

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

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	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

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	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

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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

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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

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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	2.3	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	1.7	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	1.4	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	1.6	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	1.9	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	2.0	7.1
100,001 to 200,000	103.0	41.3	7.1	8.8	7.9	21.5	0.9	2.7	Q	3.4	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	2.7	8.1
Over 500,000	129.7	44.9	11.5	9.5	11.7	30.6	2.2	2.1	Q	3.9	11.9
Principal Building Activity											
Education	83.1	39.4	8.0	8.4	5.8	11.5	0.8	1.6	0.4	3.3	4.0
Food Sales	199.7	28.9	9.8	5.9	2.9	36.7	8.6	94.8	1.6	1.5	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	3.2	16.1
Inpatient	249.2	91.8	18.6	20.0	48.4	40.1	5.6	2.0	1.1	3.6	18.1
Outpatient	94.6	38.1	7.2	3.3	2.5	22.6	Q	3.5	1.3	2.6	13.2
Lodging	100.0	22.2	4.9	2.7	31.4	24.3	3.2	2.3	Q	1.2	7.0
Retail (Other Than Mall).....	73.9	24.8	5.9	3.7	1.1	25.7	0.6	5.0	0.6	0.9	5.6
Office	92.9	32.8	8.9	5.2	2.0	23.1	0.3	2.9	2.6	6.1	9.0
Public Assembly	93.9	49.7	9.6	15.9	1.0	7.0	0.8	2.2	Q	Q	6.5
Public Order and Safety	115.8	49.9	8.9	9.5	14.0	16.5	1.3	2.9	0.6	1.5	10.6
Religious Worship	43.5	26.2	2.9	1.4	0.8	4.4	0.8	1.7	0.1	0.2	4.9
Service	77.0	35.9	3.8	6.0	1.0	15.6	Q	2.1	0.3	0.8	11.4
Warehouse and Storage	45.2	19.3	1.3	2.0	0.6	13.1	Q	3.5	0.2	0.5	4.8
Other	164.4	79.4	10.5	6.1	2.1	34.1	Q	6.0	Q	2.9	18.9
Vacant	20.9	14.4	0.6	0.4	0.1	1.7	Q	Q	Q	0.0	3.1
Year Constructed											
Before 1920	80.2	47.8	1.8	2.9	4.4	9.1	4.4	4.5	0.5	0.9	3.9
1920 to 1945	90.3	45.9	3.7	4.3	6.2	12.9	2.9	3.7	0.4	1.2	9.0
1946 to 1959	80.3	39.4	4.3	4.8	6.3	12.4	1.8	3.6	0.6	1.5	5.5
1960 to 1969	90.9	41.5	5.5	6.1	7.9	14.0	1.5	4.9	0.8	2.3	6.4
1970 to 1979	95.0	33.0	7.4	6.9	8.3	20.4	2.4	5.4	1.2	2.5	7.4
1980 to 1989	100.1	30.5	9.2	6.4	8.4	22.9	2.5	6.4	1.5	3.5	8.9
1990 to 1999	88.8	25.6	8.4	7.1	5.7	19.9	2.9	6.9	1.4	2.8	8.1
2000 to 2003	79.7	19.2	8.2	5.7	6.3	21.0	3.2	6.8	0.7	1.6	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	2.4	7.6
New England	99.0	56.2	2.7	4.0	5.3	14.1	1.8	6.5	0.7	2.1	5.5
Middle Atlantic	98.3	47.0	4.0	5.5	6.9	16.5	2.9	3.9	1.0	2.4	8.2
Midwest	98.9	48.6	3.6	6.0	5.9	16.8	2.0	5.2	0.9	2.1	7.8
East North Central	108.1	55.4	3.6	6.7	6.2	18.0	2.1	5.1	1.0	2.3	7.7
West North Central	79.5	34.2	3.7	4.6	5.3	14.4	1.8	5.4	0.6	1.6	7.9
South	82.9	20.1	10.7	6.5	7.1	19.1	3.0	6.6	0.8	2.3	6.8
South Atlantic	86.8	20.3	10.7	6.9	7.0	21.1	2.9	7.1	0.9	2.9	6.9
East South Central	91.1	31.4	6.9	6.6	8.7	18.6	2.2	7.1	0.6	1.5	7.6
West South Central	73.4	14.9	12.3	5.9	6.4	16.3	3.5	5.5	0.6	1.8	6.2
West	80.6	23.5	6.2	5.4	8.6	17.7	2.5	4.7	1.7	2.5	7.8
Mountain	103.8	40.7	7.0	6.3	9.9	21.3	1.3	4.9	Q	2.3	8.6
Pacific	69.4	15.3	5.7	5.0	8.0	16.0	3.1	4.6	Q	2.6	7.4

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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	2.3	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	1.7	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	2.3	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	2.7	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	2.1	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	2.8	6.2
Number of Floors											
One	74.6	25.0	6.1	4.2	4.5	14.8	3.2	8.9	0.6	1.3	5.9
Two	80.6	31.7	5.6	6.0	5.0	15.6	2.0	4.3	1.1	2.0	7.4
Three	82.6	36.9	4.5	5.3	6.4	15.0	2.1	2.9	1.0	2.2	6.4
Four to Nine	132.5	56.6	9.4	9.8	12.8	23.8	2.3	2.5	1.2	4.0	9.9
Ten or More	124.6	38.6	10.6	7.6	14.9	30.7	2.3	1.5	Q	5.1	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	3.9	9.6
Number of Elevators											
One	89.0	41.4	5.9	7.4	4.5	16.3	0.8	2.5	0.9	2.7	6.6
Two to Five	114.3	43.2	8.5	8.8	11.4	23.1	1.7	2.1	1.8	4.2	9.5
Six or More	149.5	48.3	14.1	11.2	16.6	34.1	2.8	1.9	2.0	5.0	13.5
Any Escalators	120.0	22.7	14.9	12.7	Q	33.9	2.5	1.8	Q	4.8	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	0.3	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	1.1	5.1
20 to 49	95.6	38.1	6.6	6.3	7.0	17.4	3.2	6.1	Q	1.9	7.6
50 to 99	91.7	32.9	7.3	8.4	7.1	19.1	1.8	4.7	1.0	2.4	7.0
100 to 249	121.9	45.1	10.2	9.8	9.4	27.3	1.7	4.0	1.3	3.7	9.4
250 or More	139.0	44.6	12.5	10.5	12.4	32.9	2.0	2.3	2.1	6.6	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	0.3	3.6
40 to 48	66.5	31.3	6.1	3.6	1.6	11.4	0.6	2.8	0.9	2.2	6.1
49 to 60	75.0	33.6	5.4	4.5	2.3	14.5	1.3	3.2	1.0	2.2	7.1
61 to 84	89.4	34.1	6.4	6.5	4.2	17.8	3.4	6.2	0.9	2.3	7.5
85 to 167	125.4	39.5	7.8	10.9	7.1	23.5	7.8	16.8	0.7	3.1	8.1
Open Continuously	138.9	41.6	10.4	9.1	22.2	31.1	3.4	5.8	1.8	3.2	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	2.1	7.5
Owner Occupied	87.3	33.3	6.3	4.9	6.0	18.0	2.0	5.7	1.2	2.1	7.7
Nonowner Occupied	88.4	26.4	6.4	4.5	8.6	19.7	4.3	7.7	1.1	2.1	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	3.0	7.2
Federal	155.0	82.1	6.9	12.2	4.6	32.5	Q	1.6	0.8	2.8	10.6
State	134.8	71.3	7.1	14.0	8.1	16.2	0.8	2.5	0.8	5.3	8.8
Local	83.4	34.6	9.2	8.7	6.3	12.5	1.1	2.4	0.5	2.2	5.8
Vacancy Status											
Completely Vacant	17.2	12.8	Q	0.1	(*)	1.2	Q	Q	Q	Q	2.3
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	3.4	7.7
Not At All Vacant	93.9	34.8	6.8	6.3	7.8	18.0	3.0	6.5	1.0	2.1	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	2.3	7.4
Number of Establishments											
One	92.3	34.6	6.4	6.0	8.0	17.5	3.1	6.4	0.9	1.9	7.4
2 to 5	90.6	37.6	6.4	5.8	5.7	18.1	1.9	4.5	1.1	2.2	7.2
6 to 10	110.1	47.5	8.2	7.1	3.6	22.1	Q	2.4	1.4	8.2	8.1
11 to 20	77.6	25.9	8.2	6.3	2.9	19.1	Q	Q	1.0	3.3	7.7
More than 20	98.5	22.0	15.0	8.4	4.2	27.4	0.9	1.8	2.0	5.7	11.0
Currently Unoccupied	17.2	12.8	Q	0.1	(*)	1.2	Q	Q	Q	Q	2.3
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	2.2	7.4
Concrete (Block or Poured)	89.9	31.3	7.2	5.8	7.5	18.6	2.4	6.7	Q	1.7	7.7
Concrete Panels	101.7	33.3	8.0	7.1	5.5	28.3	1.5	3.3	1.6	4.3	8.8
Siding or Shingles	67.1	25.2	4.1	3.3	5.8	11.9	2.8	7.0	0.8	1.4	4.9
Metal Panels	58.5	19.0	3.5	4.4	1.5	15.2	Q	5.6	0.5	1.4	6.6
Window Glass	92.3	23.7	10.4	7.2	4.9	24.7	Q	2.0	1.9	6.2	10.0
Other	108.7	43.1	8.7	5.9	10.1	22.8	2.1	3.7	1.3	3.8	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	2.7	8.4
Shingles (Not Wood)	80.7	32.0	5.3	4.0	6.7	13.2	3.2	7.7	0.9	1.5	6.2
Metal Surfacing	52.7	17.6	4.1	4.0	1.9	12.6	1.5	3.9	0.4	1.1	5.7
Synthetic or Rubber	112.0	41.2	8.6	8.6	8.6	22.3	2.6	6.2	1.5	3.6	8.8
Slate or Tile	84.2	32.3	6.6	4.4	7.7	13.9	Q	6.8	0.8	1.7	5.4
Wooden Materials	77.0	26.3	6.3	4.4	9.8	16.0	Q	4.7	0.7	1.2	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	Q	5.5
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	2.4	7.6
Addition or Annex	111.9	48.3	6.5	8.4	12.0	18.5	2.5	4.7	0.6	2.1	8.4
Reduction In Floorspace	115.2	45.5	5.4	8.9	14.3	22.0	2.5	2.3	0.9	3.0	10.3
Cosmetic Improvements	100.4	42.4	6.0	6.4	8.7	17.6	2.9	5.3	0.9	2.5	7.5
Wall or Roof Replacement	96.3	42.3	5.9	6.6	8.3	17.3	1.9	3.4	0.8	2.7	7.0
Interior Wall											
HVAC Equipment	107.0	46.8	6.7	7.2	9.4	19.0	2.0	3.8	0.9	2.8	8.4
HVAC Equipment Upgrade	107.4	43.6	6.7	7.5	10.9	19.1	2.7	4.2	1.1	3.0	8.6
Lighting Upgrade	105.6	47.2	6.1	7.3	9.0	17.9	2.3	4.7	1.0	2.7	7.4
Window Replacement	96.5	45.4	5.1	5.9	8.6	15.7	2.0	4.0	0.7	2.5	6.5
Plumbing System Upgrade	104.7	46.8	5.9	7.0	9.7	18.1	2.7	3.5	0.7	2.6	7.7
Insulation Upgrade	94.8	41.6	5.7	7.5	6.9	16.1	2.7	3.8	0.8	2.7	7.1
Other Renovation	94.9	42.8	Q	4.3	Q	13.8	Q	3.4	0.3	1.0	7.6
No Renovations Since 1980	79.2	37.3	4.5	4.6	5.3	13.1	2.2	4.2	0.7	1.4	6.0
Building Newer than 1980	91.1	26.1	8.7	6.6	6.8	21.2	2.8	6.7	1.3	2.8	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	2.3	7.6
Natural Gas	103.3	39.8	6.9	6.8	9.2	19.4	3.7	5.5	1.0	2.5	8.6
Fuel Oil	116.1	43.3	8.5	8.0	12.9	23.7	2.2	2.8	1.6	3.4	9.8
District Heat	186.8	111.3	5.9	12.8	10.9	26.9	Q	2.2	0.8	5.4	9.0
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	7.2	9.1
Propane	82.6	28.5	5.4	5.7	5.6	19.9	1.3	7.2	0.7	1.3	7.1
Other	99.2	34.4	Q	10.0	7.8	21.6	1.3	4.6	1.8	2.7	8.2

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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	2.3	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	2.4	7.5
Natural Gas	99.6	38.7	6.6	6.6	8.1	19.1	3.0	5.5	1.0	2.3	8.6
Fuel Oil	98.6	50.9	4.8	5.6	9.3	13.4	2.3	2.9	0.5	1.7	7.2
District Heat	191.2	115.2	5.9	13.0	11.3	26.9	Q	2.1	0.9	5.4	8.9
Propane	49.9	8.1	4.5	4.5	4.9	12.1	0.9	7.5	Q	1.2	5.6
Other	72.6	19.0	Q	Q	3.3	20.1	Q	4.3	0.6	1.4	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	2.3	6.2
Natural Gas	99.5	39.0	6.6	6.6	8.0	18.8	3.0	5.4	1.0	2.3	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	5.6	8.8
Propane	36.6	0.9	3.8	4.4	0.5	9.3	Q	9.8	Q	Q	5.5
Other	50.6	7.5	2.7	4.7	Q	19.4	0.7	5.8	0.5	Q	6.9
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	2.3	7.7
Natural Gas	156.3	42.3	29.6	Q	16.1	25.9	2.4	3.1	0.8	2.9	18.4
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	7.2	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	2.4	7.1
Natural Gas	111.2	40.6	7.7	7.7	12.1	20.4	4.1	6.0	1.0	2.6	9.1
Fuel Oil	109.7	57.8	3.9	4.9	12.3	13.2	4.6	3.8	0.7	1.7	6.8
District Heat	182.3	94.9	8.3	13.9	16.9	28.4	Q	2.2	0.9	4.7	9.6
Propane	56.7	11.9	6.1	6.1	0.8	12.6	Q	10.2	Q	Q	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	2.8	8.5
Natural Gas	134.3	41.9	10.2	9.9	18.1	23.8	10.0	7.9	1.0	2.4	9.1
Propane	78.3	17.6	7.9	7.1	6.9	16.5	1.4	12.4	Q	Q	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	2.4	7.6
Buildings with Cooling	96.0	34.8	7.6	6.5	7.5	19.2	2.9	6.0	1.1	2.6	7.9
Buildings with Water Heating	97.4	35.9	7.4	6.5	7.9	19.1	2.9	6.0	1.1	2.6	8.0
Buildings with Cooking	122.0	39.0	9.8	9.1	14.4	21.9	7.5	8.3	1.0	2.5	8.5
Buildings with Manufacturing	81.1	24.5	3.1	5.4	2.3	20.5	Q	3.2	0.6	2.1	18.0
Buildings with Electricity Generation	132.1	43.1	10.8	10.1	13.9	28.6	1.9	3.3	2.2	4.4	13.7
Percent of Floorspace Heated											
Not Heated	24.2	(*)	4.2	1.6	1.8	6.2	Q	4.0	0.2	0.4	4.3
1 to 50	43.6	12.0	2.0	2.7	2.0	10.1	Q	5.6	Q	0.6	5.8
51 to 99	92.1	32.5	6.9	6.0	7.5	18.7	3.6	6.7	0.8	1.9	7.4
100	103.4	41.2	7.6	6.9	8.1	19.8	2.7	5.4	1.1	2.8	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	2.3	7.4
Percent of Floorspace Cooled											
Not Cooled	45.4	28.2	(*)	2.0	2.6	6.1	0.6	1.7	0.1	0.2	4.0
1 to 50	61.8	30.3	1.5	3.4	2.7	11.8	1.2	3.8	0.3	0.8	6.1
51 to 99	106.9	38.8	8.1	7.4	8.5	20.7	3.5	7.9	1.0	2.9	8.3
100	111.5	35.6	11.0	7.9	10.0	23.1	3.6	6.4	1.7	3.6	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	0.6	4.9
51 to 99	94.9	36.4	7.1	6.8	7.4	18.0	2.5	4.8	1.1	3.1	7.6
100	106.4	38.0	8.1	7.0	7.9	22.8	3.2	7.2	1.1	2.6	8.6
Building Never Open/ Electricity Not Used	14.4	10.3	0.4	0.1	0.1	1.1	Q	0.2	Q	Q	2.2
Percent Lit When Closed											
Zero	65.1	30.2	4.3	4.0	2.4	10.0	2.3	4.2	0.5	1.7	5.5
1 to 50	84.9	34.2	6.6	5.8	3.4	15.7	2.5	5.8	1.0	2.3	7.5
51 to 100	112.3	35.0	7.8	6.8	3.2	35.6	3.0	11.5	0.8	2.2	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	2.9	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	2.8	8.1
Packaged Heat Pumps	96.0	18.8	11.7	6.1	11.3	25.9	2.4	6.0	1.6	3.2	9.0
Split-System Heat Pumps	76.8	19.0	9.8	7.0	6.2	19.6	Q	4.3	0.8	1.8	6.9
Individual Room Heat Pumps ..	94.7	25.0	11.1	6.2	14.5	22.3	2.6	2.7	0.8	2.9	6.6
Furnaces	76.1	30.0	4.4	4.3	5.2	14.6	2.9	6.3	0.7	1.4	6.4
Individual Space Heaters	81.6	30.2	5.3	5.1	6.3	18.0	1.5	4.9	0.8	2.0	7.5
District Heat	190.8	115.1	5.8	12.8	11.2	26.9	Q	2.1	0.9	5.5	8.9
Boilers	109.9	44.4	7.3	8.2	11.1	19.9	2.5	2.9	1.2	2.7	9.8
Packaged Heating Units	95.9	28.4	9.1	6.6	7.9	21.3	3.6	7.4	1.4	2.6	7.7
Other	70.7	19.0	6.8	6.1	2.5	19.7	0.8	5.6	0.8	2.5	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	1.4	7.0
Heat Pumps	92.6	21.5	11.0	6.0	10.1	23.1	2.4	6.0	1.3	2.8	8.3
Packaged Heat Pumps	97.4	20.1	11.4	5.8	11.1	26.2	2.4	6.6	1.6	3.2	9.2
Split-System Heat Pumps	78.4	19.1	10.1	7.2	6.1	19.2	Q	5.0	0.8	1.9	7.1
Individual Room Heat Pumps ..	94.4	22.7	11.8	6.6	13.3	23.3	2.4	3.7	0.9	2.9	7.0
Individual Air Conditioners	86.0	37.8	5.5	5.0	9.5	15.6	1.5	3.5	0.5	1.4	5.7
District Chilled Water	188.7	107.9	5.6	17.2	12.0	23.9	Q	2.6	1.0	7.2	9.1
Central Chillers	131.6	41.4	13.0	12.0	12.7	29.1	1.9	2.3	2.0	4.3	12.7
Packaged Air Conditioning Units	95.5	33.1	7.9	6.0	7.3	19.9	3.5	6.8	1.0	2.4	7.7
Swamp Coolers	101.1	33.2	5.5	5.8	13.4	18.1	5.0	7.7	0.5	1.4	10.5
Other	115.1	39.8	10.3	8.4	13.4	23.0	1.7	Q	1.1	2.9	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	2.2	7.5
Cooling	92.8	35.4	6.6	5.7	8.4	17.3	2.8	5.2	1.1	2.6	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	2.3	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	2.3	7.8
Distributed System	72.4	27.2	6.7	4.7	2.9	15.5	2.1	4.5	0.8	2.0	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	4.2	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	2.7	7.9
Standard Fluorescent	94.6	35.7	7.1	6.3	7.3	18.5	2.7	5.8	1.1	2.5	7.8
Compact Fluorescent	116.4	41.3	9.1	8.6	11.2	23.6	3.3	5.0	1.5	3.2	9.4
High Intensity Discharge	103.7	39.4	7.4	8.2	7.6	22.9	1.8	4.0	1.1	2.9	8.5
Halogen	111.9	37.6	8.6	7.8	10.5	25.6	3.4	5.3	1.2	2.8	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	2.6	7.8
Commercial Refrigeration	124.6	39.9	9.9	8.8	12.6	24.3	5.9	10.6	1.0	2.6	8.9
Walk-In Units	136.6	41.6	10.9	9.8	14.8	26.6	7.4	12.3	1.1	2.8	9.3
Cases or Cabinets	132.3	42.3	10.7	9.1	13.3	25.6	6.5	11.7	1.1	2.6	9.4
Residential-Type Units	89.1	34.8	6.8	6.1	7.4	17.5	1.8	4.1	0.9	2.5	7.2
Vending Machines	105.3	37.5	8.2	7.8	9.2	22.2	1.9	5.2	1.3	3.1	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	2.7	7.8
With Flat Screen Monitors	112.3	40.6	9.2	8.5	8.9	23.2	2.3	4.2	1.7	4.1	9.6
Dedicated Servers	103.5	37.3	8.3	7.7	8.0	21.9	2.0	4.5	1.6	3.4	8.8
Laser Printers	91.2	34.8	6.9	6.0	7.4	17.2	2.4	5.5	1.2	2.3	7.5
Inkjet Printers	102.5	37.1	8.7	7.5	7.3	22.3	1.9	4.9	1.2	3.2	8.4
FAX Machines	97.2	36.0	7.5	6.7	7.5	19.8	2.7	5.3	1.2	2.7	7.9
Photocopiers	96.5	37.0	7.6	7.1	7.1	20.1	1.4	4.0	1.3	2.9	8.0
Number of Computers											
None	48.5	19.7	2.2	1.6	4.2	7.2	2.8	6.0	0.1	0.0	4.8
1 to 4	81.9	31.3	4.9	3.6	6.0	13.4	5.5	10.7	0.4	0.4	5.6
5 to 9	76.0	28.8	5.4	3.8	6.8	14.1	2.8	5.6	0.6	0.9	7.0
10 to 19	77.9	28.9	6.0	5.0	5.2	16.3	1.9	6.0	0.7	1.3	6.4
20 to 49	95.3	34.3	7.4	7.6	6.2	21.7	1.2	5.1	Q	2.2	7.9
50 to 99	95.4	38.8	7.2	7.1	8.0	20.1	1.5	2.1	1.1	2.7	6.8
100 to 249	106.7	43.7	8.8	9.2	7.9	21.2	1.0	2.4	1.0	3.7	7.8
250 or More	137.1	48.2	12.0	11.0	11.0	29.2	1.7	2.1	2.2	7.3	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	0.9	5.5
1 to 4	92.6	34.8	7.0	6.5	7.8	18.7	2.2	5.3	0.7	2.0	7.5
5 to 9	104.9	30.5	10.7	10.3	5.5	25.8	Q	2.9	1.6	4.4	10.9
10 to 19	142.7	60.0	10.8	11.7	8.7	27.5	1.0	3.9	1.6	7.6	10.0
20 to 49	118.9	36.4	13.3	9.9	9.2	27.3	1.3	2.2	2.4	5.5	11.1
50 or More	139.0	44.3	8.8	8.3	Q	33.6	Q	2.4	7.9	7.8	13.7
Number of Photocopiers											
None	73.1	26.6	4.2	3.1	6.6	11.6	5.4	9.0	0.2	0.7	5.8
One	73.0	29.3	5.0	4.3	4.6	14.5	1.6	6.0	0.6	1.1	6.3
2 to 4	88.5	34.6	6.8	6.9	6.6	17.9	1.1	3.9	1.3	2.2	7.0
5 to 9	110.9	44.5	8.5	9.4	7.3	22.0	1.5	2.6	1.4	5.3	8.4
10 or More	136.4	48.0	12.5	10.3	11.3	30.6	1.7	2.1	2.4	5.5	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	2.3	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	2.5	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	2.6	9.8
Separate Computer Area	107.7	39.2	9.2	8.6	8.8	22.9	1.6	3.2	1.7	3.8	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	4.3	10.9
Economizer Cycle	122.6	43.7	9.7	9.7	9.8	26.4	2.2	4.6	1.7	4.3	10.5
HVAC Maintenance	101.1	37.9	7.7	7.0	8.1	20.1	2.8	5.5	1.1	2.7	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	3.9	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	2.5	8.1
Tinted Window Glass	103.6	37.5	8.6	7.4	7.6	22.2	2.4	4.5	1.4	3.2	8.8
Reflective Window Glass	108.5	35.4	9.9	8.3	9.8	24.7	2.1	3.9	1.3	3.4	9.6
External Overhangs or Awnings	100.7	32.1	7.5	7.0	9.7	19.7	4.5	8.1	1.4	2.7	8.0
Skylights or Atriums	104.2	38.3	7.5	7.7	9.9	21.8	2.5	2.8	1.6	2.6	9.5
Daylighting Sensors	131.4	38.9	10.7	10.3	15.0	27.7	3.1	4.3	Q	4.2	13.1
Specular Reflectors	108.3	41.0	8.4	7.9	8.0	22.8	2.2	4.3	1.3	3.1	9.2
Electronic Ballasts	101.2	38.0	7.8	7.2	7.8	20.0	2.5	5.6	1.2	2.8	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	4.0	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	2.4	7.5
Cooling	89.0	33.1	7.0	6.4	6.4	17.5	2.8	4.6	1.0	2.6	7.6
Lighting	81.3	33.7	6.0	5.4	3.2	14.8	2.5	5.6	0.8	2.2	6.9
Office Equipment	75.5	34.4	5.8	5.0	3.0	13.3	1.7	4.2	0.7	1.3	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.