

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Building floorspace (square feet)									
1,001 to 5,000	260	89.9	70.6	17.6	46.4	100.0	5.9	2.0	22.6
5,001 to 10,000	526	72.6	70.0	18.3	40.1	74.3	11.6	1.6	22.0
10,001 to 25,000	992	62.1	61.8	18.7	43.8	81.5	22.5	1.4	22.7
25,001 to 50,000	2,478	69.0	72.6	24.6	48.8	88.8	52.1	1.5	21.0
50,001 to 100,000	5,359	76.7	86.5	33.7	58.2	93.4	113.1	1.6	21.1
100,001 to 200,000	11,497	83.4	91.5	39.0	66.2	101.1	243.4	1.8	21.2
200,001 to 500,000	27,198	95.7	99.1	47.4	77.1	114.8	553.4	2.0	20.4
Over 500,000	95,959	108.4	83.4	42.9	71.2	124.3	1,996.3	2.3	20.8
Principal building activity									
Education	2,166	68.8	77.3	31.1	50.8	81.1	43.3	1.4	20.0
Food sales	1,483	209.5	223.6	128.1	222.8	321.6	34.9	4.9	23.5
Food service	1,355	282.7	149.9	94.4	241.1	449.0	26.2	5.5	19.4
Health care	4,578	172.7	94.2	42.4	63.2	90.9	83.4	3.2	18.2
Inpatient	57,281	231.1	128.2	163.8	205.7	272.6	978.6	4.0	17.1
Outpatient	1,147	94.8	50.7	33.5	61.7	82.1	25.1	2.1	21.9
Lodging	3,574	96.9	184.1	48.1	69.1	119.1	69.6	1.9	19.5
Mercantile	1,673	88.9	110.5	33.4	63.6	107.6	37.7	2.0	22.5
Retail (other than mall)	830	66.9	90.4	25.6	52.2	88.3	20.5	1.7	24.7
Enclosed and strip malls	3,924	109.3	126.4	59.0	100.8	177.3	83.6	2.3	21.3
Office	1,226	77.8	36.8	32.6	52.7	80.2	30.4	1.9	24.8
Public assembly	1,363	86.3	154.4	22.2	49.3	82.5	29.0	1.8	21.3
Public order and safety	1,583	92.2	71.6	32.9	62.1	107.7	33.0	1.9	20.8
Religious worship	421	38.0	89.3	12.5	25.1	49.8	8.1	0.7	19.3
Service	440	58.7	67.5	18.5	42.2	83.7	9.1	1.2	20.7
Warehouse and storage	539	32.8	67.4	2.5	13.8	35.6	12.2	0.7	22.6
Other	2,293	142.9	177.6	16.5	44.1	126.5	47.8	3.0	20.8
Vacant	140	12.7	176.0	0.0	0.0	6.4	3.3	0.3	23.5
Year constructed									
Before 1920	658	59.8	72.0	16.4	39.0	81.8	14.4	1.3	21.8
1920 to 1945	857	69.4	69.7	16.8	46.0	84.0	19.9	1.6	23.2
1946 to 1959	896	72.7	81.8	20.2	44.1	85.9	18.4	1.5	20.5
1960 to 1969	1,412	87.0	91.5	28.4	53.8	107.0	28.8	1.8	20.4
1970 to 1979	1,479	93.3	80.7	18.8	52.5	104.0	30.1	1.9	20.4
1980 to 1989	1,272	76.4	66.6	17.6	44.3	82.5	28.6	1.7	22.5
1990 to 1999	1,304	79.8	82.0	16.8	45.0	87.2	28.1	1.7	21.6
2000 to 2003	1,542	80.2	77.5	22.6	48.1	100.3	33.6	1.8	21.8
2004 to 2007	1,522	80.9	88.1	18.6	48.3	82.1	32.6	1.7	21.4
2008 to 2012	1,598	84.5	87.1	16.9	35.8	79.8	34.1	1.8	21.3

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	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Census region and division									
Northeast	1,812	93.9	82.1	24.7	54.8	104.6	43.3	2.3	23.9
New England	1,219	85.5	88.3	18.3	43.7	92.4	30.9	2.2	25.3
Middle Atlantic	2,167	97.2	80.2	30.9	61.5	119.6	50.8	2.3	23.5
Midwest	1,265	82.8	90.7	23.5	50.8	93.7	22.1	1.5	17.5
East North Central	1,538	88.7	94.8	32.3	61.7	109.2	26.8	1.6	17.4
West North Central	866	70.4	81.6	11.9	35.1	70.0	15.3	1.2	17.6
South	1,142	74.9	78.6	17.0	43.6	85.7	24.4	1.6	21.4
South Atlantic	1,244	75.5	75.0	18.4	43.2	94.2	28.7	1.7	23.0
East South Central	999	75.3	86.0	21.2	51.0	82.5	20.2	1.5	20.3
West South Central	1,068	73.6	81.7	12.5	39.2	80.2	20.4	1.4	19.1
West	1,082	74.7	67.0	17.5	41.9	79.6	25.2	1.7	23.3
Mountain	1,233	83.8	90.7	20.4	56.7	90.6	22.7	1.5	18.4
Pacific	1,027	71.3	60.1	16.8	37.0	75.6	26.1	1.8	25.5
Climate region¹									
Very cold/Cold	1,352	86.1	89.3	22.6	54.0	98.7	25.9	1.7	19.2
Mixed-humid	1,302	81.4	79.1	21.5	45.6	90.3	28.4	1.8	21.8
Mixed-dry/Hot-dry	960	66.8	61.6	15.0	31.6	68.2	24.5	1.7	25.5
Hot-humid	1,185	73.8	75.5	16.7	44.4	86.6	27.4	1.7	23.1
Marine	1,337	80.2	62.7	21.2	44.1	92.1	31.8	1.9	23.8
Number of floors									
One	738	71.1	80.8	16.4	42.2	88.7	16.3	1.6	22.1
Two	1,261	72.3	74.0	23.2	49.6	85.5	26.8	1.5	21.3
Three	1,787	82.1	85.4	32.5	56.4	96.0	37.6	1.7	21.0
Four to nine	8,102	105.8	88.1	42.4	66.8	102.4	160.2	2.1	19.8
Ten or more	45,392	105.8	61.2	58.3	82.0	116.1	1,048.2	2.4	23.1
Elevators and escalators (more than one may apply)									
Any elevators	7,855	99.1	79.6	43.7	69.9	106.3	163.0	2.1	20.8
Number of elevators									
One	3,253	79.2	77.9	40.5	65.7	99.2	65.7	1.6	20.2
Two to five	10,565	96.9	80.2	51.5	75.8	115.7	222.1	2.0	21.0
Six or more	65,801	129.8	80.5	67.5	96.9	166.2	1,375.4	2.7	20.9
Any escalators	38,936	103.1	78.2	65.7	66.8	115.4	838.2	2.2	21.5
Number of workers (main shift)									
Fewer than 5	261	42.6	149.3	8.6	32.1	71.7	5.8	1.0	22.3
5 to 9	551	66.6	85.2	26.3	48.7	94.1	12.6	1.5	22.8
10 to 19	1,056	80.3	81.5	36.4	63.3	119.0	22.4	1.7	21.2
20 to 49	2,316	81.8	79.8	37.3	63.0	113.2	49.6	1.8	21.4
50 to 99	5,594	85.3	85.6	48.1	69.9	112.2	116.7	1.8	20.9
100 to 249	11,330	96.7	79.2	57.9	89.0	127.0	232.8	2.0	20.5
250 or more	38,827	122.0	57.7	62.3	86.4	151.0	836.8	2.6	21.6

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				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Weekly operating hours									
Fewer than 40	199	27.8	69.5	2.4	16.8	42.4	4.2	0.6	21.0
40 to 48	618	52.6	47.4	22.5	42.9	69.0	14.2	1.2	23.1
49 to 60	1,011	61.3	50.6	25.0	48.1	83.2	23.3	1.4	23.0
61 to 84	1,792	86.3	82.1	35.5	72.4	143.7	39.4	1.9	22.0
85 to 167	2,294	116.9	135.8	59.0	124.7	265.2	47.8	2.4	20.8
Open continuously	3,783	126.2	122.7	18.6	62.7	138.5	75.1	2.5	19.9
Ownership and occupancy									
Nongovernment owned	1,124	79.6	78.5	17.4	44.5	89.3	24.4	1.7	21.7
Owner occupied	1,060	85.4	101.1	19.8	45.0	93.7	21.6	1.7	20.4
Leased to tenant(s)	1,170	78.2	63.7	22.3	51.3	102.2	27.2	1.8	23.3
Owner occupied and leased	2,032	79.9	66.9	21.3	42.6	75.8	44.9	1.8	22.1
Unoccupied	47	5.4		0.0	0.0	2.8	1.1	0.1	22.7
Government owned	2,046	81.2	80.7	28.2	53.4	87.6	41.8	1.7	20.4
Federal	4,164	87.3	64.3	32.7	58.3	67.5	94.0	2.0	22.6
State	3,001	100.1	99.4	35.0	58.2	88.8	57.6	1.9	19.2
Local	1,605	72.1	74.9	26.2	52.3	86.2	33.4	1.5	20.8
Party responsible for operation and maintenance of energy systems									
Building owner	1,232	78.8	78.0	18.2	44.4	84.7	26.1	1.7	21.2
Business owner or tenant	1,359	87.0	88.4	26.2	59.3	123.4	30.3	1.9	22.3
Property management	1,773	77.0	54.8	16.3	42.6	88.7	41.0	1.8	23.2
Other	1,172	90.6	87.3	32.9	68.3	107.0	26.6	2.1	22.7
Provider of direct input on energy-related equipment purchases									
Building owner	1,227	78.5	77.9	18.3	44.4	85.3	26.1	1.7	21.3
Business owner or tenant	1,419	92.8	88.9	26.0	61.6	135.2	31.3	2.1	22.1
Property management	1,755	68.8	63.5	35.3	64.1	115.1	43.4	1.7	24.7
Other	1,437	90.6	85.8	32.9	67.8	104.5	31.6	2.0	22.0
Number of establishments									
One	1,067	81.6	86.1	21.0	48.8	93.0	22.2	1.7	20.8
2 to 5	1,624	78.9	74.0	26.8	49.3	90.7	35.4	1.7	21.8
6 to 10	2,475	82.2	61.7	23.9	48.5	88.7	56.0	1.9	22.6
11 to 20	5,251	95.9	67.3	34.7	68.8	102.5	119.5	2.2	22.8
More than 20	12,786	90.7	57.5	0.0	50.1	86.0	312.9	2.2	24.5
Currently unoccupied	52	5.4		0.0	0.0	1.3	1.1	0.1	20.7

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				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Predominant exterior wall material									
Brick, stone, or stucco	1,495	85.4	83.0	24.3	55.2	103.9	31.3	1.8	20.9
Concrete (block or poured)	1,533	83.0	85.2	23.6	50.8	101.4	33.7	1.8	22.0
Concrete panels	3,165	76.4	70.1	15.8	37.5	83.4	66.7	1.6	21.1
Siding or shingles	442	69.6	66.5	17.0	43.1	79.5	10.4	1.6	23.5
Metal panels	458	49.3	73.7	5.9	25.5	58.4	9.9	1.1	21.5
Window glass	9,982	127.0	64.2	55.6	147.9	668.0	213.2	2.7	21.4
Other	2,131	92.7	94.0	18.4	45.1	94.4	48.7	2.1	22.9
No one major type	2,101	76.1	Q	24.6	66.3	96.4	45.0	1.6	21.4
Predominant roof material									
Metal surfacing	517	54.3	72.0	8.8	31.4	67.6	11.6	1.2	22.4
Synthetic or rubber	2,681	94.6	88.6	29.8	64.4	118.4	54.9	1.9	20.5
Built-up	2,228	85.3	77.3	25.8	51.0	97.0	47.8	1.8	21.5
Slate or tile shingles	913	86.2	87.8	22.0	52.0	114.4	20.0	1.9	21.9
Wooden materials (including shingles)	591	81.2	92.6	16.6	54.0	126.1	12.0	1.7	20.4
Asphalt, fiberglass, or other shingles	745	73.2	67.8	22.3	46.9	89.3	16.4	1.6	22.1
Concrete	2,597	80.7	63.8	29.5	57.6	112.8	64.2	2.0	24.7
Other	2,447	85.6	102.3	20.8	46.6	90.5	53.1	1.9	21.7
No one major type	1,957	53.7	105.9	15.0	42.4	69.6	43.6	1.2	22.3
Roof characteristics									
Roof tilt									
Flat	2,283	90.2	78.3	25.8	57.4	115.7	48.3	1.9	21.1
Shallow pitch	743	66.9	81.7	14.5	38.4	80.2	16.4	1.5	22.1
Steeper pitch	615	65.4	77.5	19.6	43.6	77.0	13.2	1.4	21.5
Cool roof	2,482	93.6	84.9	25.5	57.5	114.9	52.2	2.0	21.0

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				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Renovations in buildings constructed before 2008 (more than one may apply)									
Any type of renovation	1,796	89.1	81.0	27.7	55.8	100.1	37.8	1.9	21.0
Addition or annex	2,908	99.2	103.6	30.7	57.3	99.7	55.9	1.9	19.2
Reduction in floorspace	3,165	128.7	87.8	18.3	69.1	143.4	66.0	2.7	20.9
Roof replacement	2,013	95.0	86.8	29.1	54.7	96.4	41.4	2.0	20.6
Exterior wall replacement	2,052	94.2	87.5	21.3	50.1	93.6	41.9	1.9	20.4
Interior wall reconfiguration	2,312	96.4	74.4	29.7	57.2	98.1	48.7	2.0	21.1
Window replacement	1,947	88.9	77.2	28.6	56.1	100.2	40.4	1.9	20.8
HVAC equipment upgrade	2,312	95.0	84.4	30.6	56.8	103.5	48.4	2.0	21.0
Lighting upgrade	2,484	95.7	86.3	32.1	58.9	112.3	50.9	2.0	20.5
Electrical upgrade	2,152	99.5	90.7	28.5	54.9	106.7	44.3	2.1	20.6
Plumbing system upgrade	2,169	101.0	86.9	30.6	57.3	111.3	44.3	2.1	20.4
Insulation upgrade	2,019	101.4	92.0	27.6	56.0	98.1	39.9	2.0	19.8
Fire, safety, or security upgrade	2,737	98.0	84.0	31.9	58.7	109.8	56.9	2.0	20.8
Structural upgrade	2,798	108.4	113.9	32.1	53.2	92.8	54.5	2.1	19.5
Other	1,771	81.7	68.5	35.1	62.4	137.6	43.5	2.0	24.6
No renovations	860	69.4	75.1	14.8	39.6	81.2	18.9	1.5	21.9
Buildings constructed 2008 or later	1,598	84.5	87.1	16.9	35.8	79.8	34.1	1.8	21.3
Energy sources (more than one may apply)									
Electricity	1,330	82.0	79.0	23.0	50.0	93.7	28.5	1.8	21.4
Natural gas	1,890	94.4	88.9	37.5	65.8	122.3	37.4	1.9	19.8
Fuel oil	4,780	110.5	87.1	35.6	69.2	124.3	101.5	2.3	21.2
District heat	16,919	135.5	98.2	74.0	113.2	162.8	362.8	2.9	21.4
District chilled water	12,331	144.4	115.9	48.2	70.9	138.8	235.8	2.8	19.1
Propane	1,143	75.7	98.8	11.6	28.3	62.6	25.8	1.7	22.6
Other	1,750	78.7	79.6	20.4	37.5	72.7	37.5	1.7	21.4
Space-heating energy sources (more than one may apply)									
Electricity	1,364	79.5	72.4	25.0	50.1	93.6	30.2	1.8	22.2
Natural gas	1,702	89.8	85.9	36.5	64.1	112.7	32.9	1.7	19.3
Fuel oil	1,333	82.7	86.5	30.6	54.6	97.9	31.4	2.0	23.5
District heat	16,859	135.7	98.5	74.0	113.2	162.8	361.4	2.9	21.4
Propane	443	49.3	60.3	8.8	19.4	39.6	10.5	1.2	23.8
Other	481	48.0	64.7	16.7	31.2	52.9	11.5	1.2	24.0

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				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Primary space-heating energy source									
Electricity	1,014	70.4	63.7	21.9	44.6	84.1	24.7	1.7	24.4
Natural gas	1,667	90.1	86.7	36.8	63.7	112.7	32.0	1.7	19.2
Fuel oil	912	73.7	93.6	33.6	60.2	116.0	24.5	2.0	26.8
District heat	16,834	137.0	98.7	74.0	113.6	163.2	361.4	2.9	21.5
Propane	241	32.3	42.8	8.1	15.8	33.0	6.4	0.9	26.4
Other	310	34.8	40.7	8.1	22.5	43.6	8.7	1.0	28.0
Cooling energy sources (more than one may apply)									
Electricity	1,433	83.1	76.8	28.2	55.3	100.8	30.9	1.8	21.6
Natural gas	8,190	133.2	93.0	51.3	66.3	72.2	136.7	2.2	16.7
District chilled water	12,331	144.4	115.9	48.2	70.9	138.8	235.8	2.8	19.1
Water-heating energy sources (more than one may apply)									
Electricity	1,167	72.5	66.3	24.1	47.9	87.5	27.2	1.7	23.4
Natural gas	2,292	101.9	96.1	43.3	72.9	147.3	44.1	2.0	19.2
Fuel oil	2,247	91.1	107.0	42.4	64.0	106.5	56.1	2.3	25.0
District heat	25,765	143.3	102.5	79.5	113.6	166.2	543.2	3.0	21.1
Propane	613	55.1	69.0	13.3	31.1	65.9	18.1	1.6	29.5
Cooking energy sources (more than one may apply)									
Electricity	2,485	99.8	91.9	31.4	64.8	148.7	51.8	2.1	20.8
Natural gas	4,074	121.7	116.6	58.3	121.6	277.0	78.4	2.3	19.2
Propane	1,159	83.4	84.7	19.4	48.1	105.9	31.3	2.3	27.0
Energy end uses (more than one may apply)									
Buildings with space heating	1,436	84.7	79.2	27.2	53.6	98.7	30.4	1.8	21.2
Buildings with cooling	1,518	85.4	79.0	28.3	55.5	101.0	32.5	1.8	21.4
Buildings with water heating	1,537	86.0	79.6	28.5	56.4	103.5	32.7	1.8	21.3
Buildings with cooking	2,567	105.8	99.0	35.8	75.4	173.7	52.5	2.2	20.5
Buildings with manufacturing	1,393	71.0	71.6	17.9	42.2	77.6	30.5	1.6	21.9
Buildings with electricity generation	6,833	109.3	90.6	45.0	74.2	136.6	141.1	2.3	20.7
Percent of floorspace heated									
Not heated	217	25.8	70.8	0.0	2.3	18.4	6.5	0.8	30.1
1 to 50	671	46.2	72.9	13.0	27.1	53.9	16.6	1.1	24.7
51 to 99	1,787	88.6	83.5	25.8	53.9	98.9	39.0	1.9	21.8
100	1,521	90.7	78.8	32.9	59.7	106.9	31.4	1.9	20.7

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Percent of floorspace cooled									
Not cooled	173	24.3	78.7	0.0	6.5	32.3	3.9	0.6	22.7
1 to 50	843	52.3	78.2	19.6	37.0	75.4	17.4	1.1	20.6
51 to 99	2,388	94.3	84.8	33.9	61.5	116.3	51.8	2.1	21.7
100	1,523	96.7	76.1	33.2	61.3	113.9	32.6	2.1	21.4
Percent lit when open									
Zero	62	13.5	74.2	1.9	8.2	12.5	1.9	0.4	31.1
1 to 50	585	50.9	95.7	16.8	35.5	67.6	12.6	1.1	21.6
51 to 99	1,830	87.6	83.8	30.9	56.8	102.0	38.3	1.8	20.9
100	1,460	90.8	72.3	28.4	57.7	113.9	31.9	2.0	21.8
Building never open/electricity not used	48	6.6	Q	0.0	0.0	2.5	1.0	0.1	20.1
Percent lit during off hours									
Zero	520	52.3	55.8	16.3	34.6	69.1	12.2	1.2	23.5
1 to 50	1,780	85.6	79.7	34.1	61.5	113.9	37.7	1.8	21.2
51 to 100	5,043	146.9	130.2	51.3	100.8	209.5	98.7	2.9	19.6
Building always open with no "off hours"	2,996	125.3	118.8	12.5	109.2	241.2	65.6	2.7	21.9
Electricity not used	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heating equipment (more than one may apply)									
Heat pumps	1,432	75.9	67.8	25.2	44.7	78.0	32.5	1.7	22.7
Furnaces	815	71.1	71.9	30.5	53.1	92.0	16.7	1.5	20.5
Individual space heaters	1,260	75.7	81.2	23.2	45.6	82.3	26.5	1.6	21.0
District heat	16,859	135.7	98.5	74.0	113.2	162.8	361.4	2.9	21.4
Boilers	4,157	100.8	89.9	44.4	66.8	122.0	79.8	1.9	19.2
Packaged heating units	1,457	83.0	79.9	29.3	57.4	107.1	31.0	1.8	21.3
Other	3,101	121.6	159.2	28.2	70.5	165.1	63.6	2.5	20.5
Cooling equipment (more than one may apply)									
Residential-type central air conditioners	702	73.6	71.9	27.1	52.6	93.7	15.0	1.6	21.3
Heat pumps	1,357	74.9	65.8	25.3	45.2	84.1	30.8	1.7	22.7
Individual air conditioners	1,429	81.6	82.1	23.7	48.2	88.8	30.4	1.7	21.3
District chilled water	12,331	144.4	115.9	48.2	70.9	138.8	235.8	2.8	19.1
Central chillers	11,374	108.7	84.4	55.6	80.6	134.8	233.7	2.2	20.6
Packaged air conditioning units	2,080	88.0	84.6	34.9	64.0	123.1	44.5	1.9	21.4
Swamp coolers	1,604	91.5	100.0	30.9	64.9	148.7	33.1	1.9	20.6
Other	Q	137.4	95.1	16.7	56.1	102.0	Q	3.1	22.4

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Main equipment replaced since 1990 (more than one may apply)									
Heating	1,155	78.5	75.5	28.5	55.9	99.9	24.3	1.7	21.1
Cooling	1,279	82.1	75.5	30.6	57.5	101.9	27.5	1.8	21.5
Water-heating equipment									
Centralized system	1,257	88.6	83.9	29.1	57.5	105.1	26.3	1.9	20.9
Distributed system	1,206	65.6	58.5	22.7	45.1	82.7	28.1	1.5	23.3
Combination of centralized and distributed system	4,563	93.4	83.3	37.8	66.3	123.1	96.5	2.0	21.1
Lighting equipment types (more than one may apply)									
Incandescent	1,939	92.2	85.1	28.3	57.5	104.0	39.9	1.9	20.6
Standard fluorescent	1,444	83.8	78.4	26.2	53.1	99.6	30.8	1.8	21.3
Compact fluorescent	2,213	94.7	85.0	31.2	59.7	113.6	46.3	2.0	20.9
High-intensity discharge (HID)	4,163	93.5	91.8	31.8	61.2	109.8	86.4	1.9	20.7
Halogen	2,978	96.0	88.4	33.7	61.5	110.2	62.2	2.0	20.9
LED	4,993	107.1	91.2	41.7	71.4	143.7	104.7	2.2	21.0
Other	5,924	131.1	105.4	86.3	162.4	165.5	130.5	2.9	22.0
Refrigeration equipment (more than one may apply)									
Any refrigeration	1,624	87.9	82.0	28.6	56.7	105.5	34.4	1.9	21.2
Walk-in units	4,345	124.3	113.2	73.1	161.2	310.2	87.9	2.5	20.2
Cases or cabinets	3,622	115.5	105.2	56.6	112.3	244.7	75.2	2.4	20.8
Large cold storage areas	6,779	127.0	143.5	74.3	150.8	246.2	137.4	2.6	20.3
Commercial ice makers	4,411	114.0	102.2	57.1	112.7	246.2	89.7	2.3	20.3
Residential-type or compact units	1,530	83.1	76.6	27.2	51.4	88.7	32.3	1.8	21.1
Vending machines	4,354	95.1	84.1	39.7	67.9	117.8	90.7	2.0	20.8
No refrigeration	313	36.6	53.2	1.2	18.2	51.3	7.6	0.9	24.4
Office equipment (more than one may apply)									
Desktop computers	1,656	85.5	78.1	29.1	56.2	101.1	35.4	1.8	21.4
With flat screen monitors	1,696	85.7	77.8	29.7	56.4	101.6	36.2	1.8	21.4
With multiple monitors	3,230	95.1	67.8	34.5	59.0	105.5	68.6	2.0	21.2
Laptop computers	2,002	86.1	74.5	30.0	54.8	94.8	42.5	1.8	21.2
Dedicated servers	2,737	89.6	75.4	34.5	60.4	104.3	58.6	1.9	21.4
Laser printers	2,050	88.4	75.6	32.4	57.9	101.6	43.6	1.9	21.3
Inkjet printers	1,327	80.1	76.9	27.4	53.6	96.4	28.9	1.7	21.8
FAX machines	1,792	85.6	77.3	29.8	57.0	100.3	38.4	1.8	21.4
Photocopiers	2,362	86.2	74.6	31.5	54.8	88.6	50.4	1.8	21.3

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Number of desktop computers									
None	238	37.6	98.0	1.2	16.6	53.1	5.3	0.8	22.3
1 to 4	581	75.6	104.8	25.0	52.0	111.3	12.4	1.6	21.4
5 to 9	899	78.3	76.9	29.7	53.7	93.2	19.1	1.7	21.2
10 to 19	1,402	72.0	78.1	34.9	58.5	84.1	32.2	1.7	22.9
20 to 49	3,159	85.6	87.7	38.8	63.9	111.6	67.0	1.8	21.2
50 to 99	4,504	77.9	69.5	39.7	64.8	94.6	97.6	1.7	21.7
100 to 249	10,432	98.8	76.8	49.4	70.9	106.6	214.5	2.0	20.6
250 or more	28,387	109.9	62.5	51.3	74.0	120.2	600.9	2.3	21.2
Number of laptop computers									
None	530	63.4	100.9	8.6	34.0	84.0	11.7	1.4	22.1
1 to 4	780	71.7	85.4	27.0	51.3	91.5	16.7	1.5	21.5
5 to 9	1,994	83.6	78.7	35.5	56.1	86.6	42.6	1.8	21.4
10 to 19	3,965	86.1	77.5	40.6	63.2	107.2	85.3	1.9	21.5
20 to 49	6,318	94.1	77.8	42.0	65.1	105.4	129.8	1.9	20.6
50 to 99	8,795	96.7	61.4	50.3	70.4	102.0	185.8	2.0	21.1
100 to 249	15,188	100.6	79.4	46.5	61.3	90.1	307.6	2.0	20.3
250 or more	30,170	107.4	54.4	55.8	77.7	126.1	667.0	2.4	22.1
Number of dedicated servers									
None	572	64.6	88.0	13.3	36.9	81.1	12.3	1.4	21.4
1 to 4	1,740	79.7	79.2	33.9	59.6	100.3	37.5	1.7	21.5
5 to 9	5,820	90.5	72.0	40.1	62.4	110.2	120.5	1.9	20.7
10 to 19	11,797	103.8	78.5	46.8	75.9	119.5	260.3	2.3	22.1
20 to 49	15,550	105.5	59.3	50.7	89.0	171.7	316.7	2.2	20.4
50 or more	38,977	143.6	73.0	64.7	102.2	208.9	836.2	3.1	21.5
Number of photocopiers									
None	546	66.6	94.2	11.7	37.1	89.5	11.8	1.4	21.6
One	907	70.4	90.0	27.6	49.7	81.1	19.3	1.5	21.3
2 to 4	2,465	78.6	74.1	36.4	59.7	96.0	52.8	1.7	21.4
5 to 9	6,782	88.5	74.7	44.3	62.7	96.5	143.3	1.9	21.1
10 or more	20,490	117.3	66.1	61.3	80.3	113.9	437.3	2.5	21.3
Number of TVs or video displays									
None	447	49.9	68.2	8.0	29.6	67.0	10.2	1.1	22.8
One	609	69.8	69.6	27.3	54.2	99.6	12.8	1.5	21.1
2 to 4	1,266	79.6	74.1	32.9	57.6	107.0	27.6	1.7	21.8
5 to 9	2,471	95.3	76.9	43.4	74.5	170.2	54.1	2.1	21.9
10 to 19	5,264	99.1	78.3	48.4	80.0	138.5	110.4	2.1	21.0
20 to 49	6,774	89.0	80.3	52.9	73.4	128.0	151.4	2.0	22.4
50 to 99	8,961	98.6	98.4	56.7	86.8	144.1	186.2	2.1	20.8
100 or more	26,874	133.4	113.0	62.6	93.4	143.0	508.6	2.5	18.9

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Food preparation or serving areas in non-food service buildings (more than one may apply)									
Snack bar or concession stand	7,264	112.5	108.4	50.3	88.6	218.0	148.1	2.3	20.4
Fast food or small restaurant	6,957	123.2	110.0	86.1	136.6	220.7	146.5	2.6	21.1
Cafeteria or large restaurant	12,491	106.7	92.2	47.1	71.9	110.2	246.9	2.1	19.8
Commercial kitchen/ food preparation area	6,372	111.4	117.2	36.6	68.8	132.5	124.4	2.2	19.5
Small kitchen area	1,614	84.5	87.2	22.2	46.0	86.5	33.5	1.8	20.8
Separate computer areas (more than one may apply)									
Data center or server farm	14,047	122.1	75.2	50.9	85.7	129.4	294.5	2.6	21.0
Computer-based training room	6,956	95.7	76.3	42.0	67.8	111.5	143.8	2.0	20.7
Student or public computer center	5,346	88.9	101.9	39.7	59.7	86.6	103.4	1.7	19.3
HVAC conservation features (more than one may apply)									
Economizer cycle	5,228	102.2	88.8	38.6	66.8	123.8	108.0	2.1	20.7
Regular HVAC maintenance	1,952	89.6	79.7	32.8	60.3	110.2	41.5	1.9	21.2
Building automation system (BAS) ²	4,752	100.1	87.6	37.1	65.8	111.6	100.3	2.1	21.1
Window and interior lighting features (more than one may apply)									
Multipaned windows	1,743	87.0	84.3	27.5	54.4	99.6	36.2	1.8	20.8
Tinted window glass	2,118	88.2	78.2	27.1	55.9	106.1	44.5	1.9	21.0
Reflective window glass	3,013	103.9	87.0	30.6	58.6	116.1	62.6	2.2	20.8
External overhangs or awnings	1,654	96.0	91.5	30.3	60.3	120.3	34.5	2.0	20.9
Skylights or atriums	3,400	90.3	91.7	24.6	49.7	84.1	69.4	1.8	20.4
Light scheduling	3,193	96.8	83.8	35.6	64.1	122.8	69.1	2.1	21.6
Occupancy sensors	4,225	95.7	83.8	37.7	68.1	117.1	89.4	2.0	21.2
Multi-level lighting or dimming	4,637	111.3	100.3	43.7	80.1	162.4	94.3	2.3	20.3
Daylight harvesting	4,942	101.3	80.5	24.4	62.4	122.8	104.0	2.1	21.1
Demand responsive lighting	2,326	86.5	83.6	30.9	55.9	110.2	54.7	2.0	23.5
Building automation system (BAS) for lighting ²	5,762	99.5	90.8	47.5	78.2	126.5	127.5	2.2	22.1

Table C4. Sum of major fuel consumption and expenditure gross energy intensities , 2012

	Sum of major fuel consumption						Sum of major fuel expenditures		
	per building (million Btu)	per square foot (thousand Btu)	per worker (million Btu)	Distribution of building-level intensities (thousand Btu/square foot)			per building (thousand dollars)	per square foot (dollars)	per million Btu (dollars)
				25th percentile	Median	75th percentile			
All buildings	1,253	80.0	79.0	18.9	45.9	89.0	26.8	1.7	21.4
Equipment usage reduced when building not in full use (more than one may apply)									
Heating	1,358	79.5	73.4	26.8	52.0	92.2	29.3	1.7	21.6
Cooling	1,424	80.1	73.3	27.4	53.0	94.1	31.0	1.7	21.7
Lighting	1,351	81.8	76.7	25.6	51.4	95.1	28.9	1.8	21.4

¹These climate regions were created by the Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE).

²In earlier CBECS publications, BAS was referred to as *Energy Management and Control System (EMCS)*.

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

N = No cases in reporting sample.

Notes: • Because of rounding, data may not sum to totals. • See the *Guide to the 2012 CBECS Detailed Tables* or *CBECS Terminology* for definitions of terms used in these tables and/or comparison of differences with prior CBECS tables. Both references can be accessed from <http://www.eia.gov/consumption/commercial/data/2012/> • 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.

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-871A, C, D, E, and F of the 2012 Commercial Buildings Energy Consumption Survey.