

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

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

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	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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	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.