Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	C	n of Major I Consumptio (trillion Btu	n		otal Floorsp of Building lion square	s	Sun	rgy Intensit n of Major F and Btu/squ	uels
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Building Floorspace									
(Square Feet)									
1,001 to 5,000	191	290	190	2,146	2,805	1,838	89.1	103.5	103.5
5,001 to 10,000	131	231	154	1,972	2,917	1,696	66.2	79.2	91.0
10,001 to 25,000	235	351	191	3,213	4,976	3,346	73.1	70.5	57.0
25,001 to 50,000	172	328	173	2,449	4,128	2,091	70.4	79.4	82.5
50,001 to 100,000	150	380	228	2,060	4,018	2,979	73.0	94.6	76.7
100,001 to 200,000	214	438	281	2,124	3,947	2,993	100.7	111.1	94.0
200,001 to 500,000	219	354	152	2,155	3,427	1,593	101.7	103.2	95.3
Over 500,000	176	421	Q	1,566	2,986	1,357	112.1	141.2	Q
Principal Building Activity	0.40								
Education	248	385	187	3,191	4,359	2,324	77.6	88.4	80.6
Food Sales	Q	116	Q	277	587	391	Q	197.0	Q
Food Service	89	152	187	613	524	517	144.4	290.1	361.2
Health Care	130	361	103	730	1,671	762	177.7	215.8	135.7
Inpatient	Q	311	Q	456	1,218	231	Q	255.3	Q
Outpatient	Q	50	45	273	453	531	Q	109.6	84.4
Lodging	109	286	114	1,236	2,564	1,296	Q	111.7	88.1
Retail (Other Than Mall)	76	115	128	1,026	1,804	1,487	73.9	63.5	86.4
Office	267	641	226	2,852	6,792	2,563	93.6	94.4	88.0
Public Assembly	90	156	124	1,455	1,450	1,035	62.0	107.6	119.7
Public Order and Safety	Q	39	Q	Q	385	453	Q	101.3	Q
Religious Worship	71	53	39	1,522	1,328	904	46.6	39.9	43.3
Service	66	168	78	1,057	1,954	1,040	62.8	85.9	74.8
Warehouse and Storage	166	156	134	2,029	4,014	4,034	81.6	38.8	33.3
Other	Q	142	Q	372	693	673	Q	Q	Q
Vacant	Q	Q	Q	1,073	1,080	415	Q	Q	Q
Census Region and Division	505	5 40	100	0.004	4.004	0.007	07.4	440.4	05.0
Northeast	525	548	198	6,004	4,834	2,067	87.4	113.4	95.9
New England	101	135	Q	1,404	1,058	502	72.3	127.6	Q
Middle Atlantic	423	413	141	4,600	3,776	1,565	92.0	109.4	90.2
Midwest	550	748	393	5,679	7,415	3,986	96.8	100.8	98.5
East North Central	426	549	279	4,056	5,064	2,475	105.1	108.3	112.6
West North Central	123	199	114	1,623	2,351	1,511	76.0	84.6	75.4
South	257	969	721	3,659	11,032	8,798	70.4	87.9	82.0
South Atlantic	153	471	440	2,087	5,247	4,924	73.5	89.7	89.3
East South Central	41	182	86	583	1,703	1,108	69.9	107.1	77.7
West South Central	63	316	196	989	4,082	2,766	64.1	77.5	70.7
West	156	529	226	2,343	5,924	3,042	66.6	89.3	74.4
Mountain	51	255	76 450	524	2,217	934	97.0	114.9	81.2
Pacific	105	274	150	1,819	3,708	2,108	57.9	73.9	71.4
Climate Zone: 30-Year Average									
Under 2,000 CDD and	270	400	224	2 200	4 650	0.500	00.0	104.0	06.0
More than 7,000 HDD	279	488	224	3,390	4,652	2,580	82.2	104.8	86.6
5,500-7,000 HDD	583	827 517	350	6,069	7,626	3,640	96.1	108.5	96.2
4,000-5,499 HDD	380	517	237	4,078	4,911	2,515	93.3	105.2	94.1
Fewer than 4,000 HDD	183	608	422	3,095	7,506	5,137	59.0	81.0	82.1
2,000 CDD or More and Fewer than 4,000 HDD	63	354	307	1,052	4,511	4,021	60.0	78.4	76.3

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

Number of Floors		C	n of Major l Consumptio (trillion Btu	n		otal Floorsp of Building lion square	s	Sun	rgy Intensit n of Major F and Btu/squ	uels
Number of Floors										
One 377 863 698 4,849 11,814 9,318 77.7 73.0 74.9 Two 345 628 338 45,84 7,501 4,221 75.8 83.7 89.1 Three 250 241 128 3,470 2,465 1,565 72.1 77.7 73.0 74.9 Four to Nine 340 698 299 3,403 4,507 2,175 99.8 154.8 137.7 78.0 Tour to More 1177 365 Q 1,415 2,919 613 124.9 124.9 0.0 Elevators and Escalators 1180 608 6,588 11,645 6,384 97.0 128.0 109.0 Mumber of Bevators 609 141 200 341 202 2,392 2,360 71.6 104.9 85.1 118.8 149.5 109.0 128.0 128.0 128.0 128.0 109.0 128.0 128.0 128.0 128.0	All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Two		077	000	200	4.040	44.044	0.040		70.0	74.0
Three					,	,	,			
Four to Nine										
Ten or More					,	,				
Norm than one may apply							-			137.5 Q
Number of Elevators	(more than one may apply)	200	4 404	200	0.500	44.045	0.004	07.0	400.0	400.0
One 171 341 220 2,392 2,580 71,6 104,9 85,1 Two to Five 200 614 284 2,821 4,792 2,516 92.0 128.1 112.8 Six or More 208 536 193 1,375 3,605 1,288 151.1 148.8 148.5 Any Escalators Q 193 Q 0 1,598 Q Q 120.7 Q Number of Workers (main shift) Fewer than 5 362 295 160 5,370 6,047 4,075 67.5 48.8 39.3 5 to 9 127 220 121 1,766 2,693 1,706 72.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 77.1 81.6 75.2 82.8 90.2 12.1 17.66 2.693 1.0 12.2 <td>•</td> <td>639</td> <td>1,491</td> <td>696</td> <td>6,588</td> <td>11,645</td> <td>6,384</td> <td>97.0</td> <td>128.0</td> <td>109.0</td>	•	639	1,491	696	6,588	11,645	6,384	97.0	128.0	109.0
Two to Five		171	2/1	220	2 302	3 2/10	2 580	71.6	104.0	QE 1
Six or More 208 536 193 1,375 3,605 1,288 151.1 148.8 149.5					,	,	,			
Number of Workers (main shift) Fewer than 5										
Fewer than 5										Q
5 to 9 127 220 121 1,766 2,993 1,706 72.1 81.6 71.1 10 to 19 166 235 193 2,429 3,045 2,329 68.5 77.2 82.8 20 to 49 266 480 314 3,158 4,568 3,262 81.2 105.0 96.2 50 to 99 161 347 220 1,781 3,725 2,428 90.2 93.2 90.6 100 to 249 147 459 232 1,284 3,779 1,808 114.2 121.6 128.1 250 or More 268 758 299 1,896 5,347 2,285 141.4 141.7 130.8 Weekly Operating Hours Fewer than 40 88 94 46 2,541 2,798 1,525 34.5 33.7 30.0 40 to 48 253 363 157 3,627 5,079 2,917 69.8 71.5 53.8 49 to 60		262	205	160	F 270	6.047	4.075	67.5	40.0	20.2
10 to 19							-			
20 to 49							,			
50 to 99 161 347 220 1,781 3,725 2,428 90.2 93.2 90.6 100 to 249 147 459 232 1,284 3,779 1,808 114.2 121.6 128.1 250 or More 268 758 299 1,896 5,347 2,285 141.4 141.7 130.8 Weekly Operating Hours Fewer than 40 88 94 46 2,541 2,798 1,525 34.5 33.7 30.0 40 to 48 253 363 157 3,627 5,079 2,917 69.8 71.5 53.8 61 to 84 258 414 252 2,728 4,615 2,991 94.6 89.6 84.3 85 to 167 152 379 359 1,353 2,859 2,880 112.5 132.5 152.5 124.5 122.7 Open Contlinuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 <t< td=""><td></td><td></td><td></td><td></td><td>,</td><td>,</td><td></td><td></td><td></td><td></td></t<>					,	,				
100 to 249										
Weekly Operating Hours										
Fewer than 40 88 94 46 2,541 2,798 1,525 34.5 33.7 30.0 40 to 48 253 363 157 3,627 5,079 2,917 69.8 71.5 53.8 49 to 60 385 536 259 4,564 7,382 3,777 84.4 72.5 68.5 61 to 84 258 414 252 2,728 4,615 2,991 94.6 89.6 84.3 85 to 167 152 379 359 1,353 2,859 2,880 112.5 132.5 124.5 Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 122.7 Commership and Occupancy Nongoverment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 8										130.8
Fewer than 40 88 94 46 2,541 2,798 1,525 34.5 33.7 30.0 40 to 48 253 363 157 3,627 5,079 2,917 69.8 71.5 53.8 49 to 60 385 536 259 4,564 7,382 3,777 84.4 72.5 68.5 61 to 84 258 414 252 2,728 4,615 2,991 94.6 89.6 84.3 85 to 167 152 379 359 1,353 2,859 2,880 112.5 132.5 124.5 Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 122.7 Commership and Occupancy Nongoverment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 8	Weekly Operating Hours									
40 to 48	,	88	94	46	2 541	2 798	1 525	34.5	33.7	30.0
49 to 60 385 536 259 4,564 7,382 3,777 84.4 72.5 68.5 61 to 84 258 414 252 2,728 4,615 2,991 94.6 89.6 84.3 85 to 167 152 379 359 1,353 2,889 2,880 112.5 132.5 124.5 Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 125.5 122.7 Commership and Occupancy Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 85.7 Nonowner Occupied 423 1,076 616 5,206 11,103 7,604 81.2 96.9 81.0 Unoccupied Q Q Q 66.814 3,856 102.1 108.5 103.3					•	•				
61 to 84 258 414 252 2,728 4,615 2,991 94.6 89.6 84.3 85 to 167 152 379 359 1,353 2,859 2,880 112.5 132.5 124.5 Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 122.7 Owner Ship and Occupancy Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 85.7 Nonowner Occupied 423 1,076 616 5,206 11,103 7,604 81.2 96.9 81.0 Unoccupied Q Q Q 673 865 Q					,	,	-			
85 to 167 152 379 359 1,353 2,859 2,880 112.5 132.5 124.5 Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 122.7 Owner Ship and Occupancy Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 85.7 Nonowner Occupied 423 1,076 616 5,206 11,103 7,604 81.2 96.9 81.0 Unoccupied Q Q Q 673 865 Q Q Q Q Government Owned 479 740 398 4,692 6,814 3,856 102.1 108.5 103.3 Federal 142 109 Q 843 737 Q 168.6 147.6 Q							,			
Open Continuously 352 1,008 467 2,872 6,473 3,803 122.5 155.8 122.7 Ownership and Occupancy Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2 Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 85.7 Nonowner Occupied 423 1,076 616 5,206 11,103 7,604 81.2 96.9 81.0 Unoccupied Q Q Q 673 865 Q Q Q Q Government Owned 479 740 398 4,692 6,814 3,856 102.1 108.5 103.3 Federal 142 109 Q 843 737 Q 168.6 147.6 Q State 86 304 123 838 2,122 848 103.1 143.1 145.4 Local										
Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2										122.7
Nongovernment Owned 1,009 2,054 1,140 12,993 22,391 14,037 77.6 91.7 81.2	Ownership and Occupancy									
Owner Occupied 579 962 519 7,114 10,422 6,055 81.4 92.3 85.7 Nonowner Occupied 423 1,076 616 5,206 11,103 7,604 81.2 96.9 81.0 Unoccupied Q		1,009	2,054	1,140	12,993	22,391	14,037	77.6	91.7	81.2
Nonowner Occupied										85.7
Unoccupied Q Q Q Q Government Owned Q <td></td> <td>423</td> <td>1.076</td> <td>616</td> <td></td> <td></td> <td></td> <td>81.2</td> <td>96.9</td> <td>81.0</td>		423	1.076	616				81.2	96.9	81.0
Government Owned 479 740 398 4,692 6,814 3,856 102.1 108.5 103.3 Federal 142 109 Q 843 737 Q 168.6 147.6 Q State 86 304 123 838 2,122 848 103.1 143.1 145.4 Local 251 327 223 3,011 3,955 2,632 83.3 82.7 84.6 Vacancy Status Completely Vacant Q	•									Q
Federal 142 109 Q 843 737 Q 168.6 147.6 Q State 86 304 123 838 2,122 848 103.1 143.1 145.4 Local 251 327 223 3,011 3,955 2,632 83.3 82.7 84.6 Vacancy Status Completely Vacant Q	Government Owned									103.3
State 86 304 123 838 2,122 848 103.1 143.1 145.4 Local 251 327 223 3,011 3,955 2,632 83.3 82.7 84.6 Vacancy Status Completely Vacant Q </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Q</td>										Q
Local 251 327 223 3,011 3,955 2,632 83.3 82.7 84.6 Vacancy Status Completely Vacant Q Q Q Q 905 879 Q										
Completely Vacant Q Q Q Q 905 879 Q										84.6
Completely Vacant Q Q Q Q 905 879 Q	Vacancy Status									
Partially Vacant 319 538 229 3,680 5,693 3,009 86.7 94.4 76.2 Not At All Vacant 1,146 2,231 1,303 12,933 22,432 14,469 88.6 99.5 90.1 Number of Establishments One 1,095 1,929 1,143 12,247 19,473 13,424 89.4 99.0 85.2 2 to 5 240 508 245 2,930 5,170 2,860 81.9 98.2 85.6 6 to 10 39 102 75 467 989 501 82.6 103.1 149.3 11 to 20 Q 93 Q 529 974 449 Q 95.3 Q More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q	Completely Vacant	Q	Q	Q	905	879	Q	Q	Q	Q
Partially Vacant 319 538 229 3,680 5,693 3,009 86.7 94.4 76.2 Not At All Vacant 1,146 2,231 1,303 12,933 22,432 14,469 88.6 99.5 90.1 Number of Establishments One 1,095 1,929 1,143 12,247 19,473 13,424 89.4 99.0 85.2 2 to 5 240 508 245 2,930 5,170 2,860 81.9 98.2 85.6 6 to 10 39 102 75 467 989 501 82.6 103.1 149.3 11 to 20 Q 93 Q 529 974 449 Q 95.3 Q More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q	Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Number of Establishments One 1,095 1,929 1,143 12,247 19,473 13,424 89.4 99.0 85.2 2 to 5 240 508 245 2,930 5,170 2,860 81.9 98.2 85.6 6 to 10 39 102 75 467 989 501 82.6 103.1 149.3 11 to 20 Q 93 Q 529 974 449 Q 95.3 Q More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q	Partially Vacant									76.2
One 1,095 1,929 1,143 12,247 19,473 13,424 89.4 99.0 85.2 2 to 5 240 508 245 2,930 5,170 2,860 81.9 98.2 85.6 6 to 10 39 102 75 467 989 501 82.6 103.1 149.3 11 to 20 Q 93 Q 529 974 449 Q 95.3 Q More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q	NOT AL All Vacant	1,140	2,231	1,303	12,933	22,432	14,469	00.0	99.5	90.1
2 to 5 240 508 245 2,930 5,170 2,860 81.9 98.2 85.6 6 to 10 39 102 75 467 989 501 82.6 103.1 149.3 11 to 20 Q 93 Q 529 974 449 Q 95.3 Q More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q	_	1 095	1 929	1 143	12 247	19 473	13 424	89 <i>4</i>	99 N	85.2
6 to 10							-			
11 to 20										
More than 20 Q 145 Q 607 1,720 Q Q 84.5 Q								_		_
							_			_
	Currently Unoccupied	Q	143 Q	Q	905	879	Q	Q	04.5 Q	Q

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	C	n of Major I Consumptio (trillion Btu	n		otal Floorsp of Building lion square	s	Sur	ergy Intensit n of Major F and Btu/squ	uels
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Predominant Exterior Wall Material									
	1 111	1 272	702	12.022	12.061	6 024	96.0	105.0	100.0
Brick, Stone or Stucco	1,111	1,372	703	12,922	13,061	6,834	86.0	105.0	102.8
Concrete (Block or Poured)	244	500	230	2,696	5,446	2,690	90.4	91.8	85.5
Concrete Panels	Q 72	419	233	166	3,595	2,798	Q 60.4		83.4
Siding or Shingles	72	105	100	1,186	1,526	1,407	60.4	69.0	70.8
Metal Panels	Q	236	192	524	4,016	3,372	Q		56.8
Window Glass	Q	60	Q	Q	624	Q	Q		Q
Other No One Major Type	Q Q	Q Q	Q Q	Q Q	730 Q	Q Q	Q Q	Q Q	Q Q
	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material									
Built-Up	578	1,119	386	6,646	10,567	3,957	86.9	105.9	97.6
Shingles (Not Wood)	265	351	207	3,347	4,170	2,678	79.1	84.2	77.1
Metal Surfacing	51	254	325	1,072	4,964	5,908	47.8	51.2	54.9
Synthetic or Rubber	308	822	519	3,530	6,959	4,240	87.3	118.1	122.3
Slate or Tile	91	58	58	1,185	705	572	76.8	82.3	101.9
Wooden Materials	Q	40	Q	314	464	Q	Q		Q
Concrete	Q	Q	Q	Q	666	Q	Q	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	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	830	937	N	9,146	8,698	N	90.7	107.7	N
Addition or Annex	290	443	N	3,069	3,482	N	94.3	127.3	N
Reduction In Floorspace	Q	Q	N	501	511	N	Q		N
Cosmetic Improvements	606	712	N	6,751	6,368	N	89.7	111.8	N
Wall or Roof Replacement	343	434	N	4,168	3,903	N	82.3	111.2	N
Interior Wall									
Re-Configuration	378	534	N	4,191	4,327	N	90.1	123.3	N
HVAC Equipment Upgrade	510	646	N	5,436	5,332	N	93.9	121.2	N
Lighting Upgrade	489	596	N	5,483	4,792	N	89.2	124.4	N
Window Replacement	344	269	N	4,090	2,264	N	84.2	118.6	N
Plumbing System Upgrade	368	380	N	4,013	3,130	N	91.8	121.3	N
Insulation Upgrade	173	207	N	2,212	1,803	N	78.4	115.0	N
Other Renovation	Q	Q	N	451	Q	N	Q	Q	N
No Renovations Since 1980	658	823	N	8,539	10,175	N	77.1	80.9	N
Building Newer than 1980	N	1,034	1,539	N	10,332	17,893	N	100.1	86.0
Energy Sources (more than one may apply)									
Electricity	1,488	2,794	1,538	17,163	28,766	17,378	86.7	97.1	88.5
	1,466	2,794	1,235	12,097	19,763		89.4	110.1	00.5 106.4
Natural Gas					6,951	11,608	96.4	130.7	115.3
	481 354	908	370	4,995		3,211			_
District Chilled Water	354	490	Q	2,206	2,330	908	160.6	210.4	Q
District Chilled Water	Q 200	286	Q 143	510	1,433	910	Q 103.2	199.4	Q 66.0
Propane	209	233	143	2,025	2,890	2,161	103.2	80.5	66.0
Other	21	84	Q	331	806	263	64.1	104.7	Q

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				otal Floorsp of Building lion square	s	Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Space-Heating Energy Sources (more than one may apply)									
Electricity	427	1,222	724	5,769	13,818	9,013	74.1	88.4	80.3
Natural Gas	881	1,793	1,007	10,050	17,081	9,828	87.7	105.0	102.5
Fuel Oil	293	225	73	3,466	1,895	627	84.4	118.8	116.6
District Heat	349	475	Q	2,147	2,171	880	162.4	218.7	Q
Other	55 Q	60 30	45 Q	972 203	1,238 465	993 Q	56.3 Q	48.2 64.5	45.8 Q
Primary Space-Heating									
Energy Source									
Electricity	112	587	390	1,886	8,416	5,694	59.2	69.7	68.6
Natural Gas	830	1,581	869	9,431	15,149	8,390	88.1	104.3	103.6
Fuel Oil	179	92	Q	2,583	958	Q	69.4	96.4	Q
District Heat	326	458	Q	2,001	2,044	862	163.0	224.1	Q
Propane	13	22	37	450	777	729	28.4	28.0	50.7
Other	Q	Q	Q	Q	198	Q	Q	Q	Q
Cooling Energy Sources									
(more than one may apply)									
Electricity	1,128	2,530	1,363	13,263	25,843	15,214	85.0	97.9	89.6
Natural Gas	Q	Q	Q	Q	419	Q	Q	Q	Q
District Chilled Water	Q	286	Q	510	1,433	910	Q	199.4	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	431	1,105	609	6,039	13,305	8,147	71.4	83.1	74.7
Natural Gas	765	1,507	934	8,044	13,116	7,661	95.0	114.9	122.0
Fuel Oil	92	92	Q	1.047	668	Q	Q	138.5	Q
District Heat	167	331	Q	1,127	1,622	340	148.1	203.9	Q
Propane	Q	29	Q	346	651	426	Q	44.5	Q
Cooking Energy Sources (more than one may apply)									
Electricity	333	834	412	3,320	6,449	3,392	100.4	129.3	121.5
Natural Gas	524	961	588	4,847	6,307	4,284	108.1	152.4	137.4
Propane	Q	50	Q	450	678	332	Q	74.0	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	1,464	2,747	1,495	16,437	27,541	16,049	89.0	99.7	93.1
Buildings with Cooling	1,229	2,719	1,517	13,855	26,933	16,152	88.7	100.9	93.9
Buildings with Water Heating		2,708	1,500	14,569	26,409	15,499	88.6	102.5	96.8
Buildings with Cooking	694	1,289	729	6,760	9,776	5,701	102.7	131.9	127.9
Buildings with Manufacturing		115	72	928	1,480	730	72.7	77.9	98.0
	07	113	12	320	1,400	730	12.1	11.9	90.0
Buildings with Electricity Generation	315	975	403	2,294	6,955	3,572	137.3	140.2	112.9
Percent of Floorspace Heated									
Not Heated	24	47	44	1,248	1,664	1,844	19.6	28.1	23.7
1 to 50	75	104	120	1,960	2,608	2,281	38.2	39.9	52.4
51 to 99	222	332	192	2,611	3,476	2,020	85.0	95.5	95.2
100									100.7
100	1,167	2,311	1,183	11,866	21,458	11,748	98.3	107.7	100.7

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				tal Floorsp of Building lion square	s	Sur	ergy Intensit n of Major F and Btu/squ	uels
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Percent of Floorspace Cooled									
Not Cooled	259	75	22	3,830	2,272	1,741	67.6	33.1	12.5
1 to 50	376	432	218	5,393	7,014	4,191	69.8	61.5	52.0
51 to 99	348 505	693 1,594	372 927	3,663 4,799	6,171 13,748	3,377 8,584	94.9 105.2	112.3 115.9	110.2 108.0
100	303	1,394	921	4,799	13,740	0,504	105.2	113.9	100.0
Percent Lit When Open	0	0	0	0	0	0	0	0	0
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	227	191	122	3,977	3,766	2,461	57.1	50.6	49.7
51 to 99	433	888	415	4,889	9,002	4,398	88.5	98.7	94.3
100Building Never Open/	804	1,692	993	7,611	15,221	9,957	105.6	111.2	99.8
Electricity Not Used	Q	Q	Q	1,155	1,172	883	Q	Q	Q
Liectricity Not Osed	Q	Q	Q	1,133	1,172	003	Q	Q	Q
Percent Lit When Closed									
Zero	400	431	302	5,199	7,017	5,169	76.9	61.4	58.4
1 to 50	716	1,253	657	8,854	14,432	7,662	80.9	86.8	85.7
51 to 100	Q	101	113	238	961	894	Q	105.4	126.7
Building Never Closed/	352	1,008	467	3,394	6,795	4,168	103.7	148.4	112.0
Electricity Not Used	332	1,006	407	3,394	0,795	4,100	103.7	140.4	112.0
Heating Equipment (more									
than one may apply)									
Heat Pumps	136	422	247	1,617	4,223	2,973	83.9	99.9	83.1
Packaged Heat Pumps	78	307	138	796	3,059	1,587	98.5	100.3	86.7
Split-System Heat Pumps	23	104	71	364	1,214	1,003	63.6	85.7	70.8
Individual Room Heat Pumps	62	113	80	753	1,050	888	82.3	107.6	89.8
Furnaces	423	655	415	5,910	8,376	5,329	71.5	78.2	77.9
Individual Space Heaters	246	506	272	3,650	5,661	3,233	67.3	89.3	84.2
District Heat	349 734	467 1,100	Q 410	2,147 7,751	2,139 9,099	880 3,573	162.4 94.7	218.1 120.9	Q 114.8
Boilers Packaged Heating Units	243	869	617	2,791	9,099	5,978	94.7 87.2	93.9	103.1
Other	243 Q	128	74	386	1,662	1,215	07.2 Q	77.2	61.0
Cooling Equipment (more					·				
than one may apply) Residential-Type Central									
Air Conditioners	301	389	234	3,470	4,779	2,786	86.6	81.4	84.1
Heat Pumps	150	418	269	1,699	4,779	3,102	88.0	98.7	86.8
Packaged Heat Pumps	90	301	138	860	2,997	1,569	104.4	100.3	88.1
Split-System Heat Pumps	29	103	73	419	1,205	981	68.5	85.2	74.3
Individual Room Heat Pumps	59	120	99	716	1,183	1,041	82.4	101.3	94.9
Individual Air Conditioners	448	456	177	5,406	5,295	1,858	82.8	86.0	95.1
District Chilled Water	Q	286	Q	510	1,433	910	Q	199.4	Q
Central Chillers	299	922	311	2,346	6,900	2,390	127.3	133.6	130.1
Packaged Air Conditioning				•	•	•			
Units	633	1,376	854	7,068	13,851	9,050	89.5	99.3	94.3
Swamp Coolers	Q	115	Q	221	1,072	269	Q	107.5	Q
Other	Q	Q	Q	416	528	287	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	429	938	N	6,052	10,351	N	70.9	90.7	N
Cooling	633	1,316	N	7,686	13,309	N	82.3	98.9	N

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Water Heating Equipment									
Centralized System	848	1,686	899	8,889	16,543	9,240	95.4	101.9	97.3
Distributed System	195	374	266	3,221	4,871	3,448	60.6	76.9	77.1
Combination of Centralized and Distributed System	248	648	336	2,459	4,996	2,812	100.7	129.6	119.4
Lighting Equipment Types (more than one may apply)									
Incandescent	965	1,997	955	11,094	18,083	9,351	87.0	110.4	102.1
Standard Fluorescent	1,415	2,735	1,493	15,996	27,530	16,161	88.5	99.4	92.4
Compact Fluorescent	687	1,688	833	6,587	13,504	7,480	104.2	125.0	111.4
High Intensity Discharge	498	975	668	4,992	9,231	6,420	99.8	105.7	104.0
Halogen	427	994	561	4,079	8,102	5,522	104.6	122.6	101.7
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigeration Equipment									
(more than one may apply) ^a	4 000	0.507	4 450	40.070	04.405	44.000	00.0	404.0	00.4
Any Refrigeration	1,230	2,527	1,456	13,973	24,165	14,836	88.0	104.6	98.1
Commercial Refrigeration	772	1,648	916	7,421	12,240	7,107	104.0	134.6	128.9
Walk-In Units	566	1,421	780	5,242	9,625	5,387	107.9	147.6	144.7
Cases or Cabinets	614	1,379	710	5,492	9,628	5,304	111.8	143.2	133.8
Residential-Type Units	912	1,666	888	11,110	17,563	10,211	82.1	94.9	87.0
Vending Machines No Refrigeration	775 258	1,914 266	1,032 83	7,833 3,712	17,126 5,040	10,375 3,057	98.9 69.4	111.8 52.8	99.5 27.2
Office Equipment (more									
than one may apply)									
Computers	1,256	2,653	1,467	14,244	25,894	15,490	88.2	102.5	94.7
With Flat Screen Monitors	630	1,568	768	6,001	13,348	7,068	104.9	117.5	108.7
Dedicated Servers	771	1,959	1,031	8,136	17,936	10,265	94.7	109.2	100.4
Laser Printers	766	1,460	783	9,240	15,256	8,516	82.9	95.7	91.9
Inkjet Printers	675	1,675	953	6,987	15,573	9,650	96.5	107.5	98.8
FAX Machines	1,169	2,519	1,403	13,208	24,496	14,669	88.5	102.8	95.7
Photocopiers	1,037	2,248	1,180	11,473	21,832	12,952	90.4	103.0	91.1
Number of Computers									
None	232	141	72	3,441	3,311	2,403	67.3	42.5	30.0
1 to 4	306	392	318	4,022	5,011	3,362	76.0	78.3	94.4
5 to 9	139	237	170	2,124	2,820	2,236	65.7	83.9	75.9
10 to 19	103	253	159	1,268	3,254	2,088	81.1	77.8	76.2
20 to 49	156	332	220	1,808	3,178	2,428	86.0	104.4	90.4
50 to 99	135	276	102	1,607	2,523	1,246	83.8	109.4	81.8
100 to 249 250 or More	149 269	362 801	202 296	1,507 1,909	3,277 5,832	1,907 2,222	99.2 140.7	110.5 137.4	106.0 133.4
	200	331	200	.,000	5,552	-,		107.4	100.4
Number of Dedicated Servers None	717	835	508	9,549	11,269	7,628	75.1	74.1	66.6
1 to 4	470	1,138	625	5,444	11,560	7,112	86.4	98.5	87.9
5 to 9	98	179	129	1,078	1,607	1,180	90.8	111.2	109.2
10 to 19	104	221	107	795	1,468	764	130.8	150.8	139.6
20 to 49	Q	221	Q	239	1,921	423	Q	114.9	Q
50 or More	Q	200	118	581	1,380	787	Q	144.7	149.8

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				otal Floorsp of Building lion square	s	Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0
Number of Photocopiers									
None	451	546	358	6,212	7,374	4,941	72.6	74.0	72.5
One	325	451	354	4,324	6,116	5,035	75.1	73.7	70.3
2 to 4	283	696	355	3,669	7,155	4,258	77.3	97.2	83.4
5 to 9	114	297	201	1,256	2,754	1,505	90.5	107.9	133.6
10 or More	315	804	270	2,224	5,806	2,154	141.7	138.5	125.3
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation Activities with Large	693	1,289	729	6,748	9,774	5,701	102.6	131.9	127.9
Amounts of Hot Water	533	1,271	661	4,912	9,140	5,430	108.6	139.1	121.8
Separate Computer Area	630	1,561	703	6,222	13,495	7,156	101.3	115.7	98.3
HVAC Conservation Features									
(more than one may apply)									
Variable Air-Volume System	407	1,297	676	3,465	9,798	6,335	117.4	132.4	106.7
Economizer Cycle	424	1,461	703	3,618	11,196	6,294	117.2	130.5	111.7
HVAC Maintenance	1,242	2,501	1,427	13,084	23,507	14,572	94.9	106.4	97.9
Energy Management and									
Control System (EMCS)	326	985	471	2,975	8,078	4,577	109.6	122.0	102.8
Window and Interior Lighting Features (more than one									
may apply)									
Multipaned Windows	850	1,876	1,203	9,646	16,720	12,544	88.1	112.2	95.9
Tinted Window Glass	567	1,669	862	5,566	15,091	9,231	101.9	110.6	93.4
Reflective Window Glass	161	479	286	1,579	4,009	2,956	102.0	119.6	96.8
External Overhangs	101	475	200	1,575	4,000	2,550	102.0	115.0	30.0
or Awnings	344	902	491	4,147	8,148	4,947	82.9	110.7	99.1
Skylights or Atriums	245	686	376	2,666	6,130	3,750	91.9	111.8	100.3
Daylighting Sensors	49	197	130	448	1,407	1,014	110.1	140.3	128.4
Specular Reflectors	627	1,410	792	6,340	12,258	7,519	98.9	115.0	105.3
Electronic Ballasts	1,143	2,313	1,290	11,938	21,721	13,223	95.7	106.5	97.6
Energy Management and	1,140	2,010	1,200	11,000	21,721	10,220	00.7	100.0	07.0
Control System (EMCS)									
For Lighting	59	306	174	565	2,606	1,610	103.8	117.5	107.9
Equipment Usage Reduced									
When Building Not In Full Use									
(more than one may apply) ^a	007	4 000	007	44 574	20.077	14.070	04.0	04.4	07.4
Heating	937	1,836	967	11,574	20,077	11,070	81.0	91.4	87.4
Cooling	911	1,874	1,059	11,103	20,157	11,945	82.1	93.0	88.6
Lighting	1,096	1,701	1,021	13,346	20,951	12,690	82.2	81.2	80.4
Office Equipment	470	598	398	6,195	8,140	5,062	75.8	73.4	78.6

Table C12. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels for Non-Mall Buildings, 2003

	Sum of Major Fuel Consumption (trillion Btu)				otal Floorsp of Building lion square	s	Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003	1959 or Before	1960 to 1989	1990 to 2003
All Buildings*	1,488	2,794	1,539	17,685	29,205	17,893	84.1	95.7	86.0

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.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals. Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

^{*} Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 6.6 percent of total consumption.

^a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample.