.3	0.6	14.5	0.2	6.0	0.6	1.1	4.8
2 to 4	46.8	1.7	6.6	6.9	0.8	17.9	0.2	3.9	1.3	2.2	5.3
5 to 9	58.6	2.0	8.1	9.4	0.8	22.0	0.2	2.6	1.4	5.3	6.8
10 or More	72.5	2.1	10.1	10.3	0.8	30.6	0.2	2.1	2.4	5.5	8.4

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	61.9	2.3	8.7	9.1	1.3	21.9	1.0	8.3	1.0	2.5	5.9
Activities with Large Amounts of Hot Water	59.9	2.4	8.1	8.9	1.4	23.8	0.6	5.1	0.9	2.6	6.2
Separate Computer Area	57.7	2.0	8.1	8.6	0.9	22.9	0.2	3.2	1.7	3.8	6.3
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	64.7	2.3	9.2	9.0	0.9	25.4	0.3	3.6	1.8	4.3	7.7
Economizer Cycle	66.7	2.4	8.6	9.7	1.0	26.4	0.3	4.6	1.7	4.3	7.6
HVAC Maintenance	52.8	1.9	7.1	7.0	0.9	20.1	0.4	5.5	1.1	2.7	6.1
Energy Management and Control System (EMCS)	61.1	1.9	9.1	10.2	0.9	23.6	0.3	2.6	1.7	3.9	6.9
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	52.3	2.3	6.3	6.8	0.9	20.0	0.4	5.7	1.2	2.5	6.2
Tinted Window Glass	56.8	1.9	7.9	7.5	0.8	22.4	0.3	4.6	1.4	3.2	6.8
Reflective Window Glass	61.2	2.3	9.0	8.3	0.9	24.8	0.3	3.9	1.3	3.4	7.1
External Overhangs or Awnings	55.9	2.2	7.0	7.1	1.1	19.7	0.7	8.1	1.4	2.8	5.9
Skylights or Atriums	51.6	1.6	6.4	7.7	0.7	21.9	0.2	2.8	1.6	2.6	6.0
Daylighting Sensors	71.9	2.2	10.0	10.3	0.6	27.7	0.5	4.3	Q	4.2	8.2
Specular Reflectors	56.9	2.0	7.5	7.9	0.9	22.8	0.3	4.3	1.3	3.1	6.8
Electronic Ballasts	53.3	1.9	7.1	7.2	0.9	20.0	0.4	5.6	1.2	2.8	6.2
Energy Management and Control System (EMCS) For Lighting	65.1	2.0	9.8	9.1	0.9	26.1	0.2	3.1	Q	4.0	7.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	45.2	1.7	6.0	6.1	0.8	16.8	0.3	4.5	1.1	2.4	5.5
Cooling	47.0	1.7	6.5	6.4	0.8	17.5	0.3	4.6	1.0	2.6	5.6
Lighting	42.7	1.7	5.7	5.4	0.7	14.8	0.4	5.6	0.8	2.2	5.3
Office Equipment	37.2	1.5	5.5	5.0	0.7	13.3	0.2	4.2	0.7	1.3	4.7
Annual Consumption (kilowatthours)											
10,000 or Less	4.6	0.1	0.4	0.3	(*)	1.5	(*)	0.7	(*)	0.1	1.4
10,001 to 50,000	16.6	0.8	2.1	1.1	0.3	5.9	(*)	2.4	0.4	0.5	3.1
50,001 to 100,000	27.3	1.3	3.4	2.1	0.6	8.6	0.2	5.4	0.6	0.9	4.1
100,001 to 500,000	44.4	2.2	5.2	4.5	1.0	14.2	0.6	9.1	0.8	1.7	5.1
500,001 to 1,000,000	49.1	2.1	7.6	6.5	1.4	17.1	0.5	6.3	0.8	1.9	5.0
1,000,001 to 5,000,000	69.4	2.6	9.4	10.9	1.1	26.3	0.3	5.9	1.2	4.1	7.5
Over 5,000,000	84.1	1.8	10.9	11.4	0.8	38.8	0.3	3.2	2.4	4.9	9.6

Table E4. Electricity Consumption (Btu) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (thousand Btu/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	48.0	1.8	6.3	6.1	0.8	18.1	0.3	5.6	1.0	2.3	5.6
Provider of Purchased Electricity (more than one may apply)											
Local Utility	46.7	1.8	6.0	5.9	0.8	17.4	0.4	5.7	0.9	2.3	5.5
Some Other Provider	62.3	1.8	8.9	8.5	0.6	24.6	0.2	5.1	Q	3.3	7.1

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbeecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Building Floorspace (Square Feet)											
1,001 to 5,000	113	5	13	5	3	27	2	40	2	3	11
5,001 to 10,000	77	4	10	5	2	24	1	16	2	3	10
10,001 to 25,000	119	6	14	13	2	44	1	15	3	6	16
25,001 to 50,000	103	4	16	15	3	35	(*)	10	2	5	12
50,001 to 100,000	119	5	17	19	2	46	1	9	2	5	13
100,001 to 200,000	141	5	18	23	1	57	(*)	7	Q	9	16
200,001 to 500,000	106	2	15	16	1	48	(*)	3	2	6	13
Over 500,000	112	2	14	16	1	53	(*)	4	2	7	13
Principal Building Activity											
Education	109	4	22	24	3	33	(*)	5	1	9	6
Food Sales	61	2	4	2	Q	14	1	35	1	1	3
Food Service	63	3	8	7	3	12	4	20	(*)	1	4
Health Care	73	2	10	12	1	31	(*)	2	1	3	11
Inpatient	52	1	7	11	1	22	(*)	1	1	2	6
Outpatient	20	1	3	1	(*)	8	(*)	1	(*)	1	4
Lodging	69	4	7	4	3	36	1	3	Q	2	7
Retail (Other Than Mall).....	62	2	7	5	1	33	(*)	6	1	1	6
Office	211	10	30	18	2	82	(*)	10	9	22	27
Public Assembly	49	1	10	18	(*)	8	(*)	3	Q	1	7
Public Order and Safety	17	1	2	3	1	5	(*)	1	(*)	(*)	3
Religious Worship	18	1	3	2	(*)	5	(*)	2	(*)	(*)	5
Service	44	2	4	7	(*)	18	Q	3	(*)	1	8
Warehouse and Storage	72	1	4	6	1	39	Q	10	1	1	9
Other	39	1	5	3	Q	17	Q	3	Q	1	6
Vacant	4	(*)	(*)	(*)	Q	1	Q	(*)	Q	(*)	2
Year Constructed											
Before 1920	26	1	2	3	Q	10	(*)	5	1	1	4
1920 to 1945	61	1	5	9	1	26	(*)	7	1	2	9
1946 to 1959	68	2	8	10	1	26	1	8	1	3	8
1960 to 1969	96	3	13	15	2	33	(*)	12	2	5	11
1970 to 1979	168	8	21	22	3	65	1	17	4	8	20
1980 to 1989	184	8	27	19	4	69	1	19	4	11	21
1990 to 1999	202	7	29	26	4	72	2	25	5	10	23
2000 to 2003	86	3	13	9	1	34	1	11	1	3	9
Census Region and Division											
Northeast	147	6	11	20	2	60	1	17	4	9	19
New England	32	1	2	4	1	12	(*)	6	1	2	4
Middle Atlantic	116	4	9	16	1	48	(*)	11	3	7	15
Midwest	216	13	15	30	3	84	1	26	4	10	28
East North Central	153	8	10	23	2	61	1	17	3	8	20
West North Central	62	5	5	7	1	23	(*)	9	1	3	8
South	375	10	71	45	8	132	3	45	5	16	39
South Atlantic	210	6	36	25	6	76	2	26	3	10	21
East South Central	50	2	7	7	1	19	(*)	7	1	2	6
West South Central	114	2	28	13	2	37	1	13	1	4	12
West	152	5	19	18	2	59	1	15	6	8	19
Mountain	56	2	7	7	1	23	Q	5	Q	2	6
Pacific	96	3	12	11	1	36	1	10	4	6	12

CONTINUED

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	120	7	6	18	2	46	1	17	2	5	15
5,500-7,000 HDD	224	13	16	29	3	91	2	26	5	11	29
4,000-5,499 HDD	166	7	17	20	2	67	1	18	5	9	19
Fewer than 4,000 HDD	219	5	33	28	5	81	2	27	4	10	26
2,000 CDD or More and --											
Fewer than 4,000 HDD	161	3	44	18	3	50	1	16	2	8	16
Number of Floors											
One	334	15	45	32	7	113	4	67	5	10	37
Two	202	7	26	29	5	75	1	20	5	9	25
Three	84	4	9	12	1	33	(*)	6	2	5	11
Four to Nine	174	5	24	29	2	70	1	7	4	12	21
Ten or More	96	3	12	11	1	44	(*)	2	3	7	11
Elevators and Escalators (more than one may apply)											
Any Elevators	416	14	57	65	5	170	1	16	11	28	50
Number of Elevators.....											
One	104	4	14	18	2	39	(*)	6	2	6	12
Two to Five	172	7	23	26	2	68	1	6	5	12	20
Six or More	141	3	20	21	1	63	1	3	4	9	17
Any Escalators	57	1	9	9	(*)	23	Q	1	Q	3	6
Number of Workers (main shift)											
Fewer than 5	109	5	11	8	2	35	1	27	1	2	17
5 to 9	73	4	9	6	2	23	1	16	1	2	9
10 to 19	89	5	12	9	2	30	2	15	1	3	10
20 to 49	154	5	21	20	3	56	1	20	4	6	17
50 to 99	118	5	16	20	2	44	1	11	2	5	12
100 to 249	135	5	20	20	2	55	1	8	3	7	14
250 or More	213	5	28	29	2	92	1	6	6	19	25
Weekly Operating Hours											
Fewer than 40	26	1	5	2	(*)	6	(*)	3	(*)	1	6
40 to 48	116	6	19	12	2	39	(*)	10	3	7	18
49 to 60	175	7	24	21	2	67	1	15	4	10	25
61 to 84	146	5	18	20	3	54	1	19	3	7	16
85 to 167	153	5	16	23	3	49	3	35	2	6	13
Open Continuously	273	9	34	35	6	120	1	22	7	12	27
Ownership and Occupancy											
Nongovernment Owned.....	674	27	82	66	11	263	6	93	16	30	81
Owner Occupied	318	11	40	34	5	124	1	39	8	15	41
Nonowner Occupied	353	15	42	32	6	138	4	54	7	15	39
Unoccupied	2	Q	Q	(*)	Q	1	(*)	Q	Q	Q	1
Government Owned	216	7	34	47	4	72	1	10	3	14	24
Federal	38	1	4	7	(*)	19	Q	1	(*)	2	5
State	60	1	7	16	1	18	(*)	3	1	Q	7
Local	118	6	23	24	3	35	1	7	2	6	11
Vacancy Status											
Completely Vacant	3	Q	Q	(*)	Q	1	Q	Q	Q	Q	1
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	169	7	22	20	2	70	1	9	4	12	22
Not At All Vacant	717	26	94	92	13	263	6	95	15	31	81

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Number of Establishments											
One	627	24	80	80	13	231	6	85	12	25	71
2 to 5	147	5	20	19	2	58	1	14	4	7	19
6 to 10	34	2	4	4	(*)	13	(*)	1	1	Q	4
11 to 20	29	2	4	4	(*)	11	(*)	2	1	2	4
More than 20	51	1	8	6	(*)	21	(*)	1	2	4	6
Currently Unoccupied	3	Q	Q	(*)	Q	1	Q	Q	Q	Q	1
Predominant Exterior Wall Material											
Brick, Stone or Stucco	442	17	61	61	9	155	4	53	9	21	52
Concrete (Block or Poured)	155	5	21	18	3	59	1	21	Q	5	17
Concrete Panels	117	3	15	14	1	54	(*)	6	3	8	13
Siding or Shingles	44	3	5	4	1	14	1	8	1	2	5
Metal Panels	87	4	7	10	1	35	Q	13	1	3	12
Window Glass	20	1	3	2	(*)	7	(*)	1	1	2	3
Other	18	1	3	2	(*)	7	(*)	1	(*)	1	2
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	305	9	42	39	5	119	2	31	7	17	34
Shingles (Not Wood)	121	5	15	12	4	39	1	23	3	4	15
Metal Surfacing	115	5	14	14	2	44	Q	14	1	4	16
Synthetic or Rubber	261	11	34	37	3	96	2	27	7	16	29
Slate or Tile	30	1	5	3	1	10	(*)	5	1	1	4
Wooden Materials	11	1	2	1	(*)	4	Q	1	(*)	(*)	1
Concrete	29	Q	3	Q	(*)	Q	Q	1	(*)	1	4
Other	12	Q	2	1	Q	7	(*)	1	(*)	(*)	1
No One Major Type	6	Q	1	1	Q	2	Q	(*)	(*)	Q	1
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	229	9	25	33	4	87	1	26	5	12	26
Addition or Annex	92	4	10	16	2	36	1	9	1	4	10
Reduction In Floorspace	15	1	2	3	Q	7	(*)	1	(*)	1	2
Cosmetic Improvements	176	7	19	25	3	68	1	20	4	10	20
Wall or Roof Replacement	102	3	11	16	2	41	1	8	2	6	12
Interior Wall											
Re-Configuration	118	4	13	18	2	48	1	9	2	7	14
HVAC Equipment Upgrade.....	154	6	17	24	3	60	1	13	3	9	18
Lighting Upgrade	140	5	15	22	2	54	1	14	3	8	16
Window Replacement	73	3	7	11	1	29	(*)	7	1	5	9
Plumbing System Upgrade	92	3	9	15	2	38	(*)	7	2	6	11
Insulation Upgrade	51	2	6	9	1	19	(*)	4	1	3	6
Other Renovation	5	(*)	(*)	1	Q	2	Q	1	(*)	(*)	1
No Renovations Since 1980.....	190	6	23	25	3	72	1	23	4	7	25
Building Newer than 1980	472	18	69	54	8	176	4	55	11	24	53
Energy Sources (more than one may apply)											
Electricity	890	34	116	113	15	335	6	104	19	43	105
Natural Gas	633	18	79	87	9	247	5	70	13	32	75
Fuel Oil	250	8	32	36	4	105	1	12	7	15	30
District Heat	98	1	7	20	1	43	(*)	3	1	9	12
District Chilled Water	56	1	5	14	1	20	(*)	2	1	Q	7
Propane	99	3	11	12	2	41	1	15	1	3	12
Other	23	1	2	4	(*)	9	(*)	2	Q	1	3

CONTINUED

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Space-Heating Energy Sources^a											
Electricity	455	34	66	46	11	167	4	48	11	20	49
Electricity Main	266	27	44	20	8	89	2	32	6	11	26
Electricity Secondary	189	7	22	26	3	78	1	15	4	10	24
Other Excluding Electricity	407	(*)	45	65	4	159	3	50	8	22	52
Buildings without Heating	27	(*)	6	2	(*)	9	(*)	6	(*)	1	3
Primary Space-Heating Energy Source											
Electricity	266	27	44	20	8	89	2	32	6	11	26
Natural Gas	459	6	56	64	5	182	3	53	10	22	58
Fuel Oil	23	(*)	2	4	(*)	8	(*)	4	(*)	1	3
District Heat	91	1	6	19	1	40	(*)	3	1	8	12
Propane	20	(*)	2	3	(*)	5	Q	6	Q	Q	3
Other	5	Q	(*)	1	(*)	2	(*)	1	Q	Q	1
Cooling Energy Source											
Electricity	814	32	116	96	15	303	6	98	18	37	93
Other Excluding Electricity	46	Q	(*)	12	1	18	(*)	2	1	Q	6
Buildings without Cooling	30	1	(*)	4	(*)	14	(*)	4	(*)	1	6
Water-Heating Energy Source											
Electricity	402	21	57	42	15	143	3	46	10	19	46
Other Excluding Electricity	445	11	54	67	(*)	174	4	52	9	23	51
Bldgs without Water Heating	42	1	5	4	(*)	18	Q	5	(*)	1	7
Cooking Energy Source											
Electricity	249	11	34	37	6	86	6	30	4	11	23
Other Excluding Electricity	155	4	22	23	2	56	(*)	24	3	5	15
Buildings without Cooking	486	19	60	53	7	192	(*)	50	12	27	66
Energy End Uses (more than one may apply)											
Buildings with Space Heating	863	34	111	110	15	326	6	98	18	43	101
Buildings with Cooling	860	33	116	108	15	321	6	100	19	43	99
Buildings with Water Heating	848	32	112	108	15	317	6	98	18	43	97
Buildings with Cooking	404	15	56	59	9	143	6	54	7	16	38
Buildings with Manufacturing	41	1	3	5	Q	19	Q	3	1	2	7
Buildings with Electricity Generation	261	9	34	38	4	107	1	12	8	17	30
Percent of Floorspace Heated											
Not Heated	27	(*)	6	2	(*)	9	(*)	6	(*)	1	3
1 to 50	55	2	4	5	1	20	Q	11	Q	1	7
51 to 99	116	4	14	14	2	44	1	16	2	5	13
100	692	28	92	91	12	262	5	71	14	37	81
Percent of Floorspace Cooled											
Not Cooled	30	1	(*)	4	(*)	14	(*)	4	(*)	1	6
1 to 50	130	4	7	16	2	57	Q	19	1	4	19
51 to 99	219	9	27	29	3	80	1	30	4	11	24
100	511	20	82	63	10	184	4	51	13	28	56

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	66	3	9	8	2	19	1	8	Q	2	12
51 to 99	262	10	34	37	5	96	2	26	6	17	30
100	557	20	73	67	9	219	4	69	10	25	61
Building Never Open/ Electricity Not Used	4	Q	(*)	(*)	Q	1	Q	(*)	Q	Q	2
Percent Lit When Closed											
Zero	159	6	21	20	2	51	1	22	3	9	25
1 to 50	412	17	57	53	7	143	4	53	9	21	50
51 to 100	45	2	5	4	Q	22	(*)	7	1	1	3
Building Never Closed/ Electricity Not Used	273	9	34	35	6	120	1	22	7	12	27
Heating Equipment (more than one may apply)											
Heat Pumps	153	8	26	15	4	59	1	13	3	7	16
Packaged Heat Pumps	105	5	18	10	2	41	1	10	3	5	11
Split-System Heat Pumps	40	2	7	5	1	15	Q	3	1	1	4
Individual Room Heat Pumps ..	43	2	7	5	1	18	(*)	2	1	2	4
Furnaces	223	10	23	25	4	84	2	36	4	8	28
Individual Space Heaters	165	11	18	19	3	66	1	18	3	7	19
District Heat	93	1	6	19	1	41	(*)	3	1	8	12
Boilers	296	8	37	49	4	119	1	17	7	16	37
Packaged Heating Units	310	15	46	35	6	112	3	39	7	14	33
Other	49	3	6	6	1	19	(*)	5	1	2	6
Cooling Equipment (more than one may apply)											
Residential-Type Central Air Conditioners	133	6	17	20	3	46	1	17	2	5	16
Heat Pumps	160	8	27	16	4	61	1	16	3	7	17
Packaged Heat Pumps	105	5	17	9	2	42	1	10	3	5	11
Split-System Heat Pumps	41	2	7	6	1	15	Q	4	1	1	5
Individual Room Heat Pumps ..	50	2	9	6	2	20	(*)	3	1	2	5
Individual Air Conditioners	140	6	18	18	4	57	1	13	2	5	16
District Chilled Water	56	1	5	14	1	20	(*)	2	1	Q	7
Central Chillers	245	6	36	41	3	99	1	8	7	15	29
Packaged Air Conditioning Units	463	19	63	52	8	174	4	60	9	21	52
Swamp Coolers	22	1	2	3	1	8	(*)	4	(*)	1	3
Other	22	1	3	3	(*)	8	(*)	Q	(*)	1	2
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	210	11	27	25	5	76	2	24	5	11	26
Cooling	286	12	36	35	6	106	2	32	7	16	34
Water Heating Equipment											
Centralized System	515	20	64	67	9	185	5	73	10	23	60
Distributed System	142	6	22	16	3	53	1	15	3	7	17
Combination of Centralized and Distributed System	191	6	26	26	3	80	1	10	5	13	21

CONTINUED

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Lighting Equipment Types (more than one may apply)											
Incandescent	588	22	75	75	10	235	5	57	13	31	65
Standard Fluorescent	865	33	114	111	15	323	6	101	18	43	101
Compact Fluorescent	488	18	64	70	8	191	3	41	12	26	56
High Intensity Discharge	330	11	38	50	5	138	2	24	6	18	38
Halogen	313	12	39	41	5	133	2	28	6	15	33
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	812	30	105	103	14	302	6	104	17	40	90
Commercial Refrigeration	524	18	69	69	9	191	6	83	8	21	50
Walk-In Units	436	14	58	58	8	158	6	73	6	17	39
Cases or Cabinets	422	14	57	54	7	153	5	70	7	16	39
Residential-Type Units	519	21	69	69	9	200	3	47	10	29	62
Vending Machines	582	20	76	81	9	230	3	54	13	32	64
No Refrigeration	78	3	11	10	1	33	Q	(*)	1	3	15
Office Equipment (more than one may apply)											
Computers	832	31	111	108	14	316	6	88	19	43	96
With Flat Screen Monitors	466	17	62	65	6	180	2	33	13	32	55
Dedicated Servers	596	22	80	82	9	234	3	48	17	36	68
Laser Printers	454	19	61	58	8	167	3	53	11	22	52
Inkjet Printers	533	18	74	71	9	210	3	46	12	30	62
FAX Machines	792	29	105	103	13	304	5	81	18	42	91
Photocopiers	692	24	94	96	10	272	3	55	18	40	81
Number of Computers											
None	58	2	6	4	1	19	1	16	(*)	(*)	8
1 to 4	153	8	17	13	4	49	3	39	2	2	18
5 to 9	80	4	11	8	1	30	1	12	1	2	10
10 to 19	83	3	11	10	1	32	(*)	12	1	3	10
20 to 49	120	4	16	16	2	47	Q	11	Q	5	15
50 to 99	76	3	11	11	1	32	(*)	3	2	4	8
100 to 249	108	4	16	18	2	42	(*)	5	2	7	12
250 or More	212	6	28	32	2	85	1	6	7	21	23
Number of Dedicated Servers											
None	294	12	37	31	7	101	4	56	2	7	37
1 to 4	342	15	47	46	6	132	2	38	5	14	38
5 to 9	73	2	11	12	1	29	Q	3	2	5	8
10 to 19	63	2	7	10	1	24	(*)	3	1	7	7
20 to 49	54	1	9	7	1	21	(*)	2	2	4	6
50 or More	64	2	6	7	1	27	Q	2	6	6	7
Number of Photocopiers											
None	198	9	22	17	5	63	4	49	1	4	24
One	174	8	22	19	3	66	1	27	2	5	22
2 to 4	207	7	29	30	3	79	1	17	6	10	23
5 to 9	95	3	13	15	1	36	(*)	4	2	9	11
10 or More	216	6	30	31	2	91	1	6	7	16	25

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	403	15	56	59	9	142	6	54	7	16	38
Activities with Large Amounts of Hot Water	342	14	46	51	8	136	4	29	5	15	35
Separate Computer Area	454	16	64	68	7	180	2	25	13	30	50
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	371	13	53	52	5	146	2	21	10	25	44
Economizer Cycle	413	15	53	60	6	163	2	28	11	27	47
HVAC Maintenance	792	29	106	105	13	302	6	83	17	40	91
Energy Management and Control System (EMCS)	280	9	42	47	4	108	1	12	8	18	32
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	593	26	72	77	10	227	5	65	13	29	70
Tinted Window Glass	493	16	69	65	7	194	3	40	12	28	59
Reflective Window Glass	153	6	23	21	2	62	1	10	3	9	18
External Overhangs or Awnings	282	11	35	36	6	99	3	41	7	14	30
Skylights or Atriums	189	6	24	28	2	80	1	10	6	10	22
Daylighting Sensors	60	2	8	9	(*)	23	(*)	4	Q	4	7
Specular Reflectors	436	15	57	61	7	175	3	33	10	24	52
Electronic Ballasts	732	27	98	99	12	275	5	77	16	39	85
Energy Management and Control System (EMCS) For Lighting	91	3	14	13	1	37	(*)	4	Q	6	10
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	566	21	75	77	10	210	4	56	14	30	68
Cooling	595	22	82	81	10	221	4	58	13	32	71
Lighting	588	24	79	75	9	203	5	78	12	30	73
Office Equipment	211	9	31	28	4	76	1	24	4	8	27
Annual Consumption (kilowatthours)											
10,000 or Less	4	(*)	(*)	(*)	(*)	1	(*)	1	(*)	(*)	1
10,001 to 50,000	45	2	6	3	1	16	(*)	7	1	1	8
50,001 to 100,000	52	2	6	4	1	16	(*)	10	1	2	8
100,001 to 500,000	209	10	25	21	5	67	3	43	4	8	24
500,001 to 1,000,000	97	4	15	13	3	34	1	12	2	4	10
1,000,001 to 5,000,000	269	10	36	42	4	102	1	23	5	16	29
Over 5,000,000	214	5	28	29	2	99	1	8	6	12	24

Table E5. Electricity Consumption (kWh) by End Use for Non-Mall Buildings, 2003

	Total Electricity Consumption (billion kWh)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	890	34	116	113	15	335	6	104	19	43	105
Provider of Purchased Electricity (more than one may apply)											
Local Utility	791	30	102	100	14	295	6	96	16	38	94
Some Other Provider	90	3	13	12	1	36	(*)	7	Q	5	10

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

^a Totals in the "Electricity" and "Electricity Secondary" rows have been revised and values do not match published values in consumption Table C13 (http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html).

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Building Floorspace (Square Feet)											
1,001 to 5,000	17.8	0.9	2.0	0.8	0.5	4.3	0.3	6.3	0.4	0.5	1.8
5,001 to 10,000	12.4	0.6	1.6	0.8	0.3	3.9	0.2	2.6	0.3	0.4	1.7
10,001 to 25,000	10.5	0.5	1.2	1.1	0.2	3.9	0.1	1.4	0.2	0.5	1.4
25,001 to 50,000	12.2	0.5	1.9	1.8	0.3	4.2	0.1	1.2	0.2	0.6	1.5
50,001 to 100,000	13.1	0.5	1.9	2.1	0.2	5.1	0.1	1.0	0.2	0.6	1.5
100,001 to 200,000	15.7	0.5	2.0	2.6	0.2	6.3	(*)	0.8	Q	1.0	1.8
200,001 to 500,000	15.0	0.3	2.1	2.2	0.2	6.7	0.1	0.4	0.3	0.8	1.8
Over 500,000	19.0	0.4	2.3	2.8	0.1	9.0	0.1	0.6	0.4	1.2	2.1
Principal Building Activity											
Education	11.0	0.5	2.2	2.5	0.3	3.4	(*)	0.5	0.1	1.0	0.6
Food Sales	49.4	1.5	2.9	1.8	Q	10.9	0.6	28.2	0.5	0.4	2.4
Food Service	38.4	1.8	5.0	4.3	1.8	7.5	2.4	12.3	0.3	0.3	2.6
Health Care	22.9	0.5	3.1	3.9	0.2	9.7	0.1	0.8	0.3	0.9	3.3
Inpatient	27.5	0.5	3.8	5.9	0.3	11.7	0.1	0.6	0.3	1.0	3.2
Outpatient	16.1	0.7	2.1	1.0	0.1	6.6	(*)	1.0	0.4	0.8	3.5
Lodging	13.5	0.8	1.4	0.8	0.7	7.1	0.1	0.7	Q	0.4	1.4
Retail (Other Than Mall).....	14.3	0.4	1.7	1.1	0.1	7.5	(*)	1.5	0.2	0.3	1.5
Office	17.3	0.8	2.4	1.5	0.2	6.8	(*)	0.8	0.8	1.8	2.2
Public Assembly	12.5	0.4	2.6	4.7	(*)	2.0	(*)	0.7	Q	0.2	1.7
Public Order and Safety	15.3	0.5	2.1	2.8	0.9	4.8	(*)	0.9	0.2	0.4	2.7
Religious Worship	4.9	0.2	0.8	0.4	(*)	1.3	(*)	0.5	(*)	0.1	1.4
Service	11.0	0.4	1.1	1.8	(*)	4.6	Q	0.6	0.1	0.2	2.1
Warehouse and Storage	7.6	0.2	0.4	0.6	0.1	4.1	Q	1.1	0.1	0.1	0.9
Other	22.5	0.4	2.7	1.8	0.1	10.1	Q	1.8	Q	0.9	3.7
Vacant	2.4	0.1	0.2	0.2	Q	0.7	Q	0.1	Q	(*)	1.1
Year Constructed											
Before 1920	7.1	0.2	0.5	0.9	Q	2.7	0.1	1.3	0.2	0.3	0.9
1920 to 1945	9.2	0.2	0.7	1.3	0.1	4.0	0.1	1.1	0.1	0.4	1.3
1946 to 1959	9.9	0.4	1.1	1.5	0.2	3.7	0.1	1.1	0.2	0.5	1.2
1960 to 1969	11.9	0.4	1.6	1.8	0.2	4.1	(*)	1.4	0.2	0.7	1.4
1970 to 1979	15.9	0.7	2.0	2.1	0.3	6.1	0.1	1.6	0.3	0.8	1.9
1980 to 1989	18.1	0.8	2.6	1.9	0.3	6.8	0.1	1.9	0.4	1.1	2.1
1990 to 1999	16.7	0.6	2.4	2.1	0.3	6.0	0.2	2.1	0.4	0.8	1.9
2000 to 2003	16.2	0.5	2.5	1.8	0.2	6.4	0.2	2.1	0.2	0.5	1.8
Census Region and Division											
Northeast	11.5	0.5	0.8	1.5	0.1	4.7	0.1	1.3	0.3	0.7	1.5
New England	10.8	0.5	0.6	1.2	0.2	4.2	0.1	1.9	0.2	0.6	1.3
Middle Atlantic	11.7	0.4	0.9	1.6	0.1	4.9	(*)	1.2	0.3	0.7	1.5
Midwest	12.9	0.8	0.9	1.8	0.2	5.0	0.1	1.6	0.3	0.6	1.7
East North Central	13.5	0.7	0.9	2.0	0.2	5.4	0.1	1.5	0.3	0.7	1.8
West North Central	11.7	0.9	1.0	1.4	0.2	4.3	0.1	1.6	0.2	0.5	1.5
South	16.5	0.4	3.1	2.0	0.4	5.8	0.2	2.0	0.2	0.7	1.7
South Atlantic	17.4	0.5	3.0	2.1	0.5	6.3	0.2	2.1	0.3	0.9	1.7
East South Central	15.5	0.5	2.1	2.0	0.3	5.8	Q	2.2	0.2	0.5	1.9
West South Central	15.3	0.3	3.8	1.8	0.2	5.0	0.1	1.7	0.2	0.5	1.6
West	13.8	0.5	1.8	1.6	0.2	5.3	0.1	1.4	0.5	0.7	1.7
Mountain	15.4	0.6	2.0	1.9	0.2	6.3	Q	1.5	Q	0.7	1.8
Pacific	13.0	0.4	1.6	1.5	0.2	4.8	0.1	1.4	Q	0.8	1.7

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Climate Zone: 30-Year Average											
Under 2,000 CDD and --											
More than 7,000 HDD	11.5	0.6	0.6	1.7	0.2	4.4	0.1	1.7	0.2	0.5	1.5
5,500-7,000 HDD	13.1	0.8	0.9	1.7	0.2	5.3	0.1	1.5	0.3	0.7	1.7
4,000-5,499 HDD	14.6	0.6	1.5	1.8	0.2	5.9	0.1	1.6	0.5	0.8	1.7
Fewer than 4,000 HDD	14.5	0.3	2.2	1.8	0.3	5.3	0.1	1.8	0.3	0.6	1.7
2,000 CDD or More and --											
Fewer than 4,000 HDD	17.3	0.3	4.7	2.0	0.4	5.4	0.1	1.7	0.2	0.9	1.7
Number of Floors											
One	13.4	0.6	1.8	1.3	0.3	4.5	0.1	2.7	0.2	0.4	1.5
Two	12.6	0.5	1.6	1.8	0.3	4.7	0.1	1.3	0.3	0.6	1.6
Three	11.4	0.5	1.3	1.6	0.2	4.5	0.1	0.9	0.3	0.6	1.5
Four to Nine	17.3	0.5	2.4	2.9	0.2	7.0	0.1	0.7	0.4	1.2	2.1
Ten or More	19.4	0.6	2.5	2.2	0.2	9.0	0.1	0.5	0.6	1.5	2.3
Elevators and Escalators (more than one may apply)											
Any Elevators	17.0	0.6	2.3	2.6	0.2	7.0	0.1	0.6	0.5	1.1	2.0
Number of Elevators.....											
One	12.8	0.5	1.7	2.2	0.2	4.8	(*)	0.7	0.3	0.8	1.5
Two to Five	17.0	0.6	2.3	2.6	0.2	6.8	(*)	0.6	0.5	1.2	2.0
Six or More	22.5	0.5	3.2	3.3	0.2	10.0	0.1	0.5	0.6	1.5	2.7
Any Escalators	24.1	0.6	3.9	3.7	0.2	9.9	Q	0.5	Q	1.4	2.7
Number of Workers (main shift)											
Fewer than 5	7.7	0.4	0.8	0.6	0.2	2.5	0.1	1.9	0.1	0.1	1.2
5 to 9	11.8	0.6	1.5	1.0	0.3	3.7	0.2	2.7	0.2	0.3	1.5
10 to 19	11.4	0.6	1.5	1.1	0.3	3.9	0.2	2.0	0.2	0.3	1.3
20 to 49	14.0	0.5	1.9	1.9	0.3	5.1	0.1	1.8	0.4	0.6	1.6
50 to 99	14.9	0.6	2.0	2.5	0.3	5.6	0.1	1.4	0.3	0.7	1.5
100 to 249	19.6	0.7	2.9	2.9	0.4	8.0	0.1	1.2	0.4	1.1	2.1
250 or More	22.4	0.6	2.9	3.1	0.2	9.6	0.1	0.7	0.6	1.9	2.6
Weekly Operating Hours											
Fewer than 40	4.5	0.3	0.9	0.4	0.1	1.1	(*)	0.6	(*)	0.1	1.1
40 to 48	10.1	0.6	1.7	1.1	0.2	3.4	(*)	0.8	0.3	0.6	1.5
49 to 60	11.2	0.4	1.5	1.3	0.1	4.3	(*)	0.9	0.3	0.6	1.6
61 to 84	14.1	0.5	1.8	1.9	0.2	5.2	0.1	1.8	0.3	0.7	1.6
85 to 167	22.1	0.7	2.3	3.3	0.4	7.0	0.4	5.0	0.2	0.9	1.9
Open Continuously	21.2	0.7	2.6	2.7	0.5	9.3	0.1	1.7	0.5	0.9	2.1
Ownership and Occupancy											
Nongovernment Owned.....	14.0	0.6	1.7	1.4	0.2	5.5	0.1	1.9	0.3	0.6	1.7
Owner Occupied	13.6	0.5	1.7	1.4	0.2	5.3	0.1	1.7	0.4	0.6	1.7
Nonowner Occupied	15.2	0.7	1.8	1.4	0.3	5.9	0.2	2.3	0.3	0.6	1.7
Unoccupied	1.9	Q	Q	(*)	Q	0.5	(*)	Q	Q	Q	0.9
Government Owned	14.1	0.5	2.2	3.1	0.3	4.7	0.1	0.7	0.2	0.9	1.5
Federal	19.7	0.3	1.9	3.6	0.1	9.5	(*)	0.5	0.2	0.8	2.8
State	15.8	0.2	2.0	4.1	0.2	4.8	(*)	0.7	0.2	1.6	1.9
Local	12.3	0.6	2.4	2.6	0.3	3.7	0.1	0.7	0.2	0.6	1.2
Vacancy Status											
Completely Vacant	1.8	Q	Q	(*)	Q	0.5	Q	Q	Q	Q	0.9
Mostly Vacant	13.8	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	13.8	0.6	1.8	1.6	0.2	5.8	0.1	0.7	0.3	1.0	1.8
Not At All Vacant	14.6	0.5	1.9	1.9	0.3	5.3	0.1	1.9	0.3	0.6	1.6

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Number of Establishments											
One	14.1	0.5	1.8	1.8	0.3	5.2	0.1	1.9	0.3	0.6	1.6
2 to 5	13.5	0.4	1.8	1.7	0.1	5.3	0.1	1.3	0.3	0.6	1.7
6 to 10	17.3	0.8	2.2	2.1	0.2	6.5	(*)	0.7	0.4	2.4	2.0
11 to 20	14.7	0.8	2.2	1.8	0.1	5.6	(*)	Q	0.3	1.0	2.0
More than 20	19.6	0.6	3.2	2.5	0.2	8.0	(*)	0.5	0.6	1.7	2.3
Currently Unoccupied	1.8	Q	Q	(*)	Q	0.5	Q	Q	Q	Q	0.9
Predominant Exterior Wall Material											
Brick, Stone or Stucco	13.7	0.5	1.9	1.9	0.3	4.8	0.1	1.6	0.3	0.7	1.6
Concrete (Block or Poured)	14.5	0.5	2.0	1.7	0.2	5.5	0.1	2.0	0.3	0.5	1.6
Concrete Panels	18.3	0.4	2.3	2.1	0.2	8.5	0.1	1.0	0.5	1.3	2.0
Siding or Shingles	11.0	0.7	1.2	1.0	0.3	3.6	0.1	2.1	0.3	0.4	1.3
Metal Panels	11.8	0.5	1.0	1.4	0.1	4.8	Q	1.8	0.1	0.4	1.7
Window Glass	19.1	0.9	3.0	2.1	0.3	7.2	(*)	0.6	0.6	1.8	2.6
Other	16.7	0.9	2.5	1.7	0.1	6.7	0.2	1.1	0.4	1.1	1.9
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material											
Built-Up	14.7	0.4	2.0	1.9	0.2	5.7	0.1	1.5	0.3	0.8	1.7
Shingles (Not Wood)	12.3	0.6	1.5	1.2	0.4	4.0	0.1	2.3	0.3	0.4	1.5
Metal Surfacing	10.2	0.5	1.2	1.2	0.2	3.9	Q	1.2	0.1	0.3	1.4
Synthetic or Rubber	17.7	0.7	2.3	2.5	0.2	6.6	0.1	1.8	0.4	1.1	2.0
Slate or Tile	12.5	0.5	1.9	1.3	0.2	4.1	0.2	2.0	0.2	0.5	1.5
Wooden Materials	12.2	0.7	1.9	1.3	0.3	4.7	(*)	1.4	0.2	0.4	1.3
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	20.4	0.2	2.9	1.6	Q	11.0	Q	1.7	0.1	0.6	2.0
No One Major Type	10.4	Q	1.4	1.9	Q	3.2	Q	Q	0.2	Q	1.4
Renovations in Buildings Constructed Before 1980 (more than one may apply)											
Any Type of Renovation											
Since 1980	13.0	0.5	1.4	1.9	0.2	5.0	0.1	1.5	0.3	0.7	1.5
Addition or Annex	14.1	0.6	1.6	2.5	0.2	5.4	0.1	1.4	0.2	0.6	1.6
Reduction In Floorspace	15.2	0.5	1.5	2.6	0.2	6.4	0.1	0.7	0.3	0.9	2.0
Cosmetic Improvements	13.5	0.5	1.4	1.9	0.2	5.2	0.1	1.6	0.3	0.8	1.5
Wall or Roof Replacement	12.6	0.4	1.4	1.9	0.2	5.1	0.1	1.0	0.2	0.8	1.4
Interior Wall											
Re-Configuration	13.8	0.5	1.5	2.1	0.2	5.6	0.1	1.1	0.3	0.8	1.7
HVAC Equipment Upgrade.....	14.4	0.6	1.6	2.2	0.2	5.6	0.1	1.2	0.3	0.9	1.6
Lighting Upgrade	13.6	0.5	1.4	2.1	0.2	5.3	0.1	1.4	0.3	0.8	1.6
Window Replacement	11.7	0.4	1.1	1.7	0.2	4.7	0.1	1.2	0.2	0.8	1.4
Plumbing System Upgrade	12.9	0.4	1.3	2.1	0.2	5.3	0.1	1.0	0.2	0.8	1.5
Insulation Upgrade	12.7	0.4	1.5	2.2	0.2	4.7	0.1	1.1	0.2	0.8	1.5
Other Renovation	9.0	0.4	0.6	1.3	Q	4.0	0.1	1.0	0.1	0.3	1.1
No Renovations Since 1980.....	10.5	0.4	1.3	1.4	0.2	4.0	0.1	1.3	0.2	0.4	1.4
Building Newer than 1980	17.1	0.7	2.5	2.0	0.3	6.4	0.1	2.0	0.4	0.9	1.9
Energy Sources (more than one may apply)											
Electricity	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Natural Gas	14.6	0.4	1.8	2.0	0.2	5.7	0.1	1.6	0.3	0.7	1.7
Fuel Oil	16.5	0.6	2.1	2.3	0.2	7.0	0.1	0.8	0.5	1.0	2.0
District Heat	18.0	0.2	1.3	3.7	0.2	7.9	(*)	0.6	0.2	1.6	2.3
District Chilled Water	19.7	0.2	1.6	5.0	0.2	7.0	0.1	0.8	0.3	2.1	2.4
Propane	14.0	0.4	1.5	1.7	0.2	5.8	0.1	2.1	0.2	0.4	1.7
Other	16.4	0.4	1.6	3.0	0.1	6.4	0.1	1.4	Q	0.8	2.1

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Space-Heating Energy Sources											
Electricity	15.9	1.2	2.3	1.6	0.4	5.9	0.1	1.7	0.4	0.7	1.7
Electricity Main	16.6	1.7	2.8	1.3	0.5	5.6	0.1	2.0	0.4	0.7	1.6
Electricity Secondary	15.1	0.5	1.7	2.0	0.2	6.2	0.1	1.2	0.4	0.8	1.9
Other Excluding Electricity	13.0	(*)	1.4	2.1	0.1	5.1	0.1	1.6	0.2	0.7	1.7
Buildings without Heating	8.2	(*)	1.8	0.7	0.1	2.6	0.1	1.7	0.1	0.2	1.0
Primary Space-Heating Energy Source											
Electricity	16.6	1.7	2.8	1.3	0.5	5.6	0.1	2.0	0.4	0.7	1.6
Natural Gas	13.9	0.2	1.7	1.9	0.2	5.5	0.1	1.6	0.3	0.7	1.8
Fuel Oil	5.9	0.1	0.4	1.0	0.1	2.2	(*)	1.0	0.1	0.3	0.7
District Heat	18.5	0.1	1.2	3.9	0.2	8.1	(*)	0.6	0.3	1.6	2.4
Propane	10.5	0.2	1.1	1.3	0.2	2.7	Q	2.9	Q	Q	1.5
Other	12.6	0.1	0.8	1.5	0.1	6.0	(*)	1.8	0.2	Q	1.8
Cooling Energy Source											
Electricity	15.0	0.6	2.1	1.8	0.3	5.6	0.1	1.8	0.3	0.7	1.7
Other Excluding Electricity	17.5	Q	(*)	4.7	0.2	7.0	(*)	0.7	0.3	2.3	2.1
Buildings without Cooling	4.8	0.2	(*)	0.7	(*)	2.2	(*)	0.6	(*)	0.1	0.9
Water-Heating Energy Source											
Electricity	14.6	0.8	2.1	1.5	0.6	5.2	0.1	1.7	0.3	0.7	1.7
Other Excluding Electricity	15.4	0.4	1.9	2.3	(*)	6.0	0.1	1.8	0.3	0.8	1.8
Bldgs without Water Heating	6.2	0.2	0.7	0.6	(*)	2.7	Q	0.8	0.1	0.1	1.0
Cooking Energy Source											
Electricity	18.9	0.8	2.6	2.8	0.5	6.5	0.5	2.3	0.3	0.8	1.7
Other Excluding Electricity	17.1	0.5	2.5	2.5	0.3	6.2	(*)	2.6	0.3	0.6	1.7
Buildings without Cooking	11.8	0.5	1.5	1.3	0.2	4.7	(*)	1.2	0.3	0.7	1.6
Energy End Uses (more than one may apply)											
Buildings with Space Heating	14.4	0.6	1.8	1.8	0.3	5.4	0.1	1.6	0.3	0.7	1.7
Buildings with Cooling	15.1	0.6	2.0	1.9	0.3	5.6	0.1	1.8	0.3	0.8	1.7
Buildings with Water Heating	15.0	0.6	2.0	1.9	0.3	5.6	0.1	1.7	0.3	0.8	1.7
Buildings with Cooking	18.2	0.7	2.5	2.7	0.4	6.4	0.3	2.4	0.3	0.7	1.7
Buildings with Manufacturing	13.2	0.4	0.9	1.6	Q	6.0	Q	0.9	0.2	0.6	2.3
Buildings with Electricity Generation	20.3	0.7	2.7	3.0	0.3	8.4	0.1	1.0	0.6	1.3	2.4
Percent of Floorspace Heated											
Not Heated	8.2	(*)	1.8	0.7	0.1	2.6	0.1	1.7	0.1	0.2	1.0
1 to 50	8.0	0.2	0.6	0.8	0.2	3.0	Q	1.7	Q	0.2	1.1
51 to 99	14.3	0.5	1.8	1.8	0.2	5.5	0.1	2.0	0.2	0.6	1.6
100	15.4	0.6	2.0	2.0	0.3	5.8	0.1	1.6	0.3	0.8	1.8
Percent of Floorspace Cooled											
Not Cooled	4.8	0.2	(*)	0.7	(*)	2.2	(*)	0.6	(*)	0.1	0.9
1 to 50	7.8	0.3	0.4	1.0	0.1	3.5	Q	1.1	0.1	0.2	1.1
51 to 99	16.5	0.7	2.1	2.2	0.2	6.1	0.1	2.3	0.3	0.8	1.8
100	18.8	0.7	3.0	2.3	0.4	6.8	0.2	1.9	0.5	1.0	2.1

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Percent Lit When Open											
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	6.5	0.3	0.9	0.8	0.2	1.8	0.1	0.8	Q	0.2	1.1
51 to 99	14.3	0.5	1.9	2.0	0.3	5.3	0.1	1.4	0.3	0.9	1.7
100	17.0	0.6	2.2	2.1	0.3	6.7	0.1	2.1	0.3	0.8	1.8
Building Never Open/ Electricity Not Used	2.1	Q	0.2	0.1	Q	0.6	Q	0.1	Q	Q	1.0
Percent Lit When Closed											
Zero	9.2	0.4	1.2	1.2	0.1	2.9	0.1	1.2	0.2	0.5	1.4
1 to 50	13.3	0.5	1.8	1.7	0.2	4.6	0.1	1.7	0.3	0.7	1.6
51 to 100	21.7	0.8	2.2	2.0	0.3	10.4	0.2	3.4	0.2	0.6	1.5
Building Never Closed/ Electricity Not Used	21.2	0.7	2.6	2.7	0.5	9.3	0.1	1.7	0.5	0.9	2.1
Heating Equipment (more than one may apply)											
Heat Pumps	17.4	0.9	2.9	1.8	0.4	6.7	0.1	1.5	0.4	0.8	1.8
Packaged Heat Pumps	19.3	1.0	3.3	1.8	0.4	7.6	0.1	1.8	0.5	0.9	2.0
Split-System Heat Pumps	15.4	0.7	2.7	2.1	0.4	5.7	Q	1.3	0.2	0.5	1.7
Individual Room Heat Pumps ..	16.1	0.9	2.8	1.8	0.5	6.5	0.1	0.8	0.2	0.9	1.6
Furnaces	11.4	0.5	1.2	1.3	0.2	4.3	0.1	1.8	0.2	0.4	1.4
Individual Space Heaters	13.2	0.9	1.4	1.5	0.3	5.3	0.1	1.4	0.2	0.6	1.5
District Heat	18.0	0.1	1.2	3.8	0.2	7.9	(*)	0.6	0.3	1.6	2.3
Boilers	14.5	0.4	1.8	2.4	0.2	5.8	0.1	0.8	0.3	0.8	1.8
Packaged Heating Units	17.2	0.8	2.5	1.9	0.3	6.2	0.2	2.2	0.4	0.8	1.8
Other	15.2	0.9	1.9	1.8	0.3	5.8	0.1	1.7	0.2	0.7	1.8
Cooling Equipment (more than one may apply)											
Residential-Type Central											
Air Conditioners	12.1	0.5	1.6	1.8	0.3	4.2	0.1	1.6	0.2	0.4	1.5
Heat Pumps	17.7	0.8	3.0	1.8	0.4	6.8	0.1	1.8	0.4	0.8	1.9
Packaged Heat Pumps	19.4	1.0	3.2	1.7	0.4	7.7	0.1	1.9	0.5	0.9	2.0
Split-System Heat Pumps	15.7	0.6	2.7	2.1	0.4	5.6	Q	1.5	0.2	0.6	1.8
Individual Room Heat Pumps ..	17.1	0.8	3.0	1.9	0.5	6.8	0.1	1.1	0.3	0.8	1.7
Individual Air Conditioners	11.2	0.5	1.5	1.5	0.3	4.6	0.1	1.0	0.2	0.4	1.2
District Chilled Water	19.7	0.2	1.6	5.0	0.2	7.0	0.1	0.8	0.3	2.1	2.4
Central Chillers	21.1	0.6	3.1	3.5	0.3	8.5	0.1	0.7	0.6	1.3	2.5
Packaged Air Conditioning											
Units	15.4	0.6	2.1	1.7	0.3	5.8	0.1	2.0	0.3	0.7	1.7
Swamp Coolers	14.1	0.4	1.6	1.7	0.4	5.3	0.2	2.3	0.2	0.4	1.7
Other	18.0	0.6	2.7	2.5	0.1	6.8	0.1	Q	0.3	0.9	1.9
Main Equipment Replaced Since 1990 (more than one may apply)											
Heating	12.8	0.6	1.6	1.5	0.3	4.6	0.1	1.5	0.3	0.7	1.6
Cooling	13.6	0.6	1.7	1.7	0.3	5.1	0.1	1.5	0.3	0.8	1.6
Water Heating Equipment											
Centralized System	14.9	0.6	1.9	1.9	0.3	5.3	0.1	2.1	0.3	0.7	1.7
Distributed System	12.3	0.5	1.9	1.4	0.2	4.6	0.1	1.3	0.2	0.6	1.5
Combination of Centralized and Distributed System	18.6	0.6	2.5	2.5	0.3	7.7	0.1	1.0	0.5	1.2	2.0

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Lighting Equipment Types (more than one may apply)											
Incandescent	15.3	0.6	2.0	2.0	0.3	6.1	0.1	1.5	0.3	0.8	1.7
Standard Fluorescent	14.5	0.5	1.9	1.9	0.2	5.4	0.1	1.7	0.3	0.7	1.7
Compact Fluorescent	17.7	0.6	2.3	2.5	0.3	6.9	0.1	1.5	0.4	0.9	2.0
High Intensity Discharge	16.0	0.5	1.9	2.4	0.2	6.7	0.1	1.2	0.3	0.9	1.8
Halogen	17.7	0.7	2.2	2.3	0.3	7.5	0.1	1.6	0.4	0.8	1.9
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment (more than one may apply)											
Any Refrigeration.....	15.3	0.6	2.0	1.9	0.3	5.7	0.1	2.0	0.3	0.8	1.7
Commercial Refrigeration	19.6	0.7	2.6	2.6	0.3	7.1	0.2	3.1	0.3	0.8	1.9
Walk-In Units	21.5	0.7	2.8	2.9	0.4	7.8	0.3	3.6	0.3	0.8	1.9
Cases or Cabinets	20.7	0.7	2.8	2.7	0.3	7.5	0.2	3.4	0.3	0.8	1.9
Residential-Type Units	13.3	0.5	1.8	1.8	0.2	5.1	0.1	1.2	0.3	0.7	1.6
Vending Machines	16.5	0.6	2.2	2.3	0.3	6.5	0.1	1.5	0.4	0.9	1.8
No Refrigeration	7.5	0.3	1.1	1.0	0.1	3.2	Q	(*)	0.1	0.3	1.4
Office Equipment (more than one may apply)											
Computers	15.0	0.6	2.0	1.9	0.3	5.7	0.1	1.6	0.3	0.8	1.7
With Flat Screen Monitors	17.6	0.6	2.4	2.5	0.2	6.8	0.1	1.2	0.5	1.2	2.1
Dedicated Servers	16.4	0.6	2.2	2.3	0.2	6.4	0.1	1.3	0.5	1.0	1.9
Laser Printers	13.8	0.6	1.8	1.8	0.2	5.1	0.1	1.6	0.3	0.7	1.6
Inkjet Printers	16.6	0.6	2.3	2.2	0.3	6.5	0.1	1.4	0.4	0.9	1.9
FAX Machines	15.1	0.6	2.0	2.0	0.2	5.8	0.1	1.5	0.3	0.8	1.7
Photocopiers	15.0	0.5	2.0	2.1	0.2	5.9	0.1	1.2	0.4	0.9	1.7
Number of Computers											
None	7.6	0.3	0.8	0.5	0.2	2.5	0.1	2.1	(*)	(*)	1.1
1 to 4	12.4	0.6	1.4	1.1	0.3	3.9	0.2	3.1	0.1	0.1	1.4
5 to 9	11.2	0.6	1.6	1.1	0.2	4.1	0.1	1.6	0.2	0.3	1.4
10 to 19	12.6	0.5	1.7	1.5	0.2	4.8	0.1	1.8	0.2	0.4	1.6
20 to 49	16.1	0.5	2.1	2.2	0.3	6.3	Q	1.5	Q	0.6	2.0
50 to 99	14.1	0.5	2.1	2.1	0.3	5.9	(*)	0.6	0.3	0.8	1.6
100 to 249	16.1	0.7	2.4	2.7	0.3	6.2	(*)	0.7	0.3	1.1	1.8
250 or More	21.2	0.6	2.8	3.2	0.2	8.6	0.1	0.6	0.7	2.1	2.3
Number of Dedicated Servers											
None	10.9	0.4	1.4	1.1	0.2	3.8	0.1	2.1	0.1	0.3	1.4
1 to 4	14.2	0.6	1.9	1.9	0.2	5.5	0.1	1.6	0.2	0.6	1.6
5 to 9	19.0	0.6	2.8	3.0	0.3	7.6	Q	0.9	0.5	1.3	2.1
10 to 19	20.9	0.5	2.4	3.4	0.2	8.1	(*)	1.1	0.5	2.2	2.4
20 to 49	20.7	0.5	3.6	2.9	0.2	8.0	0.1	0.6	0.7	1.6	2.4
50 or More	23.4	0.7	2.1	2.4	0.2	9.8	Q	0.7	2.3	2.3	2.7
Number of Photocopiers											
None	11.6	0.6	1.3	1.0	0.3	3.7	0.2	2.9	0.1	0.2	1.4
One	11.2	0.5	1.4	1.3	0.2	4.2	0.1	1.7	0.2	0.3	1.4
2 to 4	13.7	0.5	1.9	2.0	0.2	5.3	0.1	1.2	0.4	0.7	1.6
5 to 9	17.2	0.6	2.4	2.8	0.2	6.5	(*)	0.8	0.4	1.6	2.0
10 or More	21.2	0.6	3.0	3.0	0.2	9.0	0.1	0.6	0.7	1.6	2.4

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Energy-Related Space Functions (more than one may apply)											
Commercial Food Preparation....	18.2	0.7	2.5	2.7	0.4	6.4	0.3	2.4	0.3	0.7	1.7
Activities with Large Amounts of Hot Water	17.6	0.7	2.4	2.6	0.4	7.0	0.2	1.5	0.3	0.8	1.8
Separate Computer Area	16.9	0.6	2.4	2.5	0.3	6.7	0.1	0.9	0.5	1.1	1.8
HVAC Conservation Features (more than one may apply)											
Variable Air-Volume System.....	19.0	0.7	2.7	2.6	0.3	7.5	0.1	1.1	0.5	1.3	2.3
Economizer Cycle	19.5	0.7	2.5	2.9	0.3	7.7	0.1	1.3	0.5	1.3	2.2
HVAC Maintenance	15.5	0.6	2.1	2.1	0.3	5.9	0.1	1.6	0.3	0.8	1.8
Energy Management and Control System (EMCS)	17.9	0.6	2.7	3.0	0.3	6.9	0.1	0.8	0.5	1.1	2.0
Window and Interior Lighting Features (more than one may apply)											
Multipaned Windows	15.3	0.7	1.8	2.0	0.3	5.9	0.1	1.7	0.3	0.7	1.8
Tinted Window Glass	16.6	0.5	2.3	2.2	0.2	6.6	0.1	1.3	0.4	0.9	2.0
Reflective Window Glass	17.9	0.7	2.6	2.4	0.3	7.3	0.1	1.1	0.4	1.0	2.1
External Overhangs or Awnings	16.4	0.6	2.0	2.1	0.3	5.8	0.2	2.4	0.4	0.8	1.7
Skylights or Atriums	15.1	0.5	1.9	2.2	0.2	6.4	0.1	0.8	0.5	0.8	1.8
Daylighting Sensors	21.1	0.6	2.9	3.0	0.2	8.1	0.1	1.3	Q	1.2	2.4
Specular Reflectors	16.7	0.6	2.2	2.3	0.3	6.7	0.1	1.3	0.4	0.9	2.0
Electronic Ballasts	15.6	0.6	2.1	2.1	0.3	5.9	0.1	1.6	0.3	0.8	1.8
Energy Management and Control System (EMCS) For Lighting	19.1	0.6	2.9	2.7	0.3	7.6	0.1	0.9	Q	1.2	2.1
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)											
Heating	13.2	0.5	1.8	1.8	0.2	4.9	0.1	1.3	0.3	0.7	1.6
Cooling	13.8	0.5	1.9	1.9	0.2	5.1	0.1	1.3	0.3	0.8	1.6
Lighting	12.5	0.5	1.7	1.6	0.2	4.3	0.1	1.7	0.2	0.6	1.6
Office Equipment	10.9	0.4	1.6	1.5	0.2	3.9	0.1	1.2	0.2	0.4	1.4
Annual Consumption (kilowatthours)											
10,000 or Less	1.3	(*)	0.1	0.1	(*)	0.4	(*)	0.2	(*)	(*)	0.4
10,001 to 50,000	4.9	0.2	0.6	0.3	0.1	1.7	(*)	0.7	0.1	0.1	0.9
50,001 to 100,000	8.0	0.4	1.0	0.6	0.2	2.5	0.1	1.6	0.2	0.3	1.2
100,001 to 500,000	13.0	0.6	1.5	1.3	0.3	4.2	0.2	2.7	0.2	0.5	1.5
500,001 to 1,000,000	14.4	0.6	2.2	1.9	0.4	5.0	0.1	1.9	0.2	0.6	1.5
1,000,001 to 5,000,000	20.3	0.7	2.8	3.2	0.3	7.7	0.1	1.7	0.4	1.2	2.2
Over 5,000,000	24.7	0.5	3.2	3.3	0.2	11.4	0.1	0.9	0.7	1.4	2.8

Table E6. Electricity Consumption (kWh) Intensities by End Use for Non-Mall Buildings, 2003

	Electricity Energy Intensity (kWh/square foot)										
	Total	Space Heating	Cooling	Ventilation	Water Heating	Lighting	Cooking	Refrigeration	Office Equipment	Computers	Other
All Buildings*	14.1	0.5	1.8	1.8	0.2	5.3	0.1	1.6	0.3	0.7	1.7
Provider of Purchased Electricity (more than one may apply)											
Local Utility	13.7	0.5	1.8	1.7	0.2	5.1	0.1	1.7	0.3	0.7	1.6
Some Other Provider	18.3	0.5	2.6	2.5	0.2	7.2	0.1	1.5	Q	1.0	2.1

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Building Floorspace (Square Feet)										
1,001 to 5,000	250	155	35	41	18	81.1	50.4	11.5	13.4	5.9
5,001 to 10,000	209	143	32	30	Q	56.5	38.8	8.7	8.2	Q
10,001 to 25,000	309	248	32	22	8	43.9	35.1	4.6	3.1	1.1
25,001 to 50,000	258	188	41	12	Q	42.7	31.1	6.8	2.0	Q
50,001 to 100,000	244	174	43	8	19	36.5	26.0	6.4	1.2	2.9
100,001 to 200,000	249	170	56	7	16	37.5	25.6	8.4	1.0	2.5
200,001 to 500,000	205	134	44	11	16	36.1	23.5	7.7	2.0	2.9
Over 500,000	204	105	49	11	40	44.3	22.7	10.7	2.4	8.6
Principal Building Activity										
Education	268	207	37	5	19	38.1	29.5	5.2	0.7	2.7
Food Sales	39	27	2	8	Q	51.7	35.6	3.2	11.2	Q
Food Service	203	54	56	91	Q	145.6	39.0	40.0	65.4	Q
Health Care	243	136	74	10	23	95.3	53.6	28.9	3.8	9.1
Inpatient	204	103	71	9	21	113.2	56.8	39.4	5.2	11.9
Outpatient	38	34	3	Q	Q	51.8	45.6	3.5	Q	Q
Lodging	215	64	124	14	Q	50.4	15.0	29.2	3.3	Q
Retail (Other Than Mall).....	91	84	3	3	2	31.9	29.3	1.0	0.9	0.7
Office	269	230	13	3	23	32.8	28.1	1.6	0.3	2.8
Public Assembly	102	92	2	3	Q	37.5	33.8	0.9	1.0	Q
Public Order and Safety	29	15	10	Q	Q	45.0	24.1	15.1	Q	Q
Religious Worship	82	77	2	3	Q	31.2	29.1	0.9	1.0	Q
Service	139	119	2	Q	17	55.8	47.8	0.9	Q	Q
Warehouse and Storage	132	111	4	Q	Q	24.1	20.2	0.7	Q	Q
Other	87	72	2	Q	12	69.7	57.9	1.7	Q	9.4
Vacant	28	26	Q	Q	Q	23.7	22.0	Q	Q	Q
Year Constructed										
Before 1920	143	114	12	15	Q	51.9	41.2	4.4	5.5	Q
1920 to 1945	229	150	24	18	37	49.0	32.0	5.1	3.9	8.0
1946 to 1959	216	159	34	11	13	46.5	34.0	7.3	2.3	2.7
1960 to 1969	255	187	45	10	13	45.3	33.1	8.0	1.8	2.4
1970 to 1979	351	244	68	22	17	45.9	31.9	8.9	2.8	2.2
1980 to 1989	291	180	68	21	23	45.0	27.8	10.5	3.3	3.5
1990 to 1999	314	204	54	30	26	38.4	25.0	6.7	3.6	3.1
2000 to 2003	127	79	26	15	6	36.9	23.0	7.7	4.3	1.9
Census Region and Division										
Northeast	428	310	49	30	39	46.6	33.8	5.3	3.3	4.2
New England	75	59	Q	Q	5	51.1	40.5	4.5	2.9	Q
Middle Atlantic	353	251	42	26	34	45.8	32.5	5.4	3.4	4.4
Midwest	705	555	80	29	41	53.5	42.1	6.1	2.2	3.1
East North Central	528	424	60	20	24	55.2	44.3	6.3	2.1	2.5
West North Central	177	131	20	8	Q	49.1	36.5	5.5	2.4	4.8
South	474	263	123	58	31	35.6	19.8	9.2	4.3	2.3
South Atlantic	217	115	56	28	18	34.2	18.1	8.9	4.4	2.9
East South Central	102	66	25	6	5	44.6	29.1	11.0	2.6	2.0
West South Central	156	83	42	24	8	33.2	17.6	8.8	5.1	1.7
West	320	187	81	25	27	41.0	24.0	10.3	3.2	3.5
Mountain	167	120	33	4	Q	59.7	42.9	12.0	1.4	Q
Pacific	153	68	47	21	17	30.6	13.5	9.4	4.3	3.4

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Climate Zone: 30-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	431	356	46	15	15	56.4	46.5	6.0	2.0	2.0
5,500-7,000 HDD	679	511	92	36	39	52.8	39.8	7.2	2.8	3.1
4,000-5,499 HDD	337	214	52	28	43	41.5	26.3	6.5	3.4	5.3
Fewer than 4,000 HDD	358	193	91	41	32	34.1	18.4	8.7	3.9	3.1
2,000 CDD or More and --										
Fewer than 4,000 HDD	122	42	51	22	8	28.1	9.7	11.6	5.1	1.8
Number of Floors										
One	664	471	91	71	30	44.4	31.5	6.1	4.8	2.0
Two	491	366	60	27	37	42.9	32.0	5.3	2.4	3.2
Three	241	178	38	13	11	42.5	31.4	6.8	2.4	1.9
Four to Nine	378	233	91	20	35	49.3	30.3	11.8	2.6	4.5
Ten or More	154	68	52	10	25	41.0	18.0	13.8	2.6	6.6
Number of Workers (main shift)										
Fewer than 5	272	213	25	15	19	38.8	30.4	3.5	2.2	2.6
5 to 9	198	136	32	26	Q	48.5	33.2	7.8	6.4	Q
10 to 19	242	166	37	34	5	45.5	31.3	6.9	6.4	1.0
20 to 49	395	280	58	31	25	48.1	34.2	7.1	3.8	3.0
50 to 99	241	167	46	12	16	39.2	27.1	7.5	1.9	2.6
100 to 249	235	161	49	8	16	45.8	31.5	9.6	1.6	3.0
250 or More	344	192	85	15	53	45.6	25.4	11.2	2.0	7.0
Weekly Operating Hours										
Fewer than 40	107	94	Q	4	3	32.9	28.9	Q	1.3	0.8
40 to 48	249	220	11	6	13	36.1	31.8	1.5	0.8	1.8
49 to 60	374	304	26	18	26	36.7	29.8	2.6	1.8	2.6
61 to 84	314	231	30	30	23	42.1	30.9	4.0	4.1	3.1
85 to 167	257	161	36	45	15	49.2	30.7	7.0	8.7	2.8
Open Continuously	626	306	224	38	58	60.1	29.4	21.5	3.7	5.5
Ownership and Occupancy										
Nongovernment Owned.....	1,503	995	274	131	103	45.1	29.9	8.2	3.9	3.1
Owner Occupied	708	506	106	42	53	42.8	30.6	6.4	2.5	3.2
Nonowner Occupied	779	472	168	89	50	49.0	29.7	10.6	5.6	3.1
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	425	321	58	11	35	41.9	31.7	5.7	1.1	3.4
Federal	35	27	4	Q	2	32.4	24.9	4.0	Q	2.0
State	98	76	11	2	10	40.4	31.0	4.6	0.8	3.9
Local	291	219	43	7	23	43.9	33.0	6.4	1.1	3.5
Vacancy Status										
Completely Vacant	18	17	(*)	Q	Q	19.4	18.5	0.1	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	318	231	41	15	31	37.6	27.3	4.9	1.8	3.7
Not At All Vacant	1,582	1,059	291	127	105	46.7	31.3	8.6	3.7	3.1
Number of Establishments										
One	1,462	971	275	118	98	47.9	31.8	9.0	3.9	3.2
2 to 5	307	231	41	18	16	40.4	30.5	5.5	2.4	2.1
6 to 10	48	38	5	Q	Q	35.4	27.9	3.7	1.7	Q
11 to 20	34	26	Q	Q	Q	27.0	20.7	3.4	0.7	Q
More than 20	58	32	7	2	Q	32.4	17.9	3.7	1.1	Q
Currently Unoccupied	18	17	(*)	Q	Q	19.4	18.5	0.1	Q	Q

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Predominant Exterior Wall Material										
Brick, Stone or Stucco	1,127	750	204	93	80	47.9	31.8	8.6	4.0	3.4
Concrete (Block or Poured)	351	242	62	22	24	47.9	33.0	8.5	3.1	3.3
Concrete Panels	180	126	Q	8	16	38.4	26.9	6.2	1.8	3.5
Siding or Shingles	85	55	18	10	2	42.7	27.7	9.2	4.9	1.0
Metal Panels	130	106	7	5	12	32.4	26.3	1.8	1.2	3.0
Window Glass	14	10	2	Q	Q	20.8	13.8	3.6	Q	Q
Other	35	23	9	2	Q	38.8	26.0	10.0	1.7	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material										
Built-Up	743	489	138	47	68	48.8	32.2	9.1	3.1	4.5
Shingles (Not Wood)	310	213	52	29	Q	47.6	32.7	8.0	4.5	Q
Metal Surfacing	194	151	15	14	14	33.6	26.1	2.6	2.4	2.5
Synthetic or Rubber	542	378	96	32	36	45.8	31.9	8.1	2.7	3.1
Slate or Tile	67	41	16	9	Q	42.3	25.7	9.9	6.0	Q
Wooden Materials	21	11	7	Q	(*)	39.8	21.7	Q	Q	0.4
Concrete	24	11	6	Q	Q	Q	Q	Q	4.5	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	16	12	1	Q	Q	43.3	31.8	3.5	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)										
Any Type of Renovation										
Since 1980	684	474	118	40	52	51.5	35.7	8.9	3.0	3.9
Addition or Annex	304	202	65	13	24	60.4	40.2	12.9	2.6	4.8
Reduction In Floorspace	52	34	11	2	4	53.5	35.5	11.7	2.5	3.8
Cosmetic Improvements	497	344	84	33	37	49.3	34.1	8.3	3.2	3.7
Wall or Roof Replacement	278	197	46	13	22	44.0	31.2	7.3	2.0	3.5
Interior Wall										
Re-Configuration	342	243	56	14	28	48.7	34.6	7.9	2.1	4.0
HVAC Equipment Upgrade.....	467	316	88	24	39	55.1	37.2	10.4	2.9	4.6
Lighting Upgrade	397	286	65	21	25	49.0	35.3	8.0	2.6	3.1
Window Replacement	242	179	37	10	16	48.5	35.8	7.4	2.0	3.2
Plumbing System Upgrade	287	198	48	17	24	50.2	34.6	8.4	2.9	4.3
Insulation Upgrade	132	95	18	9	9	44.5	32.3	6.1	3.1	3.0
Other Renovation	26	16	Q	Q	Q	59.1	35.9	Q	Q	Q
No Renovations Since 1980.....	512	379	66	36	31	42.3	31.3	5.4	3.0	2.6
Building Newer than 1980	732	463	149	66	55	40.5	25.6	8.2	3.6	3.0
Energy Sources (more than one may apply)										
Electricity	1,927	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Natural Gas	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Fuel Oil	507	281	145	27	53	48.8	27.1	14.0	2.6	5.1
District Heat	47	24	10	7	6	19.2	9.9	4.1	2.7	2.5
District Chilled Water	35	20	8	Q	Q	19.8	11.5	4.7	Q	Q
Propane	106	64	27	6	9	43.0	25.9	10.8	2.6	3.8
Other	47	33	9	2	Q	52.3	36.7	10.0	1.7	Q
Space-Heating Energy Source										
Natural Gas	1,803	1,316	270	98	118	48.8	35.6	7.3	2.7	3.2
Natural Gas Main	1,687	1,250	240	86	111	51.2	37.9	7.3	2.6	3.4
Natural Gas Secondary	116	66	30	12	8	29.1	16.6	7.5	3.1	1.9
Other Excluding Natural Gas	106	(*)	57	38	11	17.7	(*)	9.5	6.4	1.8
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

CONTINUED

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Primary Space-Heating Energy Source										
Electricity	177	48	79	36	13	28.6	7.8	12.8	5.9	2.2
Natural Gas	1,687	1,250	240	86	111	51.2	37.9	7.3	2.6	3.4
Fuel Oil	20	8	3	Q	Q	Q	Q	Q	4.9	Q
District Heat	23	Q	6	6	3	10.9	Q	Q	3.0	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source										
Natural Gas	92	38	15	2	37	90.3	37.6	14.8	1.9	36.0
Other Excluding Natural Gas	1,729	1,197	305	136	91	43.2	29.9	7.6	3.4	2.3
Buildings without Cooling	107	81	12	4	Q	43.7	33.0	5.0	1.6	Q
Water-Heating Energy Source										
Natural Gas	1,509	963	332	105	108	52.4	33.4	11.5	3.7	3.7
Other Excluding Natural Gas	361	299	(*)	36	26	29.3	24.3	(*)	2.9	2.1
Bldgs without Water Heating	57	54	(*)	Q	Q	24.6	23.1	(*)	Q	Q
Cooking Energy Source										
Natural Gas	856	422	232	142	61	55.5	27.3	15.0	9.2	3.9
Other Excluding Natural Gas	141	107	22	(*)	11	43.7	33.4	6.8	(*)	3.5
Buildings without Cooking	931	787	78	(*)	65	37.5	31.7	3.2	(*)	2.6
Energy End Uses (more than one may apply)										
Buildings with Space Heating	1,909	1,316	328	137	129	44.4	30.6	7.6	3.2	3.0
Buildings with Cooling	1,821	1,235	320	138	127	44.4	30.1	7.8	3.4	3.1
Buildings with Water Heating	1,870	1,262	332	142	134	45.5	30.7	8.1	3.4	3.3
Buildings with Cooking	997	529	254	142	72	53.4	28.4	13.6	7.6	3.9
Buildings with Manufacturing	100	63	4	Q	30	43.6	27.2	1.9	Q	13.2
Buildings with Electricity Generation	534	293	141	19	81	51.3	28.2	13.6	1.8	7.8
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	97	64	9	9	15	24.3	16.0	2.2	2.3	3.8
51 to 99	268	174	47	26	Q	44.9	29.2	8.0	4.3	Q
100	1,544	1,077	272	102	94	46.8	32.6	8.2	3.1	2.8
Percent of Floorspace Cooled										
Not Cooled	107	81	12	4	Q	43.7	33.0	5.0	1.6	Q
1 to 50	452	371	26	16	38	37.2	30.6	2.2	1.4	3.1
51 to 99	451	297	82	40	32	46.4	30.5	8.4	4.1	3.3
100	918	567	212	82	57	47.9	29.6	11.1	4.3	3.0
Heating Equipment (more than one may apply)										
Heat Pumps	224	109	75	17	24	40.3	19.7	13.5	3.0	4.2
Packaged Heat Pumps	140	65	51	11	Q	42.0	19.4	15.3	3.2	Q
Split-System Heat Pumps	42	24	11	Q	Q	29.0	16.4	7.9	Q	Q
Individual Room Heat Pumps	84	40	31	6	7	38.1	18.1	14.1	2.7	3.2
Furnaces	673	500	87	50	36	44.0	32.6	5.7	3.3	2.4
Individual Space Heaters	379	270	61	16	32	42.3	30.2	6.8	1.8	3.6
District Heat	39	18	10	7	Q	17.1	7.9	4.3	2.8	Q
Boilers	1,040	709	197	44	89	57.2	39.0	10.8	2.4	4.9
Packaged Heating Units	582	383	115	54	30	42.7	28.1	8.4	4.0	2.2
Other	47	39	5	2	3	26.3	21.4	2.5	0.9	1.4

CONTINUED

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Cooling Equipment (more than one may apply)										
Residential-Type Central										
Air Conditioners	391	269	57	36	29	49.0	33.7	7.2	4.5	3.7
Heat Pumps	234	119	74	18	24	40.1	20.3	12.7	3.1	4.0
Packaged Heat Pumps	145	71	50	11	Q	43.4	21.3	14.9	3.2	Q
Split-System Heat Pumps	45	25	11	Q	Q	29.9	16.8	7.6	Q	Q
Individual Room Heat Pumps ..	85	41	31	6	7	35.8	17.3	13.0	2.5	3.0
Individual Air Conditioners	410	280	92	16	22	45.0	30.8	10.1	1.8	2.4
District Chilled Water	35	20	8	Q	Q	19.8	11.5	4.7	Q	Q
Central Chillers	501	296	121	18	66	55.0	32.5	13.3	2.0	7.3
Packaged Air Conditioning										
Units	1,090	763	171	88	67	45.8	32.1	7.2	3.7	2.8
Swamp Coolers	81	48	19	7	Q	63.6	38.1	14.7	5.4	Q
Other	52	33	Q	Q	3	64.8	41.3	Q	2.2	Q
Main Equipment Replaced Since 1990 (more than one may apply)										
Heating	605	427	104	36	38	49.3	34.8	8.5	2.9	3.1
Cooling	779	528	144	50	56	48.5	32.9	9.0	3.1	3.5
Water Heating Equipment										
Centralized System	1,226	822	220	106	78	48.4	32.4	8.7	4.2	3.1
Distributed System	254	201	20	21	13	33.7	26.6	2.6	2.7	1.7
Combination of Centralized and Distributed System	390	239	92	15	43	47.4	29.1	11.2	1.9	5.2
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation....	996	529	254	142	71	53.4	28.4	13.6	7.6	3.8
Activities with Large Amounts of Hot Water	931	498	254	97	83	58.1	31.1	15.8	6.1	5.1
Separate Computer Area	875	589	169	36	81	42.4	28.6	8.2	1.7	3.9
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System.....	710	455	140	40	75	48.6	31.2	9.6	2.7	5.2
Economizer Cycle	805	543	154	39	70	48.3	32.6	9.3	2.3	4.2
HVAC Maintenance	1,659	1,114	308	120	117	44.9	30.1	8.3	3.3	3.2
Energy Management and Control System (EMCS)	477	312	93	21	51	41.1	26.9	8.0	1.8	4.4
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)										
Heating	1,292	903	200	94	95	41.4	29.0	6.4	3.0	3.1
Cooling	1,288	882	203	105	98	41.0	28.1	6.4	3.3	3.1
Lighting	1,250	968	106	100	77	40.2	31.1	3.4	3.2	2.5
Office Equipment	476	380	38	28	30	37.6	30.0	3.0	2.2	2.3

Table E7. Natural Gas Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (trillion Btu)					Natural Gas Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,928	1,316	332	142	137	44.3	30.3	7.6	3.3	3.2
Annual Consumption (hundred cubic feet)										
1,000 or Less	37	30	4	1	Q	8.4	7.0	1.0	0.3	Q
1,001 to 5,000	249	206	23	16	4	25.6	21.2	2.4	1.6	0.4
5,001 to 10,000	247	174	34	31	8	39.4	27.7	5.5	5.0	1.2
10,001 to 25,000	360	239	61	42	18	46.3	30.7	7.8	5.4	2.3
25,001 to 50,000	293	199	45	26	22	52.9	36.0	8.2	4.7	4.0
50,001 to 100,000	218	144	40	8	26	54.8	36.3	10.0	2.0	6.5
Over 100,000	525	324	125	17	59	89.4	55.1	21.3	2.9	10.1
Provider of Natural Gas (more than one may apply)										
Local Utility	1,631	1,120	278	133	99	42.5	29.2	7.2	3.5	2.6
Some Other Provider	389	256	76	13	44	61.0	40.2	11.9	2.0	6.8

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Building Floorspace (Square Feet)										
1,001 to 5,000	243	151	34	40	18	78.7	48.9	11.1	13.0	5.7
5,001 to 10,000	202	139	31	29	Q	54.8	37.6	8.5	7.9	Q
10,001 to 25,000	300	240	31	21	7	42.5	34.1	4.4	3.0	1.1
25,001 to 50,000	250	182	40	11	Q	41.5	30.2	6.6	1.9	Q
50,001 to 100,000	236	169	41	8	19	35.4	25.2	6.2	1.2	2.8
100,001 to 200,000	241	165	54	7	16	36.3	24.8	8.1	1.0	2.4
200,001 to 500,000	199	130	42	11	16	35.0	22.8	7.5	1.9	2.8
Over 500,000	198	101	48	11	38	43.0	22.0	10.4	2.3	8.3
Principal Building Activity										
Education	260	201	36	5	18	36.9	28.6	5.1	0.7	2.6
Food Sales	37	26	2	8	Q	50.2	34.5	3.1	10.9	Q
Food Service	197	53	54	89	Q	141.2	37.8	38.8	63.5	Q
Health Care	235	132	71	9	22	92.5	51.9	28.1	3.7	8.8
Inpatient	198	99	69	9	21	109.8	55.1	38.2	5.0	11.5
Outpatient	37	33	2	Q	Q	50.2	44.3	3.4	Q	Q
Lodging	208	62	121	14	Q	48.9	14.6	28.3	3.2	Q
Retail (Other Than Mall).....	89	81	3	2	2	30.9	28.4	1.0	0.8	0.7
Office	261	223	13	2	22	31.8	27.2	1.6	0.3	2.7
Public Assembly	99	89	2	3	Q	36.4	32.8	0.9	1.0	Q
Public Order and Safety	28	15	9	Q	Q	43.7	23.3	14.7	Q	Q
Religious Worship	80	74	2	3	Q	30.3	28.3	0.9	1.0	Q
Service	135	116	2	Q	17	54.1	46.3	0.9	Q	Q
Warehouse and Storage	128	108	4	Q	Q	23.4	19.6	0.7	Q	Q
Other	85	70	2	Q	11	67.6	56.1	1.6	Q	9.1
Vacant	27	25	Q	Q	Q	23.0	21.3	Q	Q	Q
Year Constructed										
Before 1920	139	110	12	15	Q	50.3	39.9	4.3	5.3	Q
1920 to 1945	223	145	23	18	36	47.6	31.1	5.0	3.8	7.7
1946 to 1959	210	154	33	11	12	45.1	33.0	7.1	2.3	2.6
1960 to 1969	248	181	44	10	13	44.0	32.1	7.8	1.8	2.3
1970 to 1979	341	237	66	21	17	44.5	30.9	8.7	2.8	2.2
1980 to 1989	282	174	66	21	22	43.7	26.9	10.1	3.2	3.4
1990 to 1999	305	198	53	29	25	37.2	24.2	6.5	3.5	3.0
2000 to 2003	123	77	26	14	6	35.8	22.3	7.5	4.1	1.8
Census Region and Division										
Northeast	415	301	47	29	38	45.2	32.8	5.1	3.2	4.1
New England	73	58	Q	Q	4	49.5	39.3	4.4	2.8	Q
Middle Atlantic	343	243	41	25	33	44.4	31.6	5.3	3.3	4.3
Midwest	683	538	78	28	40	51.9	40.9	5.9	2.1	3.0
East North Central	512	411	58	20	23	53.5	42.9	6.1	2.1	2.4
West North Central	171	127	19	8	Q	47.6	35.4	5.4	2.3	4.6
South	460	255	119	56	30	34.6	19.2	8.9	4.2	2.2
South Atlantic	210	111	54	27	18	33.2	17.6	8.6	4.2	2.8
East South Central	99	64	24	6	4	43.3	28.2	10.6	2.5	1.9
West South Central	151	80	40	23	8	32.2	17.0	8.6	5.0	1.6
West	311	182	78	24	26	39.8	23.3	10.0	3.1	3.3
Mountain	162	116	32	4	Q	57.9	41.6	11.6	1.3	Q
Pacific	149	66	46	21	17	29.7	13.1	9.2	4.1	3.3

CONTINUED

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Climate Zone: 30-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	418	345	44	15	15	54.7	45.1	5.8	1.9	1.9
5,500-7,000 HDD	659	496	90	35	38	51.3	38.6	7.0	2.7	3.0
4,000-5,499 HDD	327	207	51	27	42	40.3	25.5	6.3	3.3	5.1
Fewer than 4,000 HDD	347	187	89	40	31	33.0	17.8	8.4	3.8	3.0
2,000 CDD or More and --										
Fewer than 4,000 HDD	119	41	49	21	7	27.3	9.4	11.3	4.9	1.7
Number of Floors										
One	644	457	88	69	29	43.1	30.6	5.9	4.6	2.0
Two	476	355	59	26	36	41.6	31.1	5.1	2.3	3.1
Three	234	173	37	13	11	41.2	30.5	6.6	2.3	1.9
Four to Nine	367	226	88	20	34	47.9	29.4	11.5	2.6	4.4
Ten or More	149	66	50	9	24	39.8	17.5	13.3	2.5	6.4
Number of Workers (main shift)										
Fewer than 5	264	207	24	15	18	37.6	29.5	3.4	2.1	2.6
5 to 9	192	132	31	25	Q	47.1	32.2	7.6	6.2	Q
10 to 19	235	161	36	33	5	44.2	30.3	6.7	6.2	0.9
20 to 49	383	272	57	30	24	46.6	33.1	6.9	3.7	2.9
50 to 99	234	162	45	11	16	38.0	26.3	7.3	1.8	2.5
100 to 249	228	156	48	8	15	44.4	30.5	9.4	1.6	2.9
250 or More	334	186	82	15	51	44.2	24.6	10.9	1.9	6.8
Weekly Operating Hours										
Fewer than 40	104	91	Q	4	3	31.9	28.1	Q	1.3	0.8
40 to 48	242	213	10	6	12	35.0	30.9	1.5	0.8	1.8
49 to 60	363	295	25	17	25	35.6	28.9	2.5	1.7	2.5
61 to 84	305	224	29	29	23	40.8	30.0	3.8	3.9	3.0
85 to 167	249	156	35	44	14	47.7	29.8	6.8	8.4	2.7
Open Continuously	607	297	217	37	56	58.3	28.5	20.8	3.6	5.4
Ownership and Occupancy										
Nongovernment Owned.....	1,458	965	266	127	100	43.7	29.0	8.0	3.8	3.0
Owner Occupied	686	491	103	41	52	41.5	29.7	6.2	2.5	3.1
Nonowner Occupied	756	458	163	86	48	47.6	28.8	10.3	5.4	3.0
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	412	312	56	10	34	40.6	30.7	5.6	1.0	3.3
Federal	34	26	4	Q	2	31.4	24.2	3.9	Q	2.0
State	95	73	11	2	9	39.1	30.1	4.5	0.8	3.8
Local	283	212	41	7	22	42.6	32.0	6.2	1.1	3.3
Vacancy Status										
Completely Vacant	18	17	(*)	Q	Q	18.8	18.0	0.1	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	308	224	40	14	30	36.5	26.5	4.7	1.7	3.5
Not At All Vacant	1,534	1,027	282	123	102	45.3	30.4	8.3	3.6	3.0
Number of Establishments										
One	1,418	942	267	115	95	46.5	30.9	8.7	3.8	3.1
2 to 5	298	224	40	18	15	39.2	29.5	5.3	2.3	2.0
6 to 10	47	37	5	Q	Q	34.4	27.1	3.6	1.6	Q
11 to 20	33	26	Q	Q	Q	26.2	20.1	3.3	0.7	Q
More than 20	56	31	7	2	Q	31.4	17.3	3.6	1.1	Q
Currently Unoccupied	18	17	(*)	Q	Q	18.8	18.0	0.1	Q	Q

CONTINUED

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Predominant Exterior Wall Material										
Brick, Stone or Stucco	1,093	728	197	91	78	46.4	30.9	8.4	3.8	3.3
Concrete (Block or Poured)	340	234	60	22	23	46.4	32.0	8.3	3.0	3.2
Concrete Panels	174	122	Q	8	16	37.3	26.1	6.0	1.7	3.4
Siding or Shingles	83	54	18	9	2	41.4	26.9	8.9	4.7	1.0
Metal Panels	126	103	7	5	12	31.4	25.5	1.7	1.2	2.9
Window Glass	14	9	2	Q	Q	20.2	13.4	3.5	Q	Q
Other	34	23	9	1	Q	37.6	25.2	9.7	1.6	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material										
Built-Up	720	475	134	46	66	47.4	31.2	8.8	3.0	4.4
Shingles (Not Wood)	301	207	51	28	Q	46.1	31.7	7.8	4.3	Q
Metal Surfacing	188	147	14	14	14	32.6	25.4	2.5	2.3	2.4
Synthetic or Rubber	526	366	93	31	35	44.4	30.9	7.9	2.6	3.0
Slate or Tile	65	39	15	9	Q	41.1	25.0	9.6	5.8	Q
Wooden Materials	20	11	7	Q	(*)	38.6	21.0	Q	Q	0.4
Concrete	23	11	5	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	16	12	1	Q	Q	42.0	30.8	3.4	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)										
Any Type of Renovation										
Since 1980	663	460	114	39	50	50.0	34.7	8.6	2.9	3.8
Addition or Annex	295	196	63	13	23	58.6	38.9	12.5	2.5	4.7
Reduction In Floorspace	50	33	11	2	4	51.8	34.4	11.4	2.4	3.7
Cosmetic Improvements	482	333	81	32	36	47.8	33.1	8.1	3.1	3.5
Wall or Roof Replacement	270	191	45	12	21	42.6	30.2	7.1	2.0	3.4
Interior Wall										
Re-Configuration	331	236	54	14	27	47.2	33.6	7.7	2.0	3.9
HVAC Equipment Upgrade.....	453	306	85	24	38	53.4	36.1	10.1	2.8	4.4
Lighting Upgrade	386	278	63	20	25	47.6	34.3	7.7	2.5	3.0
Window Replacement	235	174	36	10	16	47.0	34.7	7.2	2.0	3.1
Plumbing System Upgrade	278	192	47	16	24	48.7	33.5	8.1	2.8	4.1
Insulation Upgrade	128	93	17	9	9	43.1	31.3	5.9	3.0	2.9
Other Renovation	25	15	Q	Q	Q	57.4	34.8	Q	Q	Q
No Renovations Since 1980.....	497	368	64	35	30	41.0	30.3	5.3	2.9	2.5
Building Newer than 1980	710	449	144	64	53	39.3	24.8	8.0	3.5	2.9
Energy Sources (more than one may apply)										
Electricity	1,869	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Natural Gas	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Fuel Oil	492	273	141	27	51	47.3	26.3	13.6	2.6	4.9
District Heat	46	23	10	6	6	18.7	9.6	4.0	2.6	2.4
District Chilled Water	34	20	8	Q	Q	19.2	11.2	4.5	Q	Q
Propane	103	62	26	6	9	41.7	25.1	10.5	2.5	3.7
Other	46	32	9	1	Q	50.7	35.6	9.7	1.6	Q
Space-Heating Energy Source^a										
Natural Gas	1,749	1,276	262	95	115	47.3	34.5	7.1	2.6	3.1
Natural Gas Main	1,636	1,212	233	83	107	49.6	36.8	7.1	2.5	3.3
Natural Gas Secondary	112	64	29	12	7	28.2	16.1	7.3	3.0	1.9
Other Excluding Natural Gas	103	(*)	56	37	10	17.2	(*)	9.3	6.2	1.7
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Energy Information Administration

2003 Commercial Buildings Energy Consumption Survey: Energy End-Use Consumption Tables

CONTINUED

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Primary Space-Heating Energy Source										
Electricity	171	46	76	35	13	27.8	7.5	12.4	5.7	2.1
Natural Gas	1,636	1,212	233	83	107	49.6	36.8	7.1	2.5	3.3
Fuel Oil	20	8	3	Q	Q	Q	Q	Q	Q	Q
District Heat	22	Q	5	6	3	10.5	Q	Q	2.9	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source										
Natural Gas	89	37	15	2	36	87.6	36.5	14.3	1.9	34.9
Other Excluding Natural Gas	1,677	1,161	296	132	88	41.9	29.0	7.4	3.3	2.2
Buildings without Cooling	104	78	12	4	Q	42.4	32.0	4.9	1.6	Q
Water-Heating Energy Source										
Natural Gas	1,463	934	322	102	105	50.8	32.4	11.2	3.5	3.6
Other Excluding Natural Gas	350	290	(*)	35	25	28.5	23.5	(*)	2.8	2.1
Bldgs without Water Heating	56	52	(*)	Q	Q	23.9	22.4	(*)	Q	Q
Cooking Energy Source										
Natural Gas	830	409	225	138	59	53.8	26.5	14.6	8.9	3.8
Other Excluding Natural Gas	137	104	21	(*)	11	42.4	32.4	6.6	(*)	3.4
Buildings without Cooking	903	763	76	(*)	63	36.4	30.8	3.1	(*)	2.6
Energy End Uses (more than one may apply)										
Buildings with Space Heating	1,852	1,276	318	133	125	43.1	29.7	7.4	3.1	2.9
Buildings with Cooling	1,766	1,198	310	134	124	43.0	29.2	7.6	3.3	3.0
Buildings with Water Heating	1,814	1,224	322	137	130	44.1	29.8	7.8	3.3	3.2
Buildings with Cooking	967	513	246	138	70	51.8	27.5	13.2	7.4	3.7
Buildings with Manufacturing	97	61	4	Q	29	42.3	26.4	1.8	Q	12.8
Buildings with Electricity Generation	518	284	137	19	78	49.8	27.3	13.2	1.8	7.5
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	94	62	9	9	15	23.5	15.6	2.2	2.2	3.6
51 to 99	260	169	46	25	Q	43.6	28.4	7.7	4.2	Q
100	1,498	1,045	263	99	91	45.4	31.7	8.0	3.0	2.8
Percent of Floorspace Cooled										
Not Cooled	104	78	12	4	Q	42.4	32.0	4.9	1.6	Q
1 to 50	438	360	25	16	37	36.1	29.7	2.1	1.3	3.0
51 to 99	438	288	79	38	32	45.0	29.6	8.2	3.9	3.2
100	890	550	206	80	55	46.5	28.7	10.7	4.2	2.9
Heating Equipment (more than one may apply)										
Heat Pumps	217	106	73	16	23	39.1	19.1	13.1	2.9	4.1
Packaged Heat Pumps	135	63	49	10	Q	40.8	18.8	14.9	3.1	Q
Split-System Heat Pumps	41	23	11	Q	Q	28.2	15.9	7.6	Q	Q
Individual Room Heat Pumps ..	81	39	30	6	7	37.0	17.6	13.7	2.6	3.1
Furnaces	653	485	85	48	35	42.7	31.7	5.5	3.2	2.3
Individual Space Heaters	368	262	59	15	31	41.0	29.3	6.6	1.7	3.5
District Heat	38	18	10	6	Q	16.6	7.6	4.2	2.8	Q
Boilers	1,009	688	191	43	87	55.5	37.9	10.5	2.4	4.8
Packaged Heating Units	564	371	111	52	29	41.4	27.3	8.2	3.8	2.2
Other	46	37	4	2	2	25.5	20.8	2.5	0.9	1.4

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Cooling Equipment (more than one may apply)										
Residential-Type Central										
Air Conditioners	379	261	56	35	28	47.5	32.7	7.0	4.3	3.6
Heat Pumps	227	115	72	17	23	38.9	19.7	12.3	3.0	3.9
Packaged Heat Pumps	141	69	49	10	Q	42.1	20.6	14.5	3.1	Q
Split-System Heat Pumps	43	24	11	Q	Q	29.0	16.3	7.4	Q	Q
Individual Room Heat Pumps ..	83	40	30	6	7	34.7	16.8	12.6	2.4	2.9
Individual Air Conditioners	398	272	89	16	21	43.7	29.8	9.8	1.7	2.3
District Chilled Water	34	20	8	Q	Q	19.2	11.2	4.5	Q	Q
Central Chillers	486	287	117	17	64	53.4	31.5	12.9	1.9	7.1
Packaged Air Conditioning										
Units	1,057	740	166	86	65	44.4	31.1	7.0	3.6	2.7
Swamp Coolers	78	47	18	7	Q	61.7	36.9	14.3	5.3	Q
Other	51	32	Q	Q	3	62.8	40.1	Q	2.2	Q
Main Equipment Replaced Since 1990 (more than one may apply)										
Heating	587	414	101	35	37	47.8	33.7	8.2	2.9	3.0
Cooling	756	512	140	49	55	47.1	31.9	8.7	3.0	3.4
Water Heating Equipment										
Centralized System	1,189	797	214	103	76	46.9	31.4	8.4	4.0	3.0
Distributed System	247	195	19	20	13	32.7	25.8	2.5	2.6	1.7
Combination of Centralized and Distributed System	378	232	89	15	41	46.0	28.3	10.9	1.8	5.0
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation....	966	513	246	138	69	51.8	27.5	13.2	7.4	3.7
Activities with Large Amounts of Hot Water	903	483	246	94	80	56.3	30.1	15.3	5.9	5.0
Separate Computer Area	849	571	164	35	79	41.2	27.7	7.9	1.7	3.8
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System.....	688	441	136	39	73	47.2	30.2	9.3	2.6	5.0
Economizer Cycle	781	526	149	37	68	46.9	31.6	9.0	2.2	4.1
HVAC Maintenance	1,609	1,081	298	117	113	43.5	29.2	8.1	3.2	3.1
Energy Management and Control System (EMCS)	463	303	90	21	49	39.8	26.1	7.8	1.8	4.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)										
Heating	1,253	876	194	91	92	40.2	28.1	6.2	2.9	3.0
Cooling	1,249	856	197	101	95	39.7	27.2	6.3	3.2	3.0
Lighting	1,213	939	102	97	75	39.0	30.2	3.3	3.1	2.4
Office Equipment	462	369	37	28	29	36.5	29.1	2.9	2.2	2.3
Annual Consumption (hundred cubic feet)										
1,000 or Less	35	30	4	1	Q	8.2	6.8	0.9	0.3	Q
1,001 to 5,000	242	200	23	15	4	24.8	20.5	2.3	1.6	0.4
5,001 to 10,000	239	168	33	30	7	38.3	26.9	5.3	4.9	1.2
10,001 to 25,000	349	232	59	41	17	44.9	29.8	7.6	5.3	2.2
25,001 to 50,000	284	193	44	25	22	51.3	34.9	7.9	4.6	3.9
50,001 to 100,000	211	140	38	8	25	53.2	35.3	9.7	1.9	6.3
Over 100,000	510	314	121	17	58	86.8	53.5	20.6	2.8	9.8

Table E8. Natural Gas Consumption (cubic feet) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)					Natural Gas Energy Intensity (cubic feet/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,870	1,276	322	138	133	43.0	29.4	7.4	3.2	3.1
Provider of Natural Gas (more than one may apply)										
Local Utility	1,582	1,086	270	129	96	41.2	28.3	7.0	3.4	2.5
Some Other Provider	377	249	73	13	42	59.1	39.0	11.5	2.0	6.6

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbeecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 3.8 percent of total natural gas consumption.

^a Total natural gas energy intensity in the "Other Excluding Natural Gas" row has been revised and value does not match published value in consumption Table C24 (http://www.eia.doe.gov/emeu/cbeecs/cbeecs2003/detailed_tables_2003/detailed_tables_2003.html).

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: • Due to rounding, data may not sum to totals. • HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E9. Fuel Oil Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (trillion Btu)					Fuel Oil Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Building Floorspace (Square Feet)										
1,001 to 5,000	34	32	Q	(*)	Q	57.4	52.7	Q	(*)	Q
5,001 to 10,000	36	33	Q	(*)	Q	50.6	45.8	Q	0.1	Q
10,001 to 25,000	27	25	1	(*)	Q	28.2	25.4	1.5	0.1	Q
25,001 to 50,000	16	15	Q	(*)	1	19.7	18.8	Q	(*)	0.7
50,001 to 100,000	26	23	1	Q	1	15.0	13.3	0.8	Q	0.6
100,001 to 200,000	37	34	Q	Q	1	12.5	11.6	Q	Q	0.5
200,001 to 500,000	36	25	Q	Q	2	10.5	7.5	2.4	Q	0.5
Over 500,000	10	Q	Q	Q	2	2.4	Q	Q	Q	0.5
Principal Building Activity										
Education	47	45	2	Q	Q	25.4	23.9	0.8	Q	0.3
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Health Care	11	6	2	Q	2	5.6	3.3	0.8	Q	1.3
Inpatient	9	5	2	Q	2	5.3	2.9	0.9	Q	1.4
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	35	25	Q	(*)	1	16.1	11.2	Q	0.2	0.3
Retail (Other Than Mall).....	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Office	18	15	Q	Q	1	4.3	3.8	Q	Q	0.4
Public Assembly	29	28	Q	(*)	Q	30.7	29.7	Q	(*)	Q
Public Order and Safety	8	6	Q	(*)	Q	Q	Q	Q	Q	Q
Religious Worship	18	18	Q	(*)	Q	39.8	39.3	Q	(*)	Q
Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	9	Q	Q	(*)	Q	7.3	6.3	Q	0.1	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed										
Before 1920	38	35	Q	(*)	Q	39.3	36.4	Q	0.2	Q
1920 to 1945	54	44	9	Q	(*)	27.2	22.4	4.6	Q	0.2
1946 to 1959	48	45	Q	(*)	Q	23.5	21.9	Q	(*)	Q
1960 to 1969	Q	Q	Q	Q	Q	21.7	20.0	0.7	Q	0.5
1970 to 1979	22	19	1	Q	2	10.2	8.7	0.6	Q	0.9
1980 to 1989	9	6	1	Q	2	3.0	2.1	0.2	Q	0.7
1990 to 1999	9	6	Q	Q	2	4.3	3.1	Q	Q	1.0
2000 to 2003	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division										
Northeast	175	156	15	Q	4	28.8	25.6	2.4	Q	0.7
New England	69	64	4	(*)	1	44.1	40.8	2.8	0.1	Q
Middle Atlantic	106	91	Q	Q	4	23.5	20.3	Q	Q	0.8
Midwest	24	Q	1	Q	1	8.3	7.6	0.2	Q	0.5
East North Central	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
West North Central	Q	Q	Q	Q	Q	14.4	12.9	0.5	0.1	Q
South	14	10	Q	Q	3	3.5	2.4	Q	Q	0.7
South Atlantic	13	10	Q	Q	3	4.9	3.6	Q	Q	0.9
East South Central	1	(*)	(*)	(*)	(*)	2.7	1.2	(*)	1.0	0.5
West South Central	1	Q	Q	(*)	(*)	0.5	0.1	Q	(*)	0.3
West	9	Q	Q	Q	1	Q	Q	Q	Q	Q
Mountain	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Pacific	4	2	Q	(*)	1	2.7	1.4	Q	(*)	0.5

Table E9. Fuel Oil Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (trillion Btu)					Fuel Oil Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Climate Zone: 30-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	63	59	2	Q	2	25.0	23.5	0.7	Q	0.7
5,500-7,000 HDD	63	57	4	Q	2	15.6	14.1	1.0	Q	0.5
4,000-5,499 HDD	90	75	Q	Q	4	19.4	16.3	Q	Q	0.8
Fewer than 4,000 HDD	6	2	Q	Q	2	2.5	1.0	Q	Q	0.8
2,000 CDD or More and --										
Fewer than 4,000 HDD	1	Q	Q	(*)	(*)	0.5	0.2	Q	(*)	0.3
Number of Floors										
One	47	42	2	(*)	3	18.5	16.5	0.8	0.1	1.1
Two	69	64	Q	Q	1	25.3	23.6	Q	Q	0.5
Three	39	36	1	Q	Q	20.2	18.7	0.5	Q	0.6
Four to Nine	55	43	9	Q	3	13.5	10.5	2.2	Q	0.7
Ten or More	13	9	Q	Q	1	3.3	Q	Q	Q	0.3
Number of Workers (main shift)										
Fewer than 5	69	64	Q	(*)	Q	47.4	44.1	Q	0.1	Q
5 to 9	17	15	Q	(*)	Q	26.6	23.4	Q	(*)	Q
10 to 19	33	26	7	(*)	Q	32.3	25.4	6.7	0.1	0.3
20 to 49	36	33	1	(*)	Q	22.2	20.9	0.5	(*)	Q
50 to 99	27	25	1	(*)	1	12.7	11.5	0.7	0.2	0.3
100 to 249	19	17	1	Q	1	8.9	7.8	0.3	Q	0.6
250 or More	22	14	Q	Q	4	3.5	2.3	Q	Q	0.6
Weekly Operating Hours										
Fewer than 40	15	15	Q	(*)	Q	26.6	26.4	0.1	(*)	Q
40 to 48	58	57	(*)	(*)	1	28.9	28.4	0.2	(*)	0.3
49 to 60	32	28	Q	(*)	2	10.5	9.4	Q	0.1	0.8
61 to 84	40	37	Q	Q	1	19.1	17.6	Q	Q	0.3
85 to 167	18	16	1	Q	1	12.1	10.9	0.6	Q	0.4
Open Continuously	59	40	13	Q	5	9.9	6.8	2.2	Q	0.9
Ownership and Occupancy										
Nongovernment Owned.....	154	132	13	Q	7	13.5	11.6	1.2	Q	0.6
Owner Occupied	81	69	8	(*)	4	13.4	11.4	1.3	(*)	0.7
Nonowner Occupied	72	63	Q	Q	3	13.8	12.0	Q	Q	0.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	69	62	4	Q	2	18.1	16.3	1.0	Q	0.6
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	23	21	Q	Q	Q	24.0	Q	Q	Q	0.9
Local	39	35	3	Q	1	16.1	14.4	1.1	Q	0.4
Vacancy Status										
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	30	27	2	Q	1	6.8	6.1	0.5	Q	0.2
Not At All Vacant	191	166	15	Q	9	17.9	15.5	1.4	Q	0.8
Number of Establishments										
One	183	161	14	Q	7	19.8	17.5	1.5	Q	0.7
2 to 5	28	23	3	(*)	2	10.4	8.6	1.1	(*)	0.7
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	2.3	Q	Q	(*)	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E9. Fuel Oil Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (trillion Btu)					Fuel Oil Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Predominant Exterior Wall Material										
Brick, Stone or Stucco	144	126	13	Q	4	18.7	16.3	1.7	Q	0.6
Concrete (Block or Poured)	24	18	Q	Q	4	9.6	7.3	Q	Q	1.4
Concrete Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Siding or Shingles	41	39	Q	(*)	Q	54.4	51.8	Q	(*)	Q
Metal Panels	8	8	Q	Q	(*)	7.1	6.6	Q	Q	0.4
Window Glass	(*)	Q	Q	(*)	(*)	0.3	Q	Q	(*)	0.3
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material										
Built-Up	37	30	Q	Q	2	6.6	5.5	Q	Q	0.4
Shingles (Not Wood)	63	58	3	(*)	Q	34.7	31.7	1.9	0.1	Q
Metal Surfacing	21	20	Q	Q	Q	16.2	15.0	Q	Q	0.8
Synthetic or Rubber	46	39	3	Q	4	9.9	8.4	0.7	Q	0.8
Slate or Tile	12	11	Q	(*)	(*)	25.5	23.2	Q	0.5	0.4
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)										
Any Type of Renovation										
Since 1980	105	95	5	Q	4	18.6	16.8	0.9	Q	0.7
Addition or Annex	Q	Q	Q	Q	Q	19.3	18.1	0.4	Q	0.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	77	69	5	Q	3	18.3	16.4	1.2	Q	0.7
Wall or Roof Replacement	54	47	4	Q	2	17.4	15.2	1.4	Q	0.6
Interior Wall										
Re-Configuration	44	40	3	Q	2	14.4	12.9	0.9	Q	0.6
HVAC Equipment Upgrade.....	34	28	3	Q	2	9.7	8.1	0.7	Q	0.7
Lighting Upgrade	53	48	3	Q	2	15.2	13.7	0.8	Q	0.6
Window Replacement	50	46	3	Q	1	21.6	19.8	1.2	Q	0.4
Plumbing System Upgrade	45	40	3	Q	1	16.0	14.3	0.9	Q	0.5
Insulation Upgrade	21	18	2	(*)	1	15.1	12.7	1.4	0.2	0.7
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980.....	94	82	Q	Q	Q	29.2	25.5	Q	Q	Q
Building Newer than 1980	23	17	Q	Q	5	3.7	2.7	Q	Q	0.7
Energy Sources (more than one may apply)										
Electricity	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Natural Gas	99	82	10	Q	6	9.5	7.9	0.9	Q	0.6
Fuel Oil	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
District Heat	1	Q	Q	Q	1	0.8	Q	Q	Q	0.5
District Chilled Water	2	Q	Q	Q	Q	1.7	Q	Q	Q	0.7
Propane	54	47	3	Q	2	25.1	22.2	1.5	Q	1.1
Other	Q	Q	Q	Q	Q	8.3	7.4	Q	Q	0.3
Space-Heating Energy Source										
Fuel Oil	212	194	14	Q	3	35.4	32.4	2.3	Q	0.4
Fuel Oil Main	197	181	13	Q	2	51.7	47.5	3.4	Q	0.4
Fuel Oil Secondary	16	14	1	Q	1	7.1	6.2	0.3	Q	0.5
Other Excluding Fuel Oil	7	(*)	Q	Q	6	0.8	(*)	Q	Q	0.7
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

CONTINUED

Table E9. Fuel Oil Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (trillion Btu)					Fuel Oil Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Primary Space-Heating Energy Source										
Electricity	3	Q	Q	(*)	1	1.1	Q	Q	(*)	0.5
Natural Gas	15	10	1	Q	4	2.4	1.6	0.1	Q	0.7
Fuel Oil	197	181	13	Q	2	51.7	47.5	3.4	Q	0.4
District Heat	1	Q	Q	Q	1	0.7	Q	Q	Q	0.5
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source										
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	175	151	14	Q	8	12.6	10.9	1.0	Q	0.6
Buildings without Cooling	46	42	Q	(*)	Q	36.6	33.4	Q	(*)	Q
Water-Heating Energy Source										
Fuel Oil	109	89	17	Q	2	58.0	47.1	9.2	Q	1.1
Other Excluding Fuel Oil	104	96	(*)	Q	7	8.2	7.6	(*)	Q	0.5
Bldgs without Water Heating	10	9	(*)	(*)	Q	16.0	14.8	(*)	(*)	Q
Cooking Energy Source										
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	114	97	12	(*)	5	12.9	10.9	1.3	(*)	0.6
Buildings without Cooking	103	94	5	(*)	4	16.7	15.2	0.8	(*)	0.6
Energy End Uses (more than one may apply)										
Buildings with Space Heating	219	194	15	Q	9	14.6	13.0	1.0	Q	0.6
Buildings with Cooling	176	151	14	Q	9	12.7	10.9	1.0	Q	0.6
Buildings with Water Heating	213	185	17	Q	9	14.6	12.7	1.2	Q	0.6
Buildings with Cooking	119	100	12	Q	6	13.3	11.1	1.4	Q	0.6
Buildings with Manufacturing	7	Q	Q	(*)	Q	6.7	4.5	Q	0.1	Q
Buildings with Electricity Generation	31	21	3	Q	7	3.2	2.1	0.3	Q	0.8
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	13	11	Q	(*)	Q	10.4	8.9	Q	(*)	Q
51 to 99	26	22	Q	Q	1	10.4	8.9	Q	Q	0.4
100	180	160	11	Q	7	16.0	14.3	1.0	Q	0.6
Heating Equipment (more than one may apply)										
Heat Pumps	6	4	Q	Q	1	2.5	1.8	Q	Q	0.5
Packaged Heat Pumps	3	Q	(*)	Q	1	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps ..	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	50	47	1	(*)	Q	15.0	14.0	0.3	(*)	Q
Individual Space Heaters	31	27	2	(*)	2	9.7	8.3	0.8	(*)	0.6
District Heat	1	Q	Q	Q	1	0.7	Q	Q	Q	0.5
Boilers	171	152	13	Q	5	19.2	17.0	1.5	Q	0.6
Packaged Heating Units	17	13	1	Q	3	4.4	3.3	0.3	Q	0.8
Other	5	4	Q	Q	Q	4.6	3.9	Q	Q	Q
Water Heating Equipment										
Centralized System	161	139	16	Q	6	19.2	16.5	1.9	Q	0.7
Distributed System	31	29	Q	(*)	Q	14.2	13.5	Q	(*)	Q
Combination of Centralized and Distributed System	20	16	1	Q	2	5.1	4.1	0.3	Q	0.5

Table E9. Fuel Oil Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (trillion Btu)					Fuel Oil Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	222	194	17	Q	10	14.7	12.8	1.1	Q	0.6
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation....	119	100	12	Q	6	13.3	11.1	1.4	Q	0.6
Activities with Large Amounts of Hot Water	95	76	13	Q	6	12.4	9.9	1.7	Q	0.7
Separate Computer Area	96	79	11	Q	6	9.4	7.7	1.1	Q	0.5
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System.....	35	28	3	Q	4	4.5	3.5	0.3	Q	0.6
Economizer Cycle	42	33	3	Q	5	5.3	4.2	0.4	Q	0.6
HVAC Maintenance	196	172	14	Q	9	13.9	12.1	1.0	Q	0.6
Energy Management and Control System (EMCS)	31	24	Q	Q	4	4.8	3.8	Q	Q	0.6
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)										
Heating	162	144	10	Q	6	14.9	13.2	1.0	Q	0.6
Cooling	135	117	12	Q	6	12.9	11.1	1.1	Q	0.5
Lighting	156	147	4	Q	4	17.9	16.8	0.5	Q	0.5
Office Equipment	92	87	Q	Q	3	27.8	26.2	Q	Q	0.8
Annual Consumption (gallons)										
1,000 or Less	13	10	Q	Q	2	1.5	1.2	Q	Q	0.3
1,001 to 5,000	44	39	Q	Q	3	17.1	14.9	Q	Q	1.2
5,001 to 10,000	28	24	Q	(*)	Q	31.0	26.6	Q	0.1	1.4
10,001 to 25,000	30	29	(*)	(*)	1	33.4	31.8	0.5	0.1	1.0
Over 25,000	106	92	11	Q	2	50.1	43.3	5.3	Q	1.0

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: • Due to rounding, data may not sum to totals. • HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E10. Fuel Oil Consumption (gallons) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)					Fuel Oil Energy Intensity (gallons/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
Building Floorspace (Square Feet)										
1,001 to 5,000	249	228	Q	(*)	Q	0.41	0.38	Q	(*)	Q
5,001 to 10,000	261	237	Q	1	Q	0.37	0.33	Q	(*)	Q
10,001 to 25,000	196	177	10	(*)	Q	0.20	0.18	0.01	(*)	Q
25,001 to 50,000	117	112	Q	(*)	4	0.14	0.14	Q	(*)	(*)
50,001 to 100,000	188	167	9	Q	7	0.11	0.10	0.01	Q	(*)
100,001 to 200,000	263	246	Q	Q	10	0.09	0.08	Q	Q	(*)
200,001 to 500,000	258	183	Q	Q	11	0.08	0.05	0.02	Q	(*)
Over 500,000	69	Q	Q	Q	14	0.02	Q	Q	Q	(*)
Principal Building Activity										
Education	342	322	11	Q	Q	0.18	0.17	0.01	Q	(*)
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Health Care	76	45	11	Q	18	0.04	0.02	0.01	Q	0.01
Inpatient	65	35	11	Q	17	0.04	0.02	0.01	Q	0.01
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	255	177	Q	3	5	0.12	0.08	Q	(*)	(*)
Retail (Other Than Mall).....	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Office	126	112	Q	Q	11	0.03	0.03	Q	Q	(*)
Public Assembly	208	201	Q	(*)	Q	0.22	0.21	Q	(*)	Q
Public Order and Safety	57	41	Q	(*)	Q	Q	Q	Q	Q	Q
Religious Worship	130	129	Q	(*)	Q	0.29	0.28	Q	(*)	Q
Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	66	Q	Q	1	Q	0.05	0.05	Q	(*)	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed										
Before 1920	273	253	Q	2	Q	0.28	0.26	Q	(*)	Q
1920 to 1945	390	320	65	Q	2	0.20	0.16	0.03	Q	(*)
1946 to 1959	347	323	Q	1	Q	0.17	0.16	Q	(*)	Q
1960 to 1969	Q	Q	Q	Q	Q	0.16	0.14	0.01	Q	(*)
1970 to 1979	161	137	9	Q	14	0.07	0.06	(*)	Q	0.01
1980 to 1989	66	46	5	Q	15	0.02	0.02	(*)	Q	(*)
1990 to 1999	65	46	Q	Q	15	0.03	0.02	Q	Q	0.01
2000 to 2003	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division										
Northeast	1,265	1,122	106	Q	30	0.21	0.18	0.02	Q	(*)
New England	501	464	32	1	4	0.32	0.29	0.02	(*)	Q
Middle Atlantic	764	658	Q	Q	26	0.17	0.15	Q	Q	0.01
Midwest	170	Q	4	Q	10	0.06	0.06	(*)	Q	(*)
East North Central	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
West North Central	Q	Q	Q	Q	Q	0.10	0.09	(*)	(*)	Q
South	104	73	Q	Q	22	0.03	0.02	Q	Q	0.01
South Atlantic	93	69	Q	Q	18	0.04	0.03	Q	Q	0.01
East South Central	7	3	(*)	2	1	0.02	0.01	(*)	0.01	(*)
West South Central	4	Q	Q	(*)	3	(*)	(*)	Q	(*)	(*)
West	63	Q	Q	Q	7	Q	Q	Q	Q	Q
Mountain	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Pacific	29	15	Q	(*)	5	0.02	0.01	Q	(*)	(*)

Table E10. Fuel Oil Consumption (gallons) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)					Fuel Oil Energy Intensity (gallons/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
Climate Zone: 30-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	451	424	13	Q	13	0.18	0.17	0.01	Q	0.01
5,500-7,000 HDD	455	412	29	Q	14	0.11	0.10	0.01	Q	(*)
4,000-5,499 HDD	648	542	Q	Q	25	0.14	0.12	Q	Q	0.01
Fewer than 4,000 HDD	42	17	Q	Q	13	0.02	0.01	Q	Q	0.01
2,000 CDD or More and --										
Fewer than 4,000 HDD	6	Q	Q	(*)	4	(*)	(*)	Q	(*)	(*)
Number of Floors										
One	335	300	15	1	19	0.13	0.12	0.01	(*)	0.01
Two	496	463	Q	Q	11	0.18	0.17	Q	Q	(*)
Three	279	258	7	Q	Q	0.15	0.13	(*)	Q	(*)
Four to Nine	400	310	66	Q	22	0.10	0.08	0.02	Q	0.01
Ten or More	93	66	Q	Q	8	0.02	Q	Q	Q	(*)
Number of Workers (main shift)										
Fewer than 5	498	464	Q	1	Q	0.34	0.32	Q	(*)	Q
5 to 9	120	106	Q	(*)	Q	0.19	0.17	Q	(*)	Q
10 to 19	239	187	49	(*)	Q	0.23	0.18	0.05	(*)	(*)
20 to 49	257	241	6	(*)	Q	0.16	0.15	(*)	(*)	Q
50 to 99	195	177	10	3	5	0.09	0.08	(*)	(*)	(*)
100 to 249	138	120	4	Q	9	0.06	0.06	(*)	Q	(*)
250 or More	156	101	Q	Q	27	0.03	0.02	Q	Q	(*)
Weekly Operating Hours										
Fewer than 40	110	109	Q	(*)	Q	0.19	0.19	(*)	(*)	Q
40 to 48	416	408	3	(*)	5	0.21	0.20	(*)	(*)	(*)
49 to 60	228	205	Q	1	17	0.08	0.07	Q	(*)	0.01
61 to 84	288	266	Q	Q	5	0.14	0.13	Q	Q	(*)
85 to 167	132	118	7	Q	4	0.09	0.08	(*)	Q	(*)
Open Continuously	428	291	94	Q	37	0.07	0.05	0.02	Q	0.01
Ownership and Occupancy										
Nongovernment Owned.....	1,107	952	97	Q	52	0.10	0.08	0.01	Q	(*)
Owner Occupied	588	499	58	1	30	0.10	0.08	0.01	(*)	(*)
Nonowner Occupied	520	453	Q	Q	23	0.10	0.09	Q	Q	(*)
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	495	445	28	Q	16	0.13	0.12	0.01	Q	(*)
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	166	152	Q	Q	Q	0.17	Q	Q	Q	0.01
Local	284	253	20	Q	8	0.12	0.10	0.01	Q	(*)
Vacancy Status										
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	213	192	15	Q	6	0.05	0.04	(*)	Q	(*)
Not At All Vacant	1,380	1,197	110	Q	62	0.13	0.11	0.01	Q	0.01
Number of Establishments										
One	1,318	1,160	99	Q	50	0.14	0.13	0.01	Q	0.01
2 to 5	198	164	21	(*)	13	0.07	0.06	0.01	(*)	0.01
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	0.02	Q	Q	(*)	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E10. Fuel Oil Consumption (gallons) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)					Fuel Oil Energy Intensity (gallons/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
Predominant Exterior Wall Material										
Brick, Stone or Stucco	1,041	909	94	Q	31	0.13	0.12	0.01	Q	(*)
Concrete (Block or Poured)	175	133	Q	Q	26	0.07	0.05	Q	Q	0.01
Concrete Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Siding or Shingles	295	281	Q	(*)	Q	0.39	0.37	Q	(*)	Q
Metal Panels	60	55	Q	Q	3	0.05	0.05	Q	Q	(*)
Window Glass	1	Q	Q	(*)	1	(*)	Q	Q	(*)	(*)
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material										
Built-Up	264	220	Q	Q	17	0.05	0.04	Q	Q	(*)
Shingles (Not Wood)	453	415	25	1	Q	0.25	0.23	0.01	(*)	Q
Metal Surfacing	153	141	Q	Q	Q	0.12	0.11	Q	Q	0.01
Synthetic or Rubber	335	284	24	Q	25	0.07	0.06	0.01	Q	0.01
Slate or Tile	83	76	Q	2	1	0.18	0.17	Q	(*)	(*)
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)										
Any Type of Renovation										
Since 1980	757	686	38	Q	27	0.13	0.12	0.01	Q	(*)
Addition or Annex	Q	Q	Q	Q	Q	0.14	0.13	(*)	Q	(*)
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	555	496	35	Q	21	0.13	0.12	0.01	Q	(*)
Wall or Roof Replacement	386	337	31	Q	14	0.13	0.11	0.01	Q	(*)
Interior Wall										
Re-Configuration	321	288	19	Q	13	0.10	0.09	0.01	Q	(*)
HVAC Equipment Upgrade.....	244	204	19	Q	17	0.07	0.06	0.01	Q	(*)
Lighting Upgrade	386	348	21	Q	15	0.11	0.10	0.01	Q	(*)
Window Replacement	362	332	20	Q	6	0.16	0.14	0.01	Q	(*)
Plumbing System Upgrade	321	288	19	Q	9	0.12	0.10	0.01	Q	(*)
Insulation Upgrade	151	127	14	2	7	0.11	0.09	0.01	(*)	0.01
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980.....	677	590	Q	Q	Q	0.21	0.18	Q	Q	Q
Building Newer than 1980	168	121	Q	Q	33	0.03	0.02	Q	Q	0.01
Energy Sources (more than one may apply)										
Electricity	1,601	1,396	125	Q	69	0.11	0.09	0.01	Q	(*)
Natural Gas	712	593	70	Q	44	0.07	0.06	0.01	Q	(*)
Fuel Oil	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
District Heat	10	Q	Q	Q	6	0.01	Q	Q	Q	(*)
District Chilled Water	12	Q	Q	Q	Q	0.01	Q	Q	Q	(*)
Propane	387	342	23	Q	18	0.18	0.16	0.01	Q	0.01
Other	Q	Q	Q	Q	Q	0.06	0.05	Q	Q	(*)
Space-Heating Energy Source										
Fuel Oil	1,527	1,397	100	Q	19	0.25	0.23	0.02	Q	(*)
Fuel Oil Main	1,423	1,307	94	Q	11	0.37	0.34	0.02	Q	(*)
Fuel Oil Secondary	112	98	5	Q	8	0.05	0.04	(*)	Q	(*)
Other Excluding Fuel Oil	51	(*)	Q	Q	45	0.01	(*)	Q	Q	0.01
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E10. Fuel Oil Consumption (gallons) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)					Fuel Oil Energy Intensity (gallons/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
Primary Space-Heating Energy Source										
Electricity	23	Q	Q	1	11	0.01	Q	Q	(*)	(*)
Natural Gas	109	72	6	Q	31	0.02	0.01	(*)	Q	(*)
Fuel Oil	1,423	1,307	94	Q	11	0.37	0.34	0.02	Q	(*)
District Heat	7	Q	Q	Q	5	(*)	Q	Q	Q	(*)
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source										
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	1,258	1,086	103	Q	58	0.09	0.08	0.01	Q	(*)
Buildings without Cooling	334	305	Q	(*)	Q	0.26	0.24	Q	(*)	Q
Water-Heating Energy Source										
Fuel Oil	786	638	125	Q	15	0.42	0.34	0.07	Q	0.01
Other Excluding Fuel Oil	748	695	(*)	Q	49	0.06	0.05	(*)	Q	(*)
Bldgs without Water Heating	69	64	(*)	(*)	Q	0.12	0.11	(*)	(*)	Q
Cooking Energy Source										
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	821	699	84	(*)	37	0.09	0.08	0.01	(*)	(*)
Buildings without Cooking	742	677	38	(*)	28	0.12	0.11	0.01	(*)	(*)
Energy End Uses (more than one may apply)										
Buildings with Space Heating	1,577	1,397	105	Q	65	0.11	0.09	0.01	Q	(*)
Buildings with Cooling	1,268	1,092	104	Q	61	0.09	0.08	0.01	Q	(*)
Buildings with Water Heating	1,533	1,333	125	Q	63	0.11	0.09	0.01	Q	(*)
Buildings with Cooking	860	720	87	Q	41	0.10	0.08	0.01	Q	(*)
Buildings with Manufacturing	49	Q	Q	1	Q	0.05	0.03	Q	(*)	Q
Buildings with Electricity Generation	227	151	20	Q	54	0.02	0.02	(*)	Q	0.01
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	94	81	Q	(*)	Q	0.07	0.06	Q	(*)	Q
51 to 99	187	160	Q	Q	8	0.08	0.06	Q	Q	(*)
100	1,297	1,157	81	Q	52	0.12	0.10	0.01	Q	(*)
Heating Equipment (more than one may apply)										
Heat Pumps	44	32	Q	Q	9	0.02	0.01	Q	Q	(*)
Packaged Heat Pumps	22	Q	1	Q	6	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps ..	Q	Q	Q	Q	Q	Q	Q	Q	Q	(*)
Furnaces	360	337	7	1	Q	0.11	0.10	(*)	(*)	Q
Individual Space Heaters	225	194	18	1	13	0.07	0.06	0.01	(*)	(*)
District Heat	8	Q	Q	Q	5	(*)	Q	Q	Q	(*)
Boilers	1,236	1,093	96	Q	37	0.14	0.12	0.01	Q	(*)
Packaged Heating Units	122	91	7	Q	22	0.03	0.02	(*)	Q	0.01
Other	36	31	Q	Q	Q	0.03	0.03	Q	Q	Q
Water Heating Equipment										
Centralized System	1,162	1,003	114	Q	40	0.14	0.12	0.01	Q	(*)
Distributed System	224	212	Q	(*)	Q	0.10	0.10	Q	(*)	Q
Combination of Centralized and Distributed System	147	119	9	Q	13	0.04	0.03	(*)	Q	(*)

Table E10. Fuel Oil Consumption (gallons) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total Fuel Oil Consumption (million gallons)					Fuel Oil Energy Intensity (gallons/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	1,602	1,397	125	Q	69	0.11	0.09	0.01	Q	(*)
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation....	860	720	87	Q	41	0.10	0.08	0.01	Q	(*)
Activities with Large Amounts of Hot Water	685	546	92	Q	40	0.09	0.07	0.01	Q	0.01
Separate Computer Area	695	570	78	Q	40	0.07	0.06	0.01	Q	(*)
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System.....	254	199	19	Q	32	0.03	0.03	(*)	Q	(*)
Economizer Cycle	303	239	22	Q	37	0.04	0.03	(*)	Q	(*)
HVAC Maintenance	1,413	1,238	101	Q	62	0.10	0.09	0.01	Q	(*)
Energy Management and Control System (EMCS)	222	173	Q	Q	26	0.03	0.03	Q	Q	(*)
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)										
Heating	1,166	1,035	75	Q	47	0.11	0.10	0.01	Q	(*)
Cooling	975	841	83	Q	41	0.09	0.08	0.01	Q	(*)
Lighting	1,127	1,061	30	Q	30	0.13	0.12	(*)	Q	(*)
Office Equipment	663	625	Q	Q	19	0.20	0.19	Q	Q	0.01
Annual Consumption (gallons)										
1,000 or Less	94	74	Q	Q	17	0.01	0.01	Q	Q	(*)
1,001 to 5,000	320	279	Q	Q	22	0.12	0.11	Q	Q	0.01
5,001 to 10,000	204	175	Q	(*)	Q	0.22	0.19	Q	(*)	0.01
10,001 to 25,000	219	209	3	1	7	0.24	0.23	(*)	(*)	0.01
Over 25,000	765	660	81	Q	15	0.36	0.31	0.04	Q	0.01

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbeecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: • Due to rounding, data may not sum to totals. • HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table E11. District Heat Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total District Heat Consumption (trillion Btu)					District Heat Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
Building Floorspace (Square Feet)										
1,001 to 5,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
25,001 to 50,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
50,001 to 100,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
100,001 to 200,000	165	154	10	Q	Q	118.1	109.9	Q	Q	Q
200,001 to 500,000	123	112	11	Q	Q	121.2	110.2	10.5	Q	Q
Over 500,000	169	146	16	Q	Q	99.9	86.2	9.5	Q	Q
Principal Building Activity										
Education	134	122	8	Q	Q	116.6	106.6	6.9	Q	Q
Food Service	N	N	N	N	N	N	N	N	N	N
Health Care	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Inpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Retail (Other Than Mall).....	Q	Q	(*)	(*)	(*)	Q	Q	(*)	(*)	(*)
Office	128	122	3	Q	Q	81.5	77.6	2.2	Q	Q
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed										
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	129	117	7	Q	Q	107.0	96.8	6.1	Q	Q
1946 to 1959	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1960 to 1969	117	105	Q	Q	Q	137.6	122.5	Q	Q	Q
1970 to 1979	77	66	10	Q	Q	131.7	112.2	16.6	Q	Q
1980 to 1989	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1990 to 1999	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
2000 to 2003	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division										
Northeast	165	Q	15	Q	Q	120.8	Q	10.6	Q	Q
New England	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Middle Atlantic	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Midwest	225	210	9	Q	Q	136.5	127.5	5.7	Q	Q
East North Central	192	182	5	Q	Q	135.3	128.2	3.7	Q	Q
West North Central	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
South	182	166	14	Q	Q	102.8	94.0	7.9	Q	Q
South Atlantic	117	105	10	Q	Q	94.1	84.8	8.2	Q	Q
East South Central	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
West South Central	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
West	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mountain	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Pacific	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E11. District Heat Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total District Heat Consumption (trillion Btu)					District Heat Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
Climate Zone: 30-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	88	80	8	Q	(*)	106.3	96.7	9.4	Q	(*)
5,500-7,000 HDD	255	241	9	Q	Q	142.9	135.0	4.8	Q	Q
4,000-5,499 HDD	140	120	Q	Q	Q	103.5	88.9	12.0	Q	Q
Fewer than 4,000 HDD	101	90	10	Q	(*)	98.1	88.2	9.8	Q	(*)
2,000 CDD or More and --										
Fewer than 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Floors										
One	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Two	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Three	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Four to Nine	308	279	23	Q	Q	124.4	112.8	9.5	Q	Q
Ten or More	123	104	16	(*)	Q	90.3	75.9	11.8	0.1	Q
Number of Workers (main shift)										
Fewer than 5	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
5 to 9	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10 to 19	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
20 to 49	96	87	Q	Q	(*)	143.7	130.3	Q	Q	(*)
50 to 99	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
100 to 249	124	116	6	Q	Q	118.3	110.9	6.2	Q	Q
250 or More	232	201	23	Q	Q	105.8	91.8	10.6	Q	Q
Weekly Operating Hours										
Fewer than 40	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
40 to 48	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
49 to 60	176	173	2	Q	Q	110.4	109.0	1.3	Q	Q
61 to 84	73	66	Q	Q	Q	92.9	83.7	4.5	Q	Q
85 to 167	91	87	4	(*)	Q	115.5	110.4	Q	0.2	Q
Open Continuously	210	171	36	Q	Q	130.8	106.8	22.2	Q	Q
Ownership and Occupancy										
Nongovernment Owned.....	247	221	22	(*)	Q	114.9	102.7	10.1	0.1	2.0
Owner Occupied	185	172	11	Q	Q	129.9	121.4	7.5	Q	Q
Nonowner Occupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	387	358	24	Q	Q	117.4	108.5	7.4	Q	Q
Federal	Q	126	Q	Q	Q	Q	Q	Q	Q	Q
State	188	172	16	Q	Q	111.0	101.3	9.3	Q	Q
Local	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacancy Status										
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant.....	N	N	N	N	N	N	N	N	N	N
Partially Vacant	164	150	Q	Q	Q	110.4	101.2	Q	Q	Q
Not At All Vacant	461	419	36	Q	Q	120.2	109.3	9.3	Q	Q
Number of Establishments										
One	384	348	30	Q	Q	125.3	113.6	9.9	Q	Q
2 to 5	156	142	Q	Q	Q	119.6	109.1	Q	Q	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E11. District Heat Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total District Heat Consumption (trillion Btu)					District Heat Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
Predominant Exterior Wall Material										
Brick, Stone or Stucco	408	373	29	Q	Q	120.7	110.3	8.5	Q	Q
Concrete (Block or Poured)	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Siding or Shingles	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Metal Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material										
Built-Up	263	231	26	Q	Q	100.9	88.7	9.9	Q	Q
Shingles (Not Wood)	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Metal Surfacing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Synthetic or Rubber	171	153	16	Q	Q	127.6	114.4	11.7	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)										
Any Type of Renovation										
Since 1980	197	168	21	Q	Q	111.1	94.5	12.0	Q	Q
Addition or Annex	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	143	121	15	Q	Q	110.3	93.2	11.8	Q	Q
Wall or Roof Replacement	99	86	10	(*)	Q	110.3	95.8	11.0	Q	Q
Interior Wall										
Re-Configuration	124	101	16	Q	Q	113.6	92.7	14.8	Q	Q
HVAC Equipment Upgrade	128	105	18	Q	Q	93.0	76.1	12.8	Q	Q
Lighting Upgrade	157	133	17	Q	Q	110.9	93.8	12.3	Q	Q
Window Replacement	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Plumbing System Upgrade	103	87	13	(*)	Q	107.3	90.1	13.8	0.2	Q
Insulation Upgrade	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	229	215	13	Q	Q	122.0	114.7	6.9	Q	Q
Building Newer than 1980	208	196	12	Q	Q	115.9	109.0	6.6	Q	Q
Energy Sources (more than one may apply)										
Electricity	634	578	46	1	Q	116.4	106.3	8.4	Q	Q
Natural Gas	305	270	27	Q	Q	124.6	110.5	11.1	Q	Q
Fuel Oil	177	153	20	Q	Q	102.3	88.4	11.7	Q	Q
District Heat	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
District Chilled Water	309	285	24	Q	Q	133.9	123.4	10.2	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Source										
District Heat	633	578	45	1	Q	121.8	111.3	8.7	0.3	Q
District Heat Main	618	570	41	Q	Q	125.8	116.2	8.4	Q	1.0
District Heat Secondary	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excl District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table E11. District Heat Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total District Heat Consumption (trillion Btu)					District Heat Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
Primary Space-Heating Energy Source										
Electricity	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Fuel Oil.....	N	N	N	N	N	N	N	N	N	N
District Heat	618	570	41	Q	Q	125.8	116.2	8.4	Q	1.0
Propane.....	N	N	N	N	N	N	N	N	N	N
Other.....	N	N	N	N	N	N	N	N	N	N
Cooling Energy Source										
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excl District Heat	493	455	36	Q	(*)	117.2	108.4	8.6	Q	(*)
Buildings without Cooling	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water-Heating Energy Source										
District Heat	329	274	46	1	Q	106.5	88.6	14.9	0.4	2.6
Other Excluding District Heat	194	194	(*)	(*)	Q	125.9	125.8	(*)	(*)	Q
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Source										
District Heat	77	59	13	1	Q	130.3	100.6	21.4	2.2	Q
Other Excl District Heat	142	129	Q	(*)	Q	106.4	96.2	Q	(*)	Q
Buildings without Cooking	415	390	21	(*)	Q	118.0	111.0	6.1	(*)	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	634	578	46	1	Q	117.8	107.5	8.5	0.2	Q
Buildings with Cooling	535	484	41	1	Q	114.9	104.0	8.9	0.3	Q
Buildings with Water Heating	523	468	46	1	Q	113.0	101.0	9.9	0.3	Q
Buildings with Cooking	219	188	25	1	Q	113.7	97.5	12.8	0.7	Q
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	237	209	21	Q	Q	112.0	98.5	10.0	Q	Q
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	57	53	Q	Q	Q	90.5	83.3	6.9	Q	Q
100	575	524	41	Q	Q	121.9	111.1	8.8	Q	Q
Heating Equipment (more than one may apply)										
Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps ..	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Space Heaters	50	45	Q	Q	Q	82.5	74.8	Q	0.1	Q
District Heat	628	574	45	1	Q	121.6	111.1	8.7	0.3	Q
Boilers	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Packaged Heating Units	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment										
Centralized System	286	252	30	(*)	Q	107.1	94.3	11.3	Q	Q
Distributed System	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Combination of Centralized and Distributed System	170	153	Q	Q	Q	115.2	103.4	Q	Q	Q

Table E11. District Heat Consumption (Btu) and Energy Intensities by End Use for Non-Mall Buildings, 2003

	Total District Heat Consumption (trillion Btu)					District Heat Energy Intensity (thousand Btu/square foot)				
	Total	Space Heating	Water Heating	Cooking	Other	Total	Space Heating	Water Heating	Cooking	Other
All Buildings*	634	578	46	1	Q	116.4	106.3	8.4	0.2	Q
Energy-Related Space Functions										
Commercial Food										
Commercial Food Preparation....	219	188	25	1	Q	113.7	97.5	12.8	0.7	Q
Activities with Large										
Amounts of Hot Water	273	233	34	1	Q	120.8	103.1	15.0	0.5	Q
Separate Computer Area	374	332	34	Q	Q	114.5	101.6	10.4	Q	Q
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System.....	368	330	29	Q	Q	121.9	109.4	9.7	Q	Q
Economizer Cycle	334	297	28	Q	Q	109.6	97.4	9.3	Q	Q
HVAC Maintenance	612	558	45	1	Q	118.7	108.2	8.7	0.2	Q
Energy Management and										
Control System (EMCS)	320	288	25	Q	Q	115.0	103.4	9.0	Q	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)										
Heating	356	324	24	Q	Q	113.4	103.1	7.8	Q	Q
Cooling	390	357	25	Q	Q	115.4	105.7	7.3	Q	Q
Lighting	406	389	10	Q	Q	111.9	107.3	2.9	Q	Q
Office Equipment	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, there were no responding malls in the sample that used district heat.

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

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

N=No responding cases in sample that used district heat.

Notes: ● Due to rounding, data may not sum to totals. ● HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.