Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural (Natura Consu	al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Building Floorspace						
(Square Feet)						
1,001 to 5,000	1,110	3,084	2.8	250	243	2,155
5,001 to 10,000	496	3,692	7.4	209	202	1,689
10,001 to 25,000	450	7,053	15.7	309	300	2,524
25,001 to 50,000	168	6,025	35.8	258	250	1,865
50,001 to 100,000	95	6,683	70.6	244	236	1,868
100,001 to 200,000	48	6,645	138.4	249	241	1,737
200,001 to 500,000	19	5,679	292.6	205	199	1,343
Over 500,000	5	4,606	919.5	204	198	1,344
Principal Building Activity	040	7.045	00.4	000	000	4 000
Education	213	7,045	33.1	268	260	•
Food Sales	98	747	7.6	39	37	332
Food Service	226	1,396	6.2	203	197	1,615
Health Care	72	2,544	35.5	243	235	1,538
Inpatient	7	1,805	257.0	204	198	1,241
Outpatient	65	739	11.4	38	37	297
Lodging	86	4,256	49.7	215	208	1,581
Retail (Other Than Mall)	245	2,866	11.7	91	89	719
Office	488	8,208	16.8	269	261	2,201
Public Assembly	146	2,723	18.6	102	99	775
Public Order and Safety	36	637	17.7	29	28	234
Religious Worship	220	2,629	11.9	82	80	664
Service	281	2,496	8.9	139	135	•
Warehouse and Storage	187	5,494	29.4	132	128	976
OtherVacant	45 49	1,252 1,176	27.9 24.2	87 28	85 27	684 220
Year Constructed						
Before 1920	200	2.759	13.8	143	139	1,134
1920 to 1945	338	4,679	13.9	229	223	1,708
1946 to 1959	313	4,659	14.9	216	210	1,610
1960 to 1969	309	5,635	18.2	255	248	1,872
1970 to 1979	391	7,659	19.6	351	341	2,466
1980 to 1989	303	6,469	21.3	291	282	·
1990 to 1999	419	8,177	19.5	314	305	·
2000 to 2003	118	3,431	29.1	127	123	1,012
Census Region and Division						
Northeast	397	9,181	23.1	428	415	3,553
New England	74	1,465	19.8	75	73	673
Middle Atlantic	323	7,716	23.9	353	343	2,880
Midwest	802	13,163	16.4	705	683	4,844
East North Central	546	9,570	17.5	528	512	3,649
West North Central	255	3,593	14.1	177	171	1,195
South	714	13,311	18.6	474	460	3,866
South Atlantic	308	6,326	20.5	217	210	1,934
East South Central	155	2,281	14.7	102	99	817
West South Central	251	4,704	18.7	156	151	1,115
West	479	7,813	16.3	320	311	2,261
Mountain	190	2,797	14.7	167	162	,
Pacific	289	5,016	17.4	153	149	1,172

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural			al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Climate Zone: 30-Year Average						
Under 2,000 CDD and						
More than 7,000 HDD	493	7,645	15.5	431	418	3,076
5,500-7,000 HDD	718	12,850	17.9	679	659	4,901
4,000-5,499 HDD	347	8,113	23.4	337	327	2,702
Fewer than 4,000 HDD	646	10,509	16.3	358	347	2,920
2,000 CDD or More and						
Fewer than 4,000 HDD	187	4,350	23.2	122	119	925
Number of Floors						
One	1,431	14,940	10.4	664	644	5,406
Two	617	11,441	18.5	491	476	3,627
Three	242	-,	23.5	241	234	1,816
Four to Nine	93	7,670	82.1	378	367	2,560
Ten or More	9	3,749	437.6	154	149	1,116
Number of Workers (main shift)						
Fewer than 5	1,082	7,023	6.5	272		2,308
5 to 9	474	,	8.6	198	192	1,666
10 to 19	359	5,317	14.8	242	235	1,841
20 to 49	289	8,212	28.5	395		2,951
50 to 99	113	6,156	54.7	241	234	1,780
100 to 249	52	5,127	98.1	235	228	1,652
250 or More	23	7,549	333.2	344	334	2,327
Weekly Operating Hours						
Fewer than 40	382	3,259	8.5	107	104	892
40 to 48	569	6,913	12.1	249	242	2,018
49 to 60	607	10,191	16.8	374	363	2,928
61 to 84	374	7,468	20.0	314	305	2,373
85 to 167	233	5,225	22.4	257	249	1,906
Open Continuously	225	10,411	46.2	626	607	4,407
Ownership and Occupancy						
Nongovernment Owned	2,078	33,317	16.0	1,503	1,458	11,558
Owner Occupied	1,044	16,548	15.8	708	686	5,361
Nonowner Occupied	997	15,886	15.9	779	756	6,070
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	313	10,150	32.4	425	412	2,967
Federal	23	1,083	46.3	35	34	226
State	72	2,438	33.8	98	95	748
Local	218	6,630	30.4	291	283	1,993
Vacancy Status						
Completely Vacant	37	933	25.6	18	18	142
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	264	,	32.0	318		2,477
Not At All Vacant	2,079	33,845	16.3	1,582	1,534	11,828

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural			al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Number of Establishments						
One	1,912	30,518	16.0	1,462	1,418	10,950
2 to 5	382	7,593	19.9	307	298	2,377
6 to 10	39	1,355	34.5	48	47	366
11 to 20	12	1,271	102.6	34	33	248
More than 20	9	1,797	Q	58	56	441
Currently Unoccupied	37	933	25.6	18	18	142
Predominant Exterior						
Wall Material	4 000	00.554	40.0	4 407	4 000	0.400
Brick, Stone or Stucco	1,292	23,551	18.2	1,127	1,093	8,403
Concrete (Block or Poured)	423	7,323	17.3	351	340	2,622
Concrete Panels	83	4,680	56.4	180		1,326
Siding or Shingles	261	1,997	7.7	85	83	735
Metal Panels	276	4,023	14.6	130	126	1,059
Window Glass	11	696	65.0	14		83
Other No One Major Type	33 Q	898 Q	26.9 Q	35 Q	34 Q	248 Q
Predominant Roof Material						
Built-Up	649	15,208	23.4	743		5,529
Shingles (Not Wood)	677	6,519	9.6	310	301	2,482
Metal Surfacing	436	5,781	13.2	194	188	1,516
Synthetic or Rubber	363	11,838	32.7	542	526	3,905
Slate or Tile	152	1,574	10.4	67	65	562
Wooden Materials	59	526	8.9	21	20	160
Concrete	34	Q	Q	24	23	168
Other No One Major Type	Q 13	Q 378	Q 29.1	Q 16	Q 16	Q 124
Renovations in Buildings Constructed Before 1980	13	376	29.1	10	10	124
(more than one may apply)						
Any Type of Renovation Since 1980	644	12.070	20.7	604	660	4 0.54
	641 159	13,270	20.7	684	663	4,851
Addition or Annex	158	5,036	31.8	304	295	1,982
Reduction In Floorspace	18	964	53.6	52	50	390
Cosmetic Improvements	477	10,073	21.1	497	482	3,587
Wall or Roof Replacement Interior Wall	234	6,328	27.0	278	270	1,966
Re-Configuration	278	7,019	25.2	342	331	2,430
HVAC Equipment Upgrade	306	8,482	27.7	467	453	3,281
Lighting Upgrade	304	8,104	26.7	397	386	2,868
Window Replacement	195	5,000	25.6	242	235	1,734
Plumbing System Upgrade	213	5,000 5,714	26.8	242 287	235 278	2,051
Insulation Upgrade	142	2,960	20.8	132	128	2,031 978
Other Renovation	142	2,960	20.6 37.4	26	25	976 Q
No Renovations Since 1980	910	12,120	13.3	512		3,939
Building Newer than 1980	840	18,077	21.5	732	710	5,734

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural (al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Energy Sources (more than						
one may apply)	0.000	40.404	40.0	4.007	4 000	44.500
Electricity	2,390	43,461	18.2	1,927	1,869	14,523
Natural Gas	2,391	43,468	18.2	1,928	1,870	14,525
Fuel Oil	129	10,383	80.4	507	492	3,539
District Heat	25	2,444	99.5	47	46	323
District Chilled Water	17	1,765	101.7	35	34	244
Propane	47	2,470	52.7	106	103	751
Other	39	903	23.4	47	46	330
Space-Heating Energy Sources	0.405	00.050	47.4	4 000	4.740	10.515
Natural Gas	2,165	36,959	17.1	1,803	1,749	13,515
Natural Gas Main	1,999	32,970	16.5	1,687	1,636	12,586
Natural Gas Secondary	166	3,989	24.0	116	113	929
Other Excluding Natural GasBuildings without Heating	179 47	6,015 494	33.6 10.6	106 Q	103 Q	862 Q
Primary Space-Heating						
Energy Source						
Electricity	281	6,162	21.9	177	171	1,434
Natural Gas	1,999	32,970	16.5	1,687	1,636	12,586
Fuel Oil	38	Q	42.3	20	20	162
District Heat	24	2,117	90.0	23	22	172
Propane	Q	_, · · Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Natural Gas	17	1,018	58.9	92	89	672
Other Excluding Natural Gas	2,136	40,006	18.7	1,729	1,677	13,046
Buildings without Cooling	238	2,444	10.3	107	104	807
Water-Heating Energy Sources						
Natural Gas	1,445	28,820	19.9			11,092
Other Excluding Natural Gas	681 265	12,313 2,334	18.1 8.8	361 57	350 56	2,933 500
Bldgs without Water Heating	200	2,334	0.0	57	50	500
Cooking Energy Sources						
Natural Gas	457	15,438	33.8	856	830	6,157
Other Excluding Natural Gas	107	3,218	30.0	141	137	1,007
Buildings without Cooking	1,827	24,812	13.6	931	903	7,361
Energy End Uses (more than one may apply)						
Buildings with Space Heating	2,344	42,974	18.3	1,909	1,852	14,377
Buildings with Cooling	2,344	41,023	19.1	1,821	1,766	13,718
Buildings with Water Heating	2,126	41,134	19.3	1,870	1,814	14,025
Buildings with Cooking	564	18,656	33.1	997	967	7,163
Buildings with Manufacturing	70	2,301	33.1	100	907	7,103
Buildings with Electricity	70	2,301	JJ. I	100	91	1 10
Generation	104	10,402	99.7	534	518	3,718
OCHORALIOH	104	10,402	99.7	554	310	3,110

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural		Natura Consu	al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Percent of Floorspace Heated						
Not Heated	47	494	10.6	Q	Q	Q
1 to 50	231	4,006	17.4	97	94	831
51 to 99	317	5,965	18.8	268	260	2,078
100	1,796	33,002	18.4	1,544	1,498	11,468
100	1,790	33,002	10.4	1,044	1,490	11,400
Percent of Floorspace Cooled						
Not Cooled	238	2,444	10.3	107	104	807
1 to 50	601	12,132	20	452	438	3,465
51 to 99	402	9,732	24	451	438	3,341
100	1,150	19,159	17	918	890	6,912
Heating Equipment (more						
than one may apply)						
Heat Pumps	152	5,552	37	224	217	1,804
Packaged Heat Pumps	86	3,323	39	140	135	1,115
Split-System Heat Pumps	50	1,453	29	42	41	361
Individual Room Heat Pumps	32	2,195	69	84	81	648
Furnaces	1,314	15,304	12	673	653	5,095
						,
Individual Space Heaters	429	8,969	21	379	368	2,720
District Heat	24	2,291	95	39	38	269
Boilers	432	18,174	42	1,040	1,009	7,418
Packaged Heating Units	586	13,618	23	582	564	4,477
Other	85	1,801	21	47	46	368
Cooling Equipment (more than one may apply) Residential-Type Central						
Air Conditioners	652	7,982	12	391	379	2,867
Heat Pumps	176	5,832	33	234	227	1,887
Packaged Heat Pumps	100	3,352	33	145	141	1,163
Split-System Heat Pumps	59	1,489	25	45	43	382
Individual Room Heat Pumps	31	2,380	76	85	83	660
Individual Air Conditioners	392	9,114	23	410	398	3,040
District Chilled Water	17	1,765	102	35	34	244
Central Chillers	78	9,100	117	501	486	3,461
Packaged Air Conditioning		,				-, -
Units	1,116	23,806	21	1,090	1,057	8,210
Swamp Coolers	78	1,265	16	81	78	520
Other	16	808	50	52	51	377
Main Equipment Replaced Since 1990 (more than one may apply)						
Heating	734	12,275	17	605	587	4,519
Cooling	873	16,047	18	779	756	5,761
Water Heating Equipment						
Centralized System	1,560	25,353	16	1,226	1,189	9,346
Distributed System	438	7,559	17	254	247	1,989
Combination of Centralized	400	7,000	1.7	204	2-71	1,000
and Distributed System	128	8,222	64	390	378	2,691
and Distributed System	120	0,222	04	390	3/6	2,09

Table C23. Total Natural Gas Consumption and Expenditures in Non-Mall Buildings, 2003

		All Buildings Using Natural			al Gas mption	Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings*	2,391	43,468	18.2	1,928	1,870	14,525
Energy-Related Space Functions						
(more than one may apply)						
Commercial Food Preparation	563	18,644	33	996	966	7,156
Activities with Large						
Amounts of Hot Water	404	16,023	40	931	903	6,466
Separate Computer Area	373	20,615	55	875	849	6,230
HVAC Conservation Features						
(more than one may apply)						
Variable Air-Volume System	290	14,594	50	710	688	5,070
Economizer Cycle	348	16,655	48	805	781	5,703
HVAC Maintenance	1,576	36,984	24	1,659	1,609	12,356
Energy Management and						
Control System (EMCS)	155	11,626	75	477	463	3,318
Equipment Usage Reduced When Building Not In Full Use (more than one may apply) ^a						
Heating	1,727	31,179	18	1,292	1,253	9,840
Cooling	1,676	31,437	19	1,288	1,249	9,785
Lighting	2,043	31,070	15	1,250	1,213	9,710
Office Equipment	863	12,670	15	476	462	3,666
Annual Consumption (hundred cubic feet)						
1,000 or Less	674	4,336	6	37	35	411
1,001 to 5,000	1,011	9,732	10	249	242	2,223
5,001 to 10,000	339	6,254	19	247	239	2,042
10,001 to 25,000	232	7,767	34	360	349	2,796
25,001 to 50,000	85	5,534	65	293	284	2,161
50,001 to 100,000	30	3,969	132	218	211	1,450
Over 100,000	21	5,875	285	525	510	3,441
Provider of Natural Gas (more than one may apply)						
Local Utility	2,255	38,362	17	1,631	1,582	12,577
Some Other Provider	149	6,372	43	389	377	2,537
Joine Other Floyidel	149	0,372	43	369	311	2,037

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 3.8 percent of total natural gas 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 that use natural gas.

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

		Na	tural Gas Co	nsumption	า				
				Building	stribution g-Level Int feet/squa	ensities	Natural	Gas Exper	nditures
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Building Floorspace									
(Square Feet)									
1,001 to 5,000	219	78.7	42.6	23.7	46.3	92.0	1.9	0.70	8.88
5,001 to 10,000	408	54.8	42.5	13.9	28.8	65.7	3.4	0.46	8.34
10,001 to 25,000	667	42.5	40.8	14.4	29.2	52.1	5.6	0.36	8.41
25,001 to 50,000	1,483	41.5	39.1	16.0	31.5	55.3	11.1	0.31	7.46
50,001 to 100,000		35.4	39.1	10.1	27.6	48.8	19.7	0.28	7.90
100,001 to 200,000		36.3	26.1	6.1	23.6	55.2	36.2	0.26	7.19
200,001 to 500,000		35.0	35.5	10.0	22.7	47.2	69.2	0.24	6.76
Over 500,000	39,551	43.0	28.8	2.8	20.0	71.9	268.2	0.29	6.78
Principal Building Activity									
Education	1,223	36.9	28.0	14.9	31.9	60.8	8.9	0.27	7.27
Food Sales	383	50.2	38.0	18.9	39.8	69.4	3.4	0.44	8.85
Food Service	870	141.2	72.0	77.0	150.3	301.8	7.1	1.16	8.20
Health Care	3,283	92.5	44.1	19.1	40.1	65.7	21.5	0.60	6.54
Inpatient	28,222	109.8	56.2	77.1	112.3	145.1	176.8	0.69	6.26
Outpatient	574	50.2	20.6	16.2	34.2	56.0	4.6	0.40	8.01
Lodging	2,432	48.9	101.2	19.8	36.7	76.4	18.5	0.37	7.59
Retail (Other Than Mall)	362	30.9	41.3	16.5	28.7	66.8	2.9	0.25	8.11
Office	535	31.8	13.8	17.2	35.7	56.9	4.5	0.27	8.42
Public Assembly	678	36.4	63.0	13.0	28.9	53.5	5.3	0.28	7.83
Public Order and Safety	771	43.7	39.8	26.6	49.8	76.8	6.5	0.37	8.43
Religious Worship	362	30.3	70.2	12.9	29.5	53.0	3.0	0.25	8.33
Service	481	54.1	52.2	22.9	44.5	82.6	3.9	0.44	8.12
Warehouse and Storage	687	23.4	42.1	9.3	22.1	37.5	5.2	0.18	7.60
Other	1,885	67.6	59.7	22.6	46.3	82.8	15.3	0.55	8.09
Vacant	557	23.0	Q	7.4	21.7	44.6	4.5	0.19	8.14
Year Constructed									
Before 1920	693	50.3	58.8	24.6	46.8	70.7	5.7	0.41	8.16
1920 to 1945	659	47.6	44.5	17.5	36.0	68.2	5.1	0.37	7.67
1946 to 1959	670	45.1	47.2	21.9	39.0	76.8	5.1	0.35	7.67
1960 to 1969	802	44.0	41.1	18.2	38.0	70.9	6.1	0.33	7.56
1970 to 1979	872	44.5	35.9	19.4	36.3	71.7	6.3	0.32	7.24
1980 to 1989	931	43.7	30.2	15.2	30.3	71.8	7.5	0.35	8.04
1990 to 1999	727	37.2	25.1	15.1	32.0	69.7	5.9	0.30	8.05
2000 to 2003	1,042	35.8	38.7	14.5	35.0	69.1	8.6	0.30	8.25
Census Region and Division									
Northeast	1,047	45.2	36.7	22.5	46.2	80.8	9.0	0.39	8.56
New England	981	49.5	38.4	15.9	41.1	61.7	9.1	0.46	9.27
Middle Atlantic	1,062	44.4	36.3	25.1	48.4	82.9	8.9	0.37	8.41
Midwest	853	51.9	49.5	25.6	45.4	81.2	6.0	0.37	7.09
East North Central	938	53.5	49.8	27.4	47.7	85.0	6.7	0.38	7.12
West North Central	671	47.6	48.7	23.4	43.9	74.1	4.7	0.33	6.98
South	644	34.6	27.4	12.5	26.3	52.8	5.4	0.29	8.40
South Atlantic	683	33.2	20.8	12.7	30.1	55.7	6.3	0.31	9.20
East South Central	635	43.3	45.9	14.4	25.1	45.9	5.3	0.36	8.28
West South Central	603	32.2	33.5	9.6	24.0	58.9	4.4	0.24	7.37
West	649	39.8	30.9	11.5	27.2	58.4	4.7	0.29	7.28
Mountain	853	57.9	51.1	28.3	49.8	92.0	5.7	0.29	6.72
Pacific	516	29.7	21.6	7.1	17.2	37.7	4.1	0.39	7.88

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

		Na	tural Gas Co	nsumption	n				
				Building	stribution g-Level Int feet/squa	ensities	Natural	Gas Expe	nditures
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Climate Zone: 30-Year Average Under 2,000 CDD and									
More than 7,000 HDD	849	54.7	51.2	29.6	46.4	85.7	6.2		7.35
5,500-7,000 HDD		51.3	46.9	25.3	46.1	80.2		0.38	7.44
4,000-5,499 HDD		40.3	33.2	20.2	38.4	70.1	7.8	0.33	8.27
Fewer than 4,000 HDD	538	33.0	29.2	11.5	23.4	46.2	4.5	0.28	8.41
2,000 CDD or More and									
Fewer than 4,000 HDD	634	27.3	14.8	6.1	16.0	47.9	4.9	0.21	7.79
Number of Floors One	450	43.1	41.3	18.9	37.9	73.7	3.8	0.36	8.40
Two	772	41.6	42.8	16.6	33.9	63.9	5.9	0.30	7.61
Three	967	41.2	38.5	19.2		70.7	7.5	0.32	7.77
Four to Nine	3,929	47.9	29.2	13.7	41.8	70.7	27.4	0.33	6.98
Ten or More	17,396		22.5	5.2		54.9	130.2	0.30	7.49
	,								
Number of Workers (main shift)									a = 1
Fewer than 5	244	37.6	114.5	15.7	34.3	66.8	2.1	0.33	8.74
5 to 9	405	47.1	61.8	19.2		78.8	3.5	0.41	8.67
10 to 19	655	44.2	51.5	19.9	38.4	88.1	5.1	0.35	7.84
20 to 49	1,327	46.6	44.6	20.5	40.5	76.6	10.2	0.36	7.71
100 to 249	2,078 4,355	38.0 44.4	32.6 30.0	18.6 11.3	34.6 34.5	58.8 68.9	15.8 31.6	0.29 0.32	7.61 7.26
250 or More	14,736	44.2	17.9	4.1	21.8	55.5	102.7	0.32	6.97
200 01 Word	14,730	77.2	17.5	7.1	21.0	55.5	102.7	0.01	0.57
Weekly Operating Hours Fewer than 40	070	24.0	04.0	40.0	20.2	F0 7	2.2	0.07	0.50
40 to 48	272 425	31.9 35.0	61.6 27.3	12.9 16.3	30.3 32.3	53.7 59.9	2.3 3.5	0.27 0.29	8.59 8.34
49 to 60	598	35.6	29.0	17.4	35.9	64.7	4.8	0.29	8.07
61 to 84	816	40.8	36.8	20.2	44.9	90.9	6.4	0.23	7.78
85 to 167	1,069		27.5	23.1	62.2	173.1	8.2	0.36	7.65
Open Continuously	2,692		52.4	23.4	46.0	81.5	19.6	0.42	7.26
Ownership and Occupancy									
Nongovernment Owned	701	43.7	38.4	17.5	37.3	71.3	5.6	0.35	7.93
Owner Occupied	657	41.5	35.1	17.0	35.1	62.3	5.1	0.32	7.81
Nonowner Occupied	758	47.6	41.1	19.3	39.1	82.6	6.1	0.38	8.03
Unoccupied	Q	Q	N	8.4	18.7	47.1	Q	Q	Q
Government Owned	1,315	40.6	29.4	19.2	36.0	64.4		0.29	7.20
Federal	1,455		18.4	13.7		93.5			6.63
StateLocal	1,323 1,297	39.1 42.6	16.6 44.0	19.2 19.2		61.0 64.4			7.83 7.05
	1,231	72.0	77.0	10.2	70.0	0 1 . 1	0.2	0.50	7.00
Vacancy Status	400	10.0	k i	0.4	04 7	17 1	2.0	0.45	0.40
Completely Vacant	480		N	8.4 6.5	21.7	47.1	3.9		8.10
Mostly Vacant	Q 1,169	Q 36.5	Q 26.1	6.5 16.3	35.9 34.3	41.2 63.9	Q 9.4		Q 8.04
I GIUGIIV VALAIIL	1,109	30.5	ZU. I	18.7	34.3 37.9	73.7		0.29	0.04

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

2003	1						T		
		Na	tural Gas Co	nsumption	n				
				Building	stribution g-Level Int feet/squa	ensities	Natura	Gas Expe	nditures
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Number of Establishments									
One	742		44.8	19.3	38.4	74.4		0.36	
2 to 5	779		33.7	15.9	33.6	62.3			7.99
6 to 10	1,186		9.2	6.8	27.0	54.7		0.27	7.86
11 to 20	2,685	26.2	14.2	6.1	16.9	35.7		0.20	
More than 20	Q		14.0	12.1	30.1	40.3		0.25	
Currently Unoccupied	480	18.8	N	8.4	21.7	47.1	3.9	0.15	8.10
Predominant Exterior Wall Material									
Brick, Stone or Stucco	846		40.8	17.0	36.6	72.5	6.5	0.36	
Concrete (Block or Poured)	803		47.2	21.7	41.3	77.9	6.2		7.71
Concrete Panels	2,100	37.3	19.6	16.3	32.6	62.6		0.28	7.60
Siding or Shingles	317		35.3	22.3	40.9	69.4		0.37	8.88
Metal Panels			32.4	12.8	28.1	60.3		0.26	
Window Glass	1,311	20.2	12.1	28.3	28.7	47.9	7.8	0.12	
Other	1,012		26.5	17.0	23.4	57.2		0.28	
No One Major Type	Q	Q	Q	7.4	29.6	39.5	Q	Q	Q
Predominant Roof Material	4 440	47.4	20.0	40.0	44.7	70.0	0.5	0.00	7.00
Built-Up	1,110	47.4	39.3	19.2		78.3	8.5	0.36	
Shingles (Not Wood)	444	46.1	45.2	19.5	35.8	61.8	3.7	0.38	8.25
Metal Surfacing	431	32.6	37.3	13.7	28.8	60.3			
Synthetic or Rubber	1,450		30.0	21.2		83.9	10.8	0.33	
Slate or Tile	425		34.2	13.9	34.4	79.6		0.36	8.69
Wooden Materials	343 677		33.0	12.8	27.1 21.7	54.4		0.30	
Concrete	Q		20.8	9.5	47.5	98.7 61.8		Q	
Other No One Major Type	1,219		Q Q	32.0 34.9	49.5	68.0	Q 9.5	Q 0.33	
Renovations in Buildings Constructed Before 1980									
(more than one may apply)									
Any Type of Renovation	4 005	F0.0	40.0	04.4	40.4	74.4	7 ^	0.07	7.00
Since 1980	1,035		42.2	21.4		74.1	7.6	0.37	7.32
Addition or Annex	1,865		54.7	26.4	47.9	85.0	12.5	0.39	
Reduction In Floorspace	,	51.8	48.2	29.1	62.1	128.1	21.7	0.40	
Cosmetic Improvements	1,010		38.9	20.9	39.0	70.8		0.36	7.44
Wall or Roof Replacement Interior Wall	1,152	42.6	34.6	18.4	37.9	62.1	8.4	0.31	7.28
Re-Configuration	1,191	47.2	36.1	21.6	39.7	71.1	8.7	0.35	7.33
HVAC Equipment Upgrade	1,480	53.4	40.5	19.2	40.9	74.1	10.7	0.39	7.24
Lighting Upgrade	1,270	47.6	38.2	18.4	39.4	69.7	9.4	0.35	7.44
Window Replacement	1,205	47.0	41.4	18.4	35.6	67.2	8.9	0.35	7.37
Plumbing System Upgrade	1,303	48.7	40.0	20.9	42.4	71.3	9.6	0.36	7.38
Insulation Upgrade	897	43.1	32.8	18.4	37.9	69.4	6.9	0.33	7.66
Other Renovation	2,147	57.4	Q	27.8	41.2	133.6	Q	Q	Q
No Renovations Since 1980	546		42.8	17.9	37.7	70.8	4.3	0.33	
Building Newer than 1980	845	39.3	28.8	15.1	31.9	69.7	6.8	0.32	8.08

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

2003									
		Na	tural Gas Co	Di Building	stribution g-Level Int	ensities			
		per		(cubic	feet/squa	re foot)	Natura	Gas Expe	nditures
	per Building (thousand cubic feet)	Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Energy Sources (more than									
one may apply)									
Electricity	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Natural Gas	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Fuel Oil	3,808	47.3	35.0	11.3	35.9	68.7	27.4	0.34	7.20
District Heat	1,856	18.7	6.6	1.3	3.4	9.7	13.2	0.13	7.09
District Chilled Water	1,956		6.0	1.7	6.6	43.7	14.1	0.14	7.19
Propane Other	2,197 1,188	41.7 50.7	52.5 36.6	19.8 17.3	43.0 25.3	109.0 45.1	16.0 8.6	0.30 0.36	7.30 7.20
	•								
Space-Heating Energy Sources Natural Gas	808	47.3	42.7	19.4	37.9	71.3	6.2	0.37	7.73
Natural Gas Main	819	49.6	44.5	20.7	38.9	71.7	6.3	0.38	7.69
Natural Gas Secondary	678	28.3	27.1	10.3	22.4	49.2		0.23	8.23
Other Excluding Natural Gas	574	17.1	9.7	6.1	23.5	65.0		0.14	8.38
Buildings without Heating	Q	Q	Q	5.9	12.9	54.7	Q	Q	8.40
Primary Space-Heating									
Energy Source									
Electricity	609	27.8	24.2	11.2	27.2	72.8	5.1	0.23	8.38
Natural Gas	819	49.6	44.5	20.7	38.9	71.7	6.3	0.38	7.69
Fuel Oil	522	Q	19.5	4.3	12.7	28.6	4.3	Q	8.28
District Heat	Q	10.5	3.4	1.1	2.8	7.9	Q	0.08	7.71
Propane Other	Q Q	Q Q	Q Q	2.9 0.0	2.9 20.7	2.9 25.1	Q Q	Q Q	Q Q
Other	Q	Q	Q	0.0	20.7	25.1	Q	Q	Q
Cooling Energy Sources Natural Gas	5,156	87.6	66.4	16.4	42.9	105.2	38.9	0.66	7.54
Other Excluding Natural Gas	785	41.9	33.9	17.9	36.6	70.8	6.1	0.00	7.78
Buildings without Cooling		42.4	89.1	17.2	37.9	72.5	3.4	0.33	7.79
Water-Heating Energy Sources									
Natural Gas	1,013	50.8	40.9	20.2	41.5	81.1	7.7	0.38	7.58
Other Excluding Natural Gas	515		23.5	15.0	32.8	62.8			8.37
Bldgs without Water Heating	210		42.7	11.7	25.6				8.98
Cooking Energy Sources									
Natural Gas	1,819	53.8	43.7	30.9	68.6	173.1	13.5	0.40	7.41
Other Excluding Natural Gas	1,273		38.6	21.8	36.0				7.37
Buildings without Cooking	494	36.4	30.7	15.7	31.9	61.4	4.0	0.30	8.16
Energy End Uses (more than one may apply)									
Buildings with Space Heating	790	43.1	35.9	18.4	37.4	70.9	6.1	0.33	7.76
Buildings with Cooling	820	43.0	34.8	17.9	36.6	70.9	6.4	0.33	7.77
Buildings with Water Heating	853		35.8	19.1	38.9	74.5			7.73
Buildings with Cooking	1,715		42.9	26.6	56.2			0.38	7.41
Buildings with Manufacturing	1,402	42.3	40.1	13.3	37.4	62.6	10.3	0.31	7.37
Buildings with Electricity	4.004	40.0	20.0	00 -	44.0	70.0	05.0	0.00	7.40
Generation	4,964	49.8	33.8	20.7	41.6	72.0	35.6	0.36	7.18

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

		Na	tural Gas Co	nsumption	า				
		nor		Building	stribution g-Level Int feet/squa	ensities	Natural	l Gas Expei	nditures
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	5.9	12.9	54.7	Q	Q	8.40
1 to 50	408		34.9	6.9	20.2		3.6		8.81
51 to 99	820		37.2	14.5	29.2	66.8	6.6		8.00
100	834		35.8	21.5	40.4		6.4	0.35	7.66
Percent of Floorspace Cooled									
Not Cooled	435	42.4	89.1	17.2	37.9	72.5	3.4	0.33	7.79
1 to 50	729		52.5	16.5	31.5	62.6	5.8		7.91
51 to 99	1,088		36.1	17.0	34.8	65.0	8.3		7.64
100	774		29.3	19.3	40.4		6.0		7.76
Heating Equipment (more									
than one may apply)									
Heat Pumps	1,431	39.1	31.5	11.8	32.0	52.5	11.9	0.32	8.30
Packaged Heat Pumps	1,584		28.8	11.3	36.0	55.5	13.0	0.34	8.23
Split-System Heat Pumps	813	28.2	25.8	9.3	23.0	41.5	7.2		8.82
Individual Room Heat Pumps	2,561	37.0	33.4	19.4	36.0	60.3	20.5	0.30	7.99
Furnaces	497	42.7	44.3	19.7	36.2	67.4	3.9	0.33	7.80
Individual Space Heaters	857	41.0	38.1	19.2	32.3	59.1	6.3	0.30	7.39
District Heat	1,582	16.6	5.7	1.1	2.8	9.7	11.2	0.12	7.08
Boilers	2,334	55.5	47.6	29.7	54.4	91.5	17.2	0.41	7.35
Packaged Heating Units Other	962 539		34.5 26.7	14.3 17.2	32.8 30.8	75.6 55.8	7.6 4.3		7.93 8.01
Cooling Equipment (more than one may apply)									
Residential-Type Central									
Air Conditioners	582	47.5	43.6	18.8	37.0	68.9	4.4	0.36	7.56
Heat Pumps	1,290		31.4	12.3	32.0	55.7	10.7		8.32
Packaged Heat Pumps	1,405		29.4	11.8	33.5		11.6	0.35	8.24
Split-System Heat Pumps	727		26.9	9.3	26.8	41.5	6.4		8.84
Individual Room Heat Pumps	2,638		31.8	19.4	36.0	60.3	21.1	0.28	7.99
Individual Air Conditioners	1,015		48.0	17.5	37.4		7.8	0.23	7.64
District Chilled Water	1,956			17.3	6.6	43.7		0.33	7.19
Central Chillers	6,235		37.1	21.1	41.7		44.4	0.14	7.18
Packaged Air Conditioning	0,200	55.4	07.1	١.١	71.7	70.4	77. 7	0.50	7.12
Units	947	44.4	38.3	18.2	36.0	73.6	7.4	0.34	7.77
Swamp Coolers	1,001	61.7	62.5	19.2	36.2			0.34	6.66
Other	3,126		45.9	11.9	30.2				0.00 Q
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	800	47.8	44.7	19.2	38.0	68.2	6.2	0.37	7.70
Cooling	865		44.7	16.5	38.5				7.70
Water Heating Equipment									
Centralized System	763		41.1	19.8	39.9	76.8	6.0		7.86
Distributed System	564	32.7	32.5	14.6	36.2	68.0	4.5	0.26	8.06
Combination of Centralized									
and Distributed System	2,941	46.0	26.8	18.8	39.6	73.3	20.9	0.33	7.12

Table C24. Natural Gas Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

		Na	tural Gas Co	nsumptior	า				
		per		Di Building	stribution g-Level Int feet/squai	ensities	Natural	Gas Expe	nditures
	per Building (thousand cubic feet)	Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Per- centile	Median	75th Per- centile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
All Buildings*	782	43.0	36.0	17.6	37.1	70.9	6.1	0.33	7.77
Energy-Related Space Functions (more than one may apply) Commercial Food Preparation	1,715	51.8	42.8	26.6	56.1	144.0	12.7	0.38	7.41
Activities with Large Amounts of Hot Water	2,235	56.3	50.2	27.2	62.9	141.0	16.0	0.40	7.16
Separate Computer Area	2,276	41.2	29.9	14.4	30.9	58.2	16.7	0.30	7.34
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System		47.2	29.2	19.7	37.9	83.8	17.5	0.35	7.37
Economizer Cycle	2,242	46.9	30.4	18.9	41.8	85.7	16.4	0.34	7.30
HVAC Maintenance Energy Management and	1,021	43.5	34.6	17.9	37.4	70.1	7.8	0.33	7.68
Control System (EMCS)	2,979	39.8	29.7	14.7	39.7	70.8	21.3	0.29	7.17
Equipment Usage Reduced When Building Not In Full Use									
(more than one may apply) ^a Heating	726	40.2	35.3	17.0	35.9	68.0	5.7	0.32	7.85
Cooling	745	39.7	31.4	16.9	35.8	69.7	5.8	0.32	7.83
Lighting	594	39.0	30.9	17.8	37.3	70.1	4.8	0.31	8.01
Office Equipment		36.5	35.4	15.6	33.6	63.6	4.2	0.29	7.94
Annual Consumption (hundred cubic feet)									
1,000 or Less		8.2	8.8	6.5	15.2	30.3	0.6	0.09	11.60
1,001 to 5,000	239	24.8	22.1	22.3	39.7	69.7	2.2	0.23	9.20
5,001 to 10,000	707	38.3	23.3	35.0	63.8	146.5	6.0	0.33	8.54
10,001 to 25,000	1,503	44.9	36.5	38.9	73.6	156.1	12.0	0.36	8.02
25,001 to 50,000	3,348	51.3	50.6	46.4	75.9	150.1	25.5	0.39	7.61
50,001 to 100,000 Over 100,000		53.2 86.8	50.8 69.1	40.1 59.4	73.3 94.4	130.4 141.6	48.4 167.0	0.37 0.59	6.87 6.75
Provider of Natural Gas									
(more than one may apply)	704	44.0	0.4.0	47.0	00.0	70.0		0.00	7.05
Local Utility	701	41.2	34.9	17.2	36.2	70.2	5.6 17.0	0.33	7.95 6.73
Some Other Provider	2,521	59.1	44.7	27.2	57.6	94.8	17.0	0.40	6.73

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 3.8 percent of total natural gas 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 that use natural gas.

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet) North- Mid-			Buildi	ngs Usir	orspace ng Natur quare fee	al Gas		Energy I	al Gas Intensity square f		
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Building Floorspace												
(Square Feet)	40	0.4	0.5	40	5 40	4.07.4	000	000	00.4	040	740	00.7
1,001 to 5,000	46	91	65	40	513	1,074	869	628	90.4	84.9	74.9	63.7
5,001 to 10,000	38	57	64	44	621	959	1,349	763	61.3	59.0	47.5	57.2
10,001 to 25,000	51	119	70	60	1,173	2,436	2,066	1,378	43.9	48.7	33.8	43.6
25,001 to 50,000	45	115	47	44	977	2,262	1,589	1,196	45.6	50.7	29.4	36.6
50,001 to 100,000	58	94	59	25	1,645	1,930	2,153	955	35.5	48.7	27.3	26.3
100,001 to 200,000	65	86	67	24	1,706	1,777	2,241	921	38.3	48.4	29.7	25.6
200,001 to 500,000	60	71	41	28	1,588	1,673	1,419	999		42.3	28.6	27.5
Over 500,000	51	51	49	Q	956	1,052	1,625	973	53.4	48.8	30.0	48.3
Principal Building Activity												
Education	51	113	47	48	1,347	2,184	2,291	1,222		51.8	20.6	39.6
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q
Food Service		50	87	Q	Q	379	623	Q		133.2	139.3	Q
Health Care		64	87	38	464	657	987	436		97.0	88.4	86.1
Inpatient	41	50	80	27	351	395	812	247	117.4	127.2	98.6	108.1
Outpatient	Q	14	Q	Q	Q	262	Q	Q		51.5	Q	Q
Lodging	35	66	55	52	982	1,015	1,338	920	Q	65.0	41.1	56.6
Retail (Other Than Mall)		37	23	12	385	688	1,148	645	42.3	54.1	20.4	18.3
Office	89	104	33	35	2,301	2,447	1,915	1,544		42.3	17.2	23.0
Public Assembly	16	43	22	18	712	770	699	542		56.4	32.1	32.4
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q
Religious Worship	15	37	20	8	384	899	923	424		41.4	21.7	18.1
Service	23	57	28	Q	368	934	822	Q	62.2	61.3	34.6	Q
Warehouse and Storage	25	61	20	Q	985	1,921	1,617	971	25.8	31.9	12.1	Q
Other	45	Q	Q	Q	531	Q	Q	Q		Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed			_	_			_	_			_	_
Before 1920	42	66	Q	Q	950	1,175	Q	Q		56.4	Q	Q
1920 to 1945	88	94	23	18	1,845	1,344	790	699		69.6	28.8	25.7
1946 to 1959	56	85	46	24	1,406	1,681	953	620	39.5	50.5	48.1	38.3
1960 to 1969	58	94	50	46	1,276	1,819	1,428	1,113	45.4	51.8	35.1	40.9
1970 to 1979	55	138	74	74	1,162	2,737	2,265	1,494	47.6	50.4	32.5	49.4
1980 to 1989	40	77	89	75	1,016	1,342	2,520	1,592		57.7	35.5	47.4
1990 to 1999	44 32	94 35	121 39	46 16	949 576	2,126 939	3,708 1,261	1,395 654		44.1 37.6	32.6 31.3	33.0 23.8
	32	33	39	10	370	939	1,201	054	50.5	37.0	31.3	23.0
Climate Zone: 30-Year Average												
Under 2,000 CDD and	_				_	,						
More than 7,000 HDD	Q	235	N	122	Q	4,382	N	2,102		53.6	N	57.9
5,500-7,000 HDD	188	405	N	66	3,692	7,947	N	1,211	51.0	51.0	N	54.1
4,000-5,499 HDD	165	44	104	14	4,328	834	2,508	443		52.3	41.5	30.8
Fewer than 4,000 HDD	N	N	249	99	N	N	6,748	3,761	N	N	36.8	26.2
2,000 CDD or More and Fewer than 4,000 HDD	N	N	107	11	N	N	4,054	296	N	N	26.5	37.9
Number of Floors												
One	101	209	192	142	2,061	3,915	5,853	3,111	48.9	53.5	32.8	45.5
Two	89	210	98	79	1,972	4,485	2,781	2,203	45.3	46.9	35.2	35.8
Three	60	109	47	17	1,464	2,239	1,252	714		48.6	37.9	23.7
Four to Nine	112	125	87	42	2,539	2,075	2,036	1,019		60.4	42.9	41.4
Ten or More	52	29	36	Q	1,145	449	1,389	766	45.8	65.6	25.7	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	(billion cubic feet)				Buildir	ngs Usir	orspace ng Natur quare fee	al Gas		Energy I	al Gas Intensity square f	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Number of Workers (main shift)												
Fewer than 5	49	121	55	39	1,191	2,608	1,974	1,249	41.0	46.3	27.9	31.4
5 to 9	40	63	54	35	693	1,231	1,464	695	58.1	51.0	36.7	50.8
10 to 19	46	94	60	35	1,258	1,769	1,533	758	36.9	53.2	38.9	45.7
20 to 49	65	157	97	63	1,955	2,620	2,282	1,355	33.4	59.9	42.7	46.6
50 to 99	58	91	46	39	1,183	1,990	1,905	1,078	48.8	45.9	24.2	35.9
100 to 249	57	75	68	27	1,118	1,407	1,574	1,078	51.0	53.3	43.4	26.6
250 or More	100	82	80	72	1,783	1,538	2,579	1,650	55.8	53.5	30.9	43.9
Weekly Operating Hours												
Fewer than 40	Q	49	17	22	Q	1,420	764	593	Q	34.7	21.7	37.6
40 to 48	43	109	50	40	1,346	2,107	2,262	1,198	31.9	51.6	22.0	33.6
49 to 60	80	160	74	50	2,148	3,548	2,813	1,682	37.1	45.0	26.2	29.6
61 to 84	75	111	69	50	1,434	2,205	2,402	1,425	52.3	50.2	28.8	35.1
85 to 167	38	106	71	34	958	1,626	1,613	1,028	39.9	65.4	43.8	33.0
Open Continuously	163	149	180	114	2,812	2,257	3,455	1,886	58.1	65.9	52.2	60.6
Ownership and Occupancy												
Nongovernment Owned	348	513	367	230	7,646	9,795	9,888	5,988	45.5	52.3	37.1	38.4
Owner Occupied	201	253	145	87	4,156	4,972	4,873	2,547	48.4	51.0	29.8	34.0
Nonowner Occupied	144	248	221	143	3,302	4,276	4,956	3,352	43.5	58.1	44.6	42.5
Unoccupied	Q	Q	Q	Q	Q,00 <u>2</u>	,, <u>,,,</u> Q	,,000 Q	0,00 <u>2</u> Q	Q	Q	Q	Q
Government Owned	67	171	93	81	1,535	3,368	3,422	1,825	43.9	50.7	27.3	44.1
Federal	Q	Q	6	Q	1,000 Q	0,000 Q	356	1,0 <u>2</u> 0 Q	Q	Q	16.9	Q
State	Q	27	36	22	Q	499	1,205	463	Q	54.6	30.3	48.0
Local	53	132	51	46	1,136	2,497	1,862	1,135	47.1	53.1	27.3	40.3
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	91	113	55	49	2,146	2,450		1,440	42.4	46.1	22.8	34.2
Not At All Vacant	317	554	404	259	6,754	10,049		6,221	47.0	55.1	37.4	41.7
Number of Establishments												
One	287	507	366	258	5,740	9,415	9,850	5,513	50.1	53.9	37.1	46.8
2 to 5	69	127	61	40	1,877	2,420	1,945	1,351	37.0	52.7	31.3	29.4
6 to 10	20	15	Q	6	474	353	Q	227	41.8	41.5	Q	26.0
11 to 20	Q	Q	Q	Q	Q	Q	391	Q	Q	Q	28.7	Q
More than 20	Q	Q	15	Q	Q	Q		Q	Q	Q	20.7	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q		Q		Q	20.3 Q	Q
Predominant Exterior Wall Material												
Brick, Stone or Stucco	280	410	256	147	5,607	7,366	7,125	3,453	50.0	55.7	35.9	42.5
Concrete (Block or Poured)	65	137	91	47	1,623	2,466	2,096	1,138	39.8	55.7	43.3	41.6
Concrete Panels	Q	59	30	61	Q	1,072	1,538	1,535	Q	54.9	19.5	39.5
Siding or Shingles	17	28	25	13	510	684	534	269	32.8	40.9	46.2	49.8
Metal Panels	Q	30	43	34	Q	1,050	1,541	986	Q	28.7	27.8	34.8
Window Glass	Q	Q	Q	Q	Q	1,030 Q	1,541 Q	Q	Q	20.7 Q	27.0 Q	04.0 Q
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

		Consu	tural Ga mption ubic fee		Buildir	ngs Usir	orspace ng Natur quare fee	al Gas		Energy	al Gas Intensity square f	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Predominant Roof Material												
Built-Up	139	260	184	137	2,935	4,573	4,450	3,250		56.9	41.4	42.1
Shingles (Not Wood)	64	121	68	48	1,169	2,419	1,938	993		50.0	35.0	48.0
Metal Surfacing	Q 165	62 193	67 115	45 52	Q 2 200	1,542	2,726	1,127		40.0	24.5	40.0
Synthetic or RubberSlate or Tile	165 Q	193	115 16	52 16	3,308 Q	3,767 243	3,291 484	1,472 468		51.3 64.8	35.0 32.5	35.5 35.2
Wooden Materials	Q	Q	Q	Q	Q	243 Q	Q	Q		04.0 Q	32.3 Q	33.2 Q
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	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation												
Since 1980	172	278	123	90	3,567	4,692	2,809	2,202	48.2	59.1	43.8	41.1
Addition or Annex	61	116	67	51	1,239	1,793	1,122	883	49.3	64.8	59.9	57.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	135	196	81	70	2,980	3,309	2,011	1,773	45.4	59.2	40.1	39.6
Wall or Roof Replacement Interior Wall	66	113	45	46	1,979	2,010	1,226	1,113	33.2	56.0	37.0	41.6
Re-Configuration	87	134	54	56	2,005	2,347	1,417	1,250	43.6	56.9	38.2	45.0
HVAC Equipment Upgrade	114	188	88	63	2,265	3,003	1,713	1,501	50.2	62.8	51.3	41.9
Lighting Upgrade	113	159	54	59	2,582	2,703	1,354	1,465	43.8	58.8	39.8	40.5
Window Replacement	84	99	22	30	2,145	1,657	547	650		59.9	39.4	46.1
Plumbing System Upgrade	82	110	41	45	1,913	1,639	912	1,252		67.0	45.2	35.6
Insulation Upgrade Other Renovation	34 Q	53 Q	25 Q	17 Q	883 Q	1,090 Q	511 Q	476 Q		48.5 Q	48.2 Q	34.9 Q
No Renovations Since 1980	127	199	87	83	3,072	4,065	3,013	1,971	41.2	49.1	29.0	42.3
Building Newer than 1980	117	206	250	137	2,542	4,406	7,489	3,641	45.9	46.9	33.3	37.6
Energy Sources (more than one may apply)												
Electricity	415	683	460	311			13,306			51.9	34.6	39.8
Natural Gas	415	683	460	311		13,163		7,813		51.9	34.6	39.8
Fuel Oil	148	136	131	76	3,714	2,123	2,962	1,584		64.2	44.3	48.3
District Heat	Q	14	14	Q	666	680	811	Q		21.0	16.7	Q
District Chilled Water	Q	Q 35	14	Q	Q	Q 877	694	Q		Q 39.9	20.1	Q 42.6
Propane Other	Q Q	20	Q Q	Q Q	Q Q	377	787 Q	632 Q		53.0	Q Q	42.0 Q
Space-Heating Energy Sources												
Natural Gas	393	668	410	279	,	12,180	10,693	6,848	54.3	54.8	38.3	40.7
Natural Gas Main	367	630	377	262	-	11,321	9,299	5,911	57.0	55.7	40.6	44.3
Natural Gas Secondary	26	37	32	17	800	858	1,393	938		43.3	23.2	18.5
Other Excluding Natural Gas Buildings without Heating	20 Q	14 Q	49 Q	19 Q	1,938 Q	951 Q	2,413 Q	713 Q		15.2 Q	20.4 Q	26.8 Q
Primary Space-Heating Energy Source												
Electricity	24	45	69	33	675	1,185	2,954	1,348	35.3	38.1	23.5	24.4
Natural Gas	367	630	377	262	6,439	11,321	9,299	5,911		55.7	40.6	44.3
Fuel Oil	16	Q	Q	Q	Q, 100	Q	Q, <u>2</u> 33	Q	_	Q	Q	Q
District Heat	Q	Q	Q	Q	526	Q	741	Q		Q	12.2	Q
Propane	N	N	Q	N	N	N	Q	N	N	N	Q	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

- Region for Henrican Da	(billion cubic feet)				Buildi	ngs Usir	orspace ng Natur quare fee	al Gas		Energy	al Gas Intensity square f	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Cooling Energy Sources							_					_
Natural Gas	Q	Q		Q	Q	Q	Q	Q		Q		Q
Other Excluding Natural Gas	341	614		282			12,979	6,989		51.9		40.3
Buildings without Cooling	31	46	Q	20	625	1,074	Q	556	49.9	43.3	Q	36.4
Water-Heating Energy Sources Natural Gas	317	513	363	270	5,601	8,799	8 206	6,114	56.6	58.3	43.7	44.2
							8,306					
Other Excluding Natural Gas	85	151		33	3,159	3,685	4,257	1,212		41.0	19.1	27.2
Bldgs without Water Heating	Q	20	16	7	Q	679	748	487	Q	29.1	20.9	15.3
Cooking Energy Sources Natural Gas	175	262	259	135	3,580	3,965	5,480	2,412	48.7	66.0	47.3	55.9
Other Excluding Natural Gas	33	61	239	155	563	1,237	946	473		49.6	28.9	32.3
S S	208	360		161	5.038	7,961	6,885	4,928	41.3	45.3	25.2	32.6
Buildings without Cooking	200	300	174	101	5,036	7,901	0,000	4,920	41.3	40.5	23.2	32.0
Energy End Uses (more than one may apply)												
Buildings with Space Heating	413	682	459	298	9 176	13,130	13 106	7,561	45.0	51.9	35.0	39.4
Buildings with Cooling	384	637		291		12,090		7,257	44.9	52.7	34.6	40.0
Buildings with Water Heating	402	664		303		12,484		7,326		53.2	35.4	41.4
Buildings with Cooking	207	323		150	4,143	5,202		2,885		62.1	44.6	52.1
Buildings with Manufacturing	29	32		Q	516	711	524	551	57.2	45.6	27.3	38.5
Buildings with Electricity				_								
Generation	136	165	133	83	2,554	2,901	3,127	1,820	53.3	57.0	42.6	45.7
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	24	23	29	18	808	876	1,281	1,041	30.0	26.3	22.7	17.2
51 to 99	65	79	60	55	1,199	1,336	1,858	1,573	54.4	59.3	32.3	35.3
100	324	580	370	225	7,169	10,919	9,966	4,948	45.1	53.1	37.1	45.4
Percent of Floorspace Cooled	•		_	•		4 ~= :	_				_	
Not Cooled	31	46		20	625	1,074	Q	556		43.3	Q	36.4
1 to 50	119	187		63	3,222	3,954	3,025	1,931	37.0	47.3	22.8	32.6
51 to 99	118 146	177 273		63 164	2,507 2,828	3,111 5,025	2,362 7,733	1,753 3,573		57.0 54.3	33.3 39.7	36.1 46.0
Heating Equipment (more												
than one may apply)												
Heat Pumps	51	32		43		754	-	1,117		42.3	33.2	38.1
Packaged Heat Pumps	27	24		Q	549	563	,	651	49.9	42.9		Q
Split-System Heat Pumps	Q	Q		8	Q	Q	982	279		Q	25.9	29.9
Individual Room Heat Pumps		Q		Q		Q	918	Q		Q	30.5	Q
Furnaces	117	298		95	2,355	6,265		2,381	49.7	47.5	33.3	39.9
Individual Space Heaters	93	155		61	1,992	3,362		1,515	46.5	46.0		40.2
District Heat	Q	Q		Q	548	Q		Q		Q		Q
Boilers	269	365		167	5,142	5,729	-	3,362		63.8	52.5	49.6
Packaged Heating Units	134	167		74	,	3,209		2,551	53.1	52.0	35.5	29.0
Other	Q	22	9	Q	Q	562	716	Q	Q	38.3	13.3	Q

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

Negion for Non-Mail Bu	Total Natural Gas Consumption (billion cubic feet)				Buildi	ngs Usir	orspace ng Natur quare fee	al Gas		Energy	al Gas Intensity square f	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Cooling Equipment (more												
than one may apply)												
Residential-Type Central												
Air Conditioners	101	172		36	1,937	3,032		842		56.6		43.0
Heat Pumps	55	36		42	996	803	,	1,232		44.9		34.3
Packaged Heat Pumps	32	28		Q		593	,	627	51.1	46.5		Q
Split-System Heat Pumps	Q	Q		Q	Q	Q	,	Q		Q		Q
Individual Room Heat Pumps		Q	29	11	Q	Q		598		Q		18.5
Individual Air Conditioners	111	164		48	2,742	2,835		1,285		58.0		37.7
District Chilled Water	Q	Q		Q		Q		Q		Q		Q
Central Chillers	118	157	134	76	1,523	2,498	3,433	1,646	77.6	62.9	39.0	46.4
Packaged Air Conditioning	044	004	000	400	5 000	7 400	7.044	4.05.4	40.0	540	07.4	07.7
Units	244	391	262	160	5,309	7,199	-	4,254		54.3		37.7
Swamp Coolers	Q	Q			Q	Q		1,077		25.9		62.5
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	121	240	127	98	2,791	4,392	3,081	2,011	43.5	54.8	41.2	48.6
Cooling	167	308		125	4,177	5,122		2,657	40.0	60.2		47.2
G												
Water Heating Equipment												
Centralized System	286	430		192	5,521	8,122	,	4,084	51.9	52.9		46.9
Distributed System	51	101	63	31	1,819	2,100	2,288	1,352	28.2	48.2	27.5	23.2
Combination of Centralized												
and Distributed System	65	133	100	80	1,421	2,263	2,649	1,890	45.6	58.6	37.8	42.5
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	207	323	287	149	4,143	5,202	6,426	2,873	50.0	62.1	44.6	52.0
Activities with Large					,	•		, -				
Amounts of Hot Water	168	308	256	171	3,304	4,701	5,214	2,804	50.8	65.5	49.1	61.0
Separate Computer Area	238	283	191	136	4,882	5,605	6,290	3,838	48.7	50.5	30.4	35.5
HVAC Conservation Features												
(more than one may apply)	450	040	475	444	2 000	4047	4 500	2.050	F0.0	FF 0	20.4	40.0
Variable Air-Volume System Economizer Cycle	159	240		114	,	4,347		2,656		55.3		43.0
,	178	296				5,231		3,620		56.6		38.6
HVAC Maintenance Energy Management and	366	567	400	277	0,140	10,764	11,127	6,926	44.9	52.5	36.0	39.9
Control System (EMCS)	101	171	111	80	2,291	3,257	3,741	2,337	44.2	52.4	29.6	34.4
Equipment Usage Reduced When Building Not In Full Use												
(more than one may apply) ^a	205	4 4 7	202	202	7 000	0.404	0.047	E 7F7	40.4	40.7	20.4	25.0
Heating	305	447		206	7,022	9,184		5,757		48.7		35.8
Cooling	283	435				8,746	-	5,919		49.8		37.2
Lighting Office Equipment	240 106	510 198			5,902 3,001	10,070 4,439		5,681	40.7 35.2	50.7 44.7		33.5 34.4
Onice Equipment	100	198	60	18	3,001	4,439	2,970	2,259	35.2	44./	21.0	34.4

Table C25. Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)				Buildi	ngs Usir	orspace ng Natur quare fee	al Gas		Energy	al Gas Intensity square f	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	415	683	460	311	9,181	13,163	13,311	7,813	45.2	51.9	34.6	39.8
Annual Consumption (hundred cubic feet)												
1,000 or Less	4	11	11	9	884	698	1,610	1,145	Q	16.1	7.0	7.9
1,001 to 5,000	49	85	70	38	1,633	2,770	3,420	1,909	29.7	30.6	20.5	20.1
5,001 to 10,000	46	97	59	37	1,010	1,983	2,255	1,005	45.1	48.9	26.3	37.3
10,001 to 25,000	77	119	81	71	1,926	2,232	2,162	1,447	39.8	53.5	37.5	49.4
25,001 to 50,000	53	114	64	52	1,371	2,135	1,258	770	38.7	53.4	51.2	68.0
50,001 to 100,000	43	85	55	27	810	1,450	1,092	618	53.3	58.6	50.7	44.5
Over 100,000	144	172	118	75	1,546	1,895	1,514	919	93.3	90.9	78.2	81.2
Provider of Natural Gas (more than one may apply)												
Local Utility	327	568	412	273	7,977	11,278	12,067	7,040	41.0	50.4	34.2	38.8
Some Other Provider	113	155	59	50	1,562	2,378	1,579	853	72.2	65.1	37.3	58.9

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.

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 that use natural gas.

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 3.8 percent of total natural gas 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.

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	1		tural Gas ditures	5		N	atural G	as Expe	enditures	s (dollar	s)	
		•	ditures dollars)		per 1	housan	d Cubic	Feet		per Squ	are Foot	
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Building Floorspace												
(Square Feet)												
1,001 to 5,000		782	599	317	9.84	8.57	9.21	7.94	0.89	0.73	0.69	0.51
5,001 to 10,000		427	582	332	9.15	7.54	9.08	7.60	0.56	0.45	0.43	0.44
10,001 to 25,000	502	945	656	422	9.74	7.96	9.41	7.02	0.43	0.39	0.32	0.31
25,001 to 50,000	408	738	402	317	9.14	6.44	8.60	7.24	0.42	0.33	0.25	0.27
50,001 to 100,000	531	662	493	182	9.08	7.04	8.39	7.26	0.32	0.34	0.23	0.19
100,001 to 200,000	454	573	555	156	6.94	6.66	Q	6.59	0.27	0.32	0.25	0.17
200,001 to 500,000	457	423	286	178	7.64	5.97	7.05	6.46	0.29	0.25	0.20	0.18
Over 500,000	Q	295	293	Q	7.80	5.75	6.02	7.60	0.42	0.28	0.18	Q
Principal Building Activity												
Education		740	397	339	8.02	6.55	8.42	7.01	0.31	0.34	0.17	0.28
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	355	747	Q	Q	7.04	8.61	Q	Q	0.94	1.20	Q
Health Care	310	381	630	217	6.62	5.98	7.23	5.79	0.67	0.58	0.64	0.50
Inpatient	255	279	565	143	6.19	5.55	7.05	5.36	0.73	0.71	0.69	0.58
Outpatient	Q	103	Q	Q	Q	7.60	Q	Q	Q	0.39	Q	Q
Lodging	295	419	447	Q	8.44	6.34	8.12	8.06	Q	0.41	0.33	0.46
Retail (Other Than Mall)	141	274	212	91	8.69	7.38	9.06	7.73	0.37	0.40	0.18	0.14
Office	827	826	287	261	9.27	7.97	8.71	7.34	0.36	0.34	0.15	0.17
Public Assembly	142	315	188	129	9.11	7.26	8.39	7.36	Q	0.41	0.27	0.24
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship		285	176	61	9.61	7.66	8.80	7.95	0.37	0.32	0.19	0.14
Service		438	260	Q	Q	7.66	9.16	Q	Q	0.47	0.32	Q
Warehouse and Storage		399	187	Q	9.19	6.50	9.57	7.07	0.24	0.21	0.12	0.16
Other	355	Q	Q	Q	7.81	Q	Q	Q	0.67	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
Before 1920	390	502	Q	Q	9.37	7.58	Q	Q	0.41	0.43	Q	Q
1920 to 1945		582	208	135	8.87	6.23	9.14	7.50	0.42	0.43	0.26	0.19
1946 to 1959		635	386	162	7.69	7.49	Q	6.83	0.30	0.38	0.41	0.26
1960 to 1969	509	640	407	316	8.80	6.80	8.13	6.93	0.40	0.35	0.29	0.28
1970 to 1979	473	927	555	511	8.55	6.71	7.53	6.94	0.41	0.34	0.24	0.34
1980 to 1989		585	755	570	8.94	7.56	8.45	7.55	0.35	0.44	0.30	0.36
1990 to 1999		675	1,075	361	7.75	7.20	8.90	7.85	0.36	0.32	0.29	0.26
2000 to 2003		296	333	112	8.37	8.38	8.45	7.21	0.47	0.32	0.26	0.17
Climate Zone: 30-Year Average												
Under 2,000 CDD and												
More than 7,000 HDD	Q	1,814	N	763	8.07	7.72	N	6.27	0.43	0.41	N	0.36
5,500-7,000 HDD	1,593	2,788	N	521	8.46	6.89	N	7.94	0.43	0.35	N	0.43
4,000-5,499 HDD		242	906	93	8.85	5.55	8.69	6.81	0.34	0.29	0.36	0.21
Fewer than 4,000 HDD	-	N	2,116	804	N	N	8.52	8.15	N	N	0.31	0.21
2,000 CDD or More and		N.		0.1	N.	N.			N.	N.		
Fewer than 4,000 HDD	N	N	844	81	N	N	7.85	7.25	N	N	0.21	0.28
Number of Floors	027	1 670	1 759	1 055	0.20	7.97	0.14	7 46	0.45	0.42	0 20	U 34
One	927	1,670	1,753	1,055	9.20		9.14	7.46	0.45	0.43	0.30	0.34
There	754 540	1,477	846	551	8.43	7.02	8.64	7.00	0.38	0.33	0.30	0.25
Three	549	742	395	129	9.08	6.82	Q 7.00	7.64	0.38	0.33	0.32	0.18
Four to Nine	878	782	637	263	7.84	6.24	7.28	6.25	0.35	0.38	0.31	0.26
Ten or More	445	173	235	Q	8.49	5.86	6.59	8.35	0.39	0.38	0.17	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

							otural O	00 Evr	anditure:	delle:	o)	
			tural Gas ditures dollars)	S	ner T		d Cubic		enditures		are Foot	
	North-	Mid- west	South	West	North-	Mid- west	South	West	North-	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Number of Workers (main shift)												
Fewer than 5	469	993	530	316	9.59	8.21	9.62	8.03	0.39	0.38	0.27	0.25
5 to 9	396	508	500	262	9.82	8.09	9.31	7.42	0.57	0.41	0.34	0.38
10 to 19	404	662	531	245	8.70	7.03	8.90	7.07	0.32	0.37	0.35	0.32
20 to 49	602	1,081	811	457	9.21	6.89	8.32	7.23	0.31	0.41	0.36	0.34
50 to 99	495	630	386	269	8.59	6.89	8.36	6.96	0.42	0.32		0.25
100 to 249	400	479	578	195	7.02	6.39	8.45	7.14	0.36	0.34	0.37	0.19
250 or More	787	492	530	518	7.90	5.98	6.65	7.16	0.44	0.32	0.21	0.31
Weekly Operating Hours	_		4	100	_	0.15	2.24	0.05	_	0.00	0.01	
Fewer than 40	Q	400	159	180	Q	8.13	9.61	8.05	Q	0.28	0.21	0.30
40 to 48	407	838	493	279	9.48	7.70	9.90	6.92	0.30	0.40		0.23
49 to 60	741	1,151	665	371	9.29	7.21	9.02	7.44	0.35	0.32		0.22
61 to 84	649	792	577	356	8.65	7.15	8.34	7.12	0.45	0.36		0.25
85 to 167	330	719	608	249	8.61	6.76	8.61	7.35	0.34	0.44	0.38	0.24
Open Continuously	1,273	943	1,364	826	7.79	6.35	7.57	7.23	0.45	0.42	0.39	0.44
Ownership and Occupancy												
Nongovernment Owned	3,023	3,669	3,122	1,745	8.69	7.16	8.51	7.58	0.40	0.37	0.32	0.29
Owner Occupied	1,733	1,762	1,226	641	8.62	6.95	8.44	7.40	0.42	0.35		0.25
Nonowner Occupied	1,265	1,820	1,888	1,098	8.80	7.33	8.55	7.70	0.38	0.43	0.38	0.33
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	530	1,175	744	516	7.88	6.88	7.98	6.41	0.35	0.35	0.22	0.28
Federal	Q	Q	34	Q	Q	Q	5.73	Q	Q	Q		Q
State	Q	219	287	168	Q	8.04	7.88	7.53		0.44		0.36
Local	406	887	423	278	7.58	6.70	8.32	6.07	0.36	0.36	0.23	0.24
Vacancy Status												
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	839	861	452	325	9.22	7.63	8.22	6.60		0.35		0.23
Not At All Vacant	2,650	3,855	3,405	1,918	8.35	6.96	8.42	7.40	0.39	0.38	0.31	0.31
Number of Establishments												
One	2,391	3,580	3,100	1,879	8.32	7.06	8.48	7.29	0.42	0.38	0.31	0.34
2 to 5	642	943	507	285	9.24	7.39	8.33	7.16	0.34	0.39		0.21
6 to 10	175	101	Q	43	8.85	6.89	Q	7.28	0.37	0.29	_	0.19
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q		Q		Q
More than 20	Q	Q	121	Q	Q	Q		Q		Q		Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material												
Brick, Stone or Stucco	2,352	2,875	2,115	1,061	8.39	7.01	8.27	7.23	0.42	0.39	0.30	0.31
Concrete (Block or Poured)		945	785	325	8.77	6.88	8.66	6.86	0.35	0.38	0.37	0.29
Concrete Panels	Q	440	220	Q	Q	7.47	7.31	7.62	Q	0.41	0.14	0.30
Siding or Shingles	175	228	226	107	10.46	8.15	9.16	7.95	0.34	0.33	0.42	0.40
Metal Panels	Q	247	402	247	Q	8.19	9.39	7.19	Q	0.23		0.25
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q		Q		Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.03	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	т		tural Gas	6		N	atural G	as Expe	nditures	(dollar	s)	
		-	ditures dollars)		per T	housan	d Cubic	Feet	ı	oer Squ	are Foot	:
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Predominant Roof Material	4.400	4 007	4 500	4.040	0.40	7.00	0.00	7.40	0.40	0.40	0.04	0.04
Built-Up	1,166	1,827	1,523	1,013	8.40	7.02	8.26	7.40	0.40	0.40	0.34	0.31
Shingles (Not Wood) Metal Surfacing	623 Q	877 445	623 618	358 328	9.68 Q	7.25 7.21	9.19 9.26	7.51 7.27	0.53 Q	0.36 0.29	0.32 0.23	0.36 0.29
Synthetic or Rubber	1,328	1,369	877	332	8.06	7.08	7.60	6.35	0.40	0.26	0.27	0.23
Slate or Tile	1,0 <u>2</u> 0	114	136	135	Q.00	7.25	8.68	8.18	Q. Q	0.47	0.28	0.29
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980												
(more than one may apply) Any Type of Renovation												
Since 1980	1,443	1,839	950	619	8.39	6.63	7.72	6.85	0.40	0.39	0.34	0.28
Addition or Annex	475	682	489	336	7.79	5.87	7.27	6.61	0.38	0.38	0.44	0.38
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	1,143	1,318	647	479	8.45	6.73	8.03	6.83	0.38	0.40	0.32	0.27
Wall or Roof ReplacementInterior Wall	552	758	345	311	8.39	6.74	7.61	6.73	0.28	0.38	0.28	0.28
Re-Configuration	750	887	405	388	8.58	6.65	7.48	6.89	0.37	0.38	0.29	0.31
HVAC Equipment Upgrade	970	1,201	679	430	8.53	6.37	7.73	6.84	0.43	0.40	0.40	0.29
Lighting Upgrade	971	1,075	414	409	8.57	6.76	7.68	6.89	0.38	0.40	0.31	0.28
Window Replacement	726	641	159	208	8.61	6.46	7.38	6.92	0.34	0.39	0.29	0.32
Plumbing System Upgrade	682	733	316	319	8.27	6.68	7.68	7.18	0.36	0.45	0.35	0.26
Insulation Upgrade	296	383	184	115	8.83	7.25	7.49	6.89	0.34	0.35	0.36	0.24
Other Renovation No Renovations Since 1980	Q	Q	Q 750	Q	Q	Q 7.00	Q	Q 7.10	Q	Q	Q	Q 0.30
Building Newer than 1980	1,139 971	1,449 1,556	752 2,163	599 1,043	9.00 8.33	7.26 7.54	8.61 8.67	7.18 7.62	0.37 0.38	0.36 0.35	0.25 0.29	0.30
Energy Sources (more than												
one may apply)												
Electricity	3,553	4,843	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Natural Gas		4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Fuel Oil	1,155	842	981	561	7.83	6.18	7.48	7.34	0.31	0.40	0.33	0.35
District Heat District Chilled Water	103	Q	107 110	Q	7.14	6.43	7.92 7.92	Q	0.16	0.14	0.13	Q
Propane	Q Q	Q 244	251	Q Q	Q Q	Q 6.98	7.92 Q	Q 7.09	Q Q	Q 0.28	0.16 Q	Q 0.30
Other	Q	128	Q	Q	Q	6.41	Q	7.03 Q	Q	0.20	Q	0.30 Q
Space-Heating Energy Sources												
Natural Gas	3,351	4,719	3,435	2,010	8.53	7.07	8.38	7.20	0.46	0.39	0.32	0.29
Natural Gas Main	3,115	4,450	3,140	1,882	8.49	7.06	8.32	7.19	0.48	0.39	0.34	0.32
Natural Gas Secondary	237	269	295	129	9.11	7.24	9.11	7.41	0.30	0.31	0.21	0.14
Other Excluding Natural GasBuildings without Heating	182 Q	116 Q	418 Q	146 Q	9.05 Q	7.98 Q	8.50 Q	7.66 Q	Q Q	0.12 Q	0.17 Q	0.21 Q
Primary Space-Heating												
Energy Source					~ = :						<u></u>	
Electricity	232	339	611	252	9.74	7.51	8.81	7.66	0.34	0.29	0.21	0.19
Natural Gas	3,115	4,450	3,140	1,882	8.49	7.06	8.32	7.19	0.48	0.39	0.34	0.32
	136	Q	Q	Q	8.30	Q	Q	Q	Q	Q	Q	Q
Fuel Oil						^	0.00	^	0.07			^
Puel Oil District Heat Propane	Q N	Q N	Q Q	Q N	8.75 N	Q N	8.28 Q	Q N	0.07 N	Q N	0.10 Q	Q N

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	<u> </u>											
	Т		tural Gas ditures	6		N	atural G	as Expe	nditures	(dollar	s)	
		(million	dollars)		per T	housan	d Cubic	Feet		per Squ	are Foot	:
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Cooling Energy Sources												
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q
Other Excluding Natural Gas	2,934	4,347	3,704	2,060	8.61	7.08	8.42	7.32	0.36	0.37	0.29	0.29
Buildings without Cooling	247	364	Q	146	7.91	7.84	Q	7.22	0.40	0.34	Q	0.26
Water-Heating Energy Sources												
Natural Gas	2,648	3,555	2,942	1,948	8.35	6.94	8.10	7.20		0.40	0.35	0.32
Other Excluding Natural Gas	783	1,135	760	255	9.19	7.51	9.35	7.73	0.25	0.31	0.18	0.21
Bldgs without Water Heating	Q	154	164	59	Q	7.81	10.50	7.88	Q	0.23	0.22	0.12
Cooking Energy Sources							- 0.1					
Natural Gas	1,455	1,663	2,051	988	8.34	6.36	7.91	7.32		0.42	0.37	0.41
Other Excluding Natural Gas	231	457	209	110	7.09	7.45	7.65	7.19	0.41	0.37	0.22	0.23
Buildings without Cooking	1,867	2,724	1,607	1,163	8.97	7.56	9.25	7.24	0.37	0.34	0.23	0.24
Energy End Uses (more than one may apply)												
Buildings with Space Heating	3,533	4,834	3,853	2,156	8.56	7.09	8.40	7.23	0.39	0.37	0.29	0.29
Buildings with Cooling	3,307	4,480	3,816	2,115	8.61	7.03	8.40	7.28	0.39	0.37	0.29	0.29
Buildings with Water Heating	3,431	4,690	3,702	2,202	8.53	7.07	8.33	7.26	0.39	0.38	0.29	0.30
Buildings with Cooking	1,686	2,120	2,259	1,098	8.14	6.56	7.88	7.31	0.41	0.41	0.35	0.38
Buildings with Manufacturing	244	178	136	Q	8.26	5.49	9.52	7.53	0.47	0.25	0.26	0.29
Buildings with Electricity												
Generation	1,069	1,031	996	623	7.86	6.23	7.47	7.48	0.42	0.36	0.32	0.34
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	214	190	284	144	8.83	8.24	9.73	8.05	0.26	0.22	0.22	0.14
51 to 99	613	569	487	408	9.41	7.19	8.12	7.35	0.51	0.43	0.26	0.26
100	2,706	4,075	3,082	1,605	8.36	7.03	8.34	7.14	0.38	0.37	0.31	0.32
Percent of Floorspace Cooled												
Not Cooled	247	364	Q	146	7.91	7.84	Q	7.22	0.40	0.34	Q	0.26
1 to 50	1,032	1,315	655	463	8.66	7.04	9.47	7.35	0.32	0.33	0.22	0.24
51 to 99	1,007	1,252	631	451	8.51	7.06	8.03	7.12	0.40	0.40	0.27	0.26
100	1,268	1,912	2,531	1,202	8.66	7.01	8.25	7.31	0.45	0.38	0.33	0.34
Heating Equipment (more than one may apply)												
Heat Pumps	420	234	802	Q	8.22	7.35	8.75	8.16	0.45	0.31	0.29	0.31
Packaged Heat Pumps	242	174	434	Q		7.21	Q	8.41	0.44	0.31	0.28	Q
Split-System Heat Pumps	Q	Q	246	62		Q	9.70	7.44		Q	0.25	0.22
Individual Room Heat Pumps		Q	235	Q		Q	8.38	Q		Q	0.26	Q
Furnaces	1,010	2,124	1,242	719	8.62	7.14	8.67	7.57	0.43	0.34	0.29	0.30
Individual Space Heaters	771	1,032	466	451	8.32	6.67	7.83	7.40	0.39	0.31	0.22	0.30
District Heat	Q	Q	101	Q	6.94	Q	7.97	Q	0.11	Q	0.13	Q
Boilers	2,222	2,457	1,582	1,156	8.25	6.72	7.65	6.93		0.43	0.40	0.34
Packaged Heating Units	1,139	1,196	1,618	524	8.51	7.17	8.53	7.09		0.37	0.30	0.21
Other	Q	150	83	Q	Q	6.94	8.72	Q	Q	0.27	0.12	Q

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	Total Natural Gas					N	latural G	as Expe	enditures	s (dollar	s)	
	'	Expen	ditures	•								
		(million	dollars)		per 1	housan	d Cubic	Feet		per Squ	are Foot	<u> </u>
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Cooling Equipment (more												
than one may apply)												
Residential-Type Central												
Air Conditioners	851	1,139	607	270	8.46	6.64	8.54	7.45	0.44	0.38	0.28	0.32
Heat Pumps	455	269	818	Q	8.20	7.46	8.79	8.17	0.46	0.33	0.29	0.28
Packaged Heat Pumps	277	203	425	Q	8.72	7.37	Q	8.43	0.45	0.34	0.28	Q
Split-System Heat Pumps		Q	263	Q	Q	Q	9.71	Q	Q	Q	0.26	Q
Individual Room Heat Pumps	Q	Q		81	Q	Q	8.36	7.30	Q	Q	0.25	0.14
Individual Air Conditioners	948	1,136	613	343	8.55	6.91	8.26	7.08	0.35	0.40	0.27	0.27
District Chilled Water	Q	Q	110	Q	Q	Q	7.92	Q	Q	Q	0.16	Q
Central Chillers	936	1,021	953	550	7.92	6.50	7.12	7.20	0.61	0.41	0.28	0.33
Packaged Air Conditioning												
Units	2,097	2,724	2,245	1,143	8.60	6.96	8.58	7.13	0.40	0.38	0.32	0.27
Swamp Coolers	Q	Q	Q	449	Q	Q	Q	6.68	Q	0.19	Q	0.42
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)												
Heating	1,076	1,652	,	732	8.86	6.87	8.34	7.49	0.39	0.38		0.36
Cooling	1,484	2,128	1,231	918	8.88	6.90	7.95	7.32	0.36	0.42	0.30	0.35
Water Heating Equipment												
Centralized System	2,507	3,127	2,337	1,375	8.76	7.28	8.30	7.17	0.45	0.39	0.31	0.34
Distributed System		764		246	8.23	7.55		7.84	0.23	0.36		0.18
Combination of Centralized												
and Distributed System	501	799	809	582	7.74	6.02	8.07	7.25	0.35	0.35	0.31	0.31
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	1,686	2,120	2,259	1,091	8.14	6.56	7.88	7.30	0.41	0.41	0.35	0.38
Activities with Large												
Amounts of Hot Water	1,282	1,952	1,990	1,242	7.64	6.34	7.77	7.26	0.39	0.42	0.38	0.44
Separate Computer Area	1,890	1,900	1,469	971	7.94	6.71	7.68	7.13	0.39	0.34	0.23	0.25
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	1,266	1,626	1,331	847	7.97	6.76	7.61	7.42	0.42	0.37	0.29	0.32
Economizer Cycle		2,040	1,264	999	7.87	6.89	7.55	7.15	0.41	0.39	0.29	0.28
HVAC Maintenance	3,094	3,959	3,297	2,006	8.46	6.99	8.24	7.25	0.38	0.37	0.30	0.29
Energy Management and												
Control System (EMCS)	793	1,089	845	590	7.84	6.38	7.63	7.34	0.35	0.33	0.23	0.25
Equipment Usage Reduced When Building Not In Full Use												
(more than one may apply) ^a												
Heating	2,618	3,181	2,544	1,497	8.60	7.11		7.27		0.35		0.26
Cooling	2,470	3,061	2,647	1,607	8.72	7.03		7.30		0.35		0.27
Lighting	2,174	3,723		1,386		7.30		7.28	0.37	0.37		0.24
Office Equipment	974	1,406	736	550	9.21	7.09	9.17	7.07	0.32	0.32	0.25	0.24

Table C26. Natural Gas Expenditures by Census Region for Non-Mall Buildings, 2003

	7	Total Natural Gas Expenditures (million dollars)				N	atural G	as Expe	enditures	s (dollar	s)	
		(million	dollars)		per 1	housan	d Cubic	Feet		per Squ	are Foot	<u> </u>
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All Buildings*	3,553	4,844	3,866	2,261	8.56	7.09	8.40	7.28	0.39	0.37	0.29	0.29
Annual Consumption (hundred cubic feet) 1,000 or Less		116 732	143 685	98 300	13.99 10.45	10.34 8.64	12.64 9.76	10.85 7.81	0.31	0.17 0.26	0.09 0.20	0.09 0.16
5,001 to 10,000	422	777 890 837 452 1,040	538 699 532 449 820	277 510 370 188 519	9.88 9.08 7.94 8.39 7.35	8.02 7.46 7.35 5.32 6.04	9.06 8.61 8.26 8.11 6.93	7.41 7.14 7.06 6.83 6.95	0.45 0.36 0.31 0.45 0.69	0.39 0.40 0.39 0.31 0.55	0.24 0.32 0.42 0.41 0.54	0.28 0.35 0.48 0.30 0.56
Provider of Natural Gas (more than one may apply) Local Utility	2,886 865	4,140 951	3,531 403	2,021 318	8.82 7.67	7.28 6.14	8.56 6.83	7.39 6.34	0.36 0.55	0.37 0.40	0.29 0.25	0.29 0.37

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 3.8 percent of total natural gas 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 that use natural gas.

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	_									
	Co	l Natural G nsumption	n	Buildings	I Floorspaces Using Nation square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5	
Building Floorspace (Square Feet)										
1,001 to 5,000	0	41	68	0	417	729	Q	99.5	93.6	
•	Q Q	31	43	Q Q	482	654	Q	64.8	66.0	
5,001 to 10,000						1,681				
10,001 to 25,000	Q	45	90	Q	931	,	Q	47.9	53.6	
25,001 to 50,000	Q	39	70	Q	829	1,422	Q	47.4	49.5	
50,001 to 100,000	Q	43	73	Q	1,263	1,554	Q	34.1	47.2	
100,001 to 200,000	Q	41	67	Q	1,445	1,264	Q	28.3	52.7	
200,001 to 500,000	Q	55	56	Q	1,484	1,277	Q	37.3	44.1	
Over 500,000	Q	47	44	Q	865	989	Q	54.0	44.4	
Principal Building Activity	0	40	00		4.047	4 004		00.5	540	
Education	Q	49	99	Q	1,247	1,804	Q	39.5	54.6	
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Food Service	Q	Q	35	Q	Q	228	Q	Q	152.9	
Health Care	Q	41	49	Q	396	484	Q	103.8	100.6	
Inpatient	Q	37	38	Q	306	287	Q	120.3	131.2	
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	_ Q	
Lodging	Q	Q	39	Q	Q	507	Q	Q	77.5	
Retail (Other Than Mall)	Q	13	29	Q	269	485	Q	48.2	59.2	
Office	Q	72	84	Q	1,887	1,929	Q	38.2	43.7	
Public Assembly	Q	12	35	Q	602	550	Q	Q	64.2	
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Religious Worship	Q	Q	29	Q	Q	624	Q	Q	46.3	
Service	Q	Q	44	Q	Q	723	Q	Q	61.5	
Warehouse and Storage	Q	24	34	Q	913	1,259	Q	26.0	26.7	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Year Constructed						2.40				
Before 1920	Q	30	48	Q	704	819	Q	43.0	58.0	
1920 to 1945	Q	73	65	Q	1,584	959	Q	46.2	68.2	
1946 to 1959	Q	52	67	Q	1,237	1,360	Q	41.9	49.0	
1960 to 1969	Q	51	68	Q	1,113	1,215	Q	45.6	56.0	
1970 to 1979	Q	48	110	Q	1,034	1,980	Q	46.8	55.8	
1980 to 1989	Q	31	64	Q	838	1,126	Q	37.5	56.4	
1990 to 1999 2000 to 2003	Q Q		63 28	Q Q	818 Q	1,403 708	Q Q	39.3 Q	44.8 39.2	
Climate Zone: 30-Year Average										
Under 2,000 CDD and										
More than 7,000 HDD	N	Q	151	N	Q	2,660	N	53.3	56.7	
5,500-7,000 HDD	73		361	1,465	2,227	6,909	49.5	52.0	52.3	
4,000-5,499 HDD	N	165	N	N	4,328	N	N	38.1	N	
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N	
2,000 CDD or More and										
Fewer than 4,000 HDD	N	N	N	N	N	N	N	N	N	
Number of Floors						_				
One	Q		159	Q	1,889	2,820	Q	48.6	56.5	
Two	Q	83	146	Q	1,755	3,025	Q	47.4	48.4	
Three	Q		86	Q	1,125	1,658	Q	45.0	51.9	
Four to Nine	45		93	614	1,925	1,658	73.8	34.7	56.0	
Ten or More	Q	50	27	Q	1,021	409	Q	49.2	67.1	

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Buildings	I Floorspaces Using Nation square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5	
Number of Workers (main shift)										
Fewer than 5	Q	39	92	Q	887	1,956	Q	43.5	46.9	
5 to 9	Q	34	44	Q	496	784	Q	69.3	56.0	
10 to 19	Q	39	65	Q	1,069	1,105	Q	36.3	59.2	
					,					
20 to 49	Q	60	111	Q	1,812	1,855	Q	33.1	60.0	
50 to 99	Q	44	71	Q	994	1,418	Q	44.6	49.7	
100 to 249	Q	41	59	Q	885	1,085	Q	46.0	54.6	
250 or More	Q	86	70	Q	1,574	1,367	Q	54.5	51.2	
Weekly Operating Hours	-	-		-	-		-	_		
Fewer than 40	Q	Q	43	Q	Q	1,180	Q		36.3	
40 to 48	Q	38	89	Q	1,188	1,554	Q	31.9	57.0	
49 to 60	Q	69	108	Q	1,824	2,629	Q	37.8	41.2	
61 to 84	Q	65	87	Q	1,197	1,541	Q	54.6	56.4	
85 to 167	Q	35	83	Q	821	1,181	Q	42.3	70.7	
Open Continuously	40	123	102	510	2,302	1,485	79.1	53.4	68.7	
Ownership and Occupancy										
Nongovernment Owned	61	287	366	1,219	6,427	6,793	49.7	44.7	53.9	
Owner Occupied	42	159	170	791	3,365	3,244	53.4	47.2	52.3	
Nonowner Occupied	Q	125	186	Q	2,874	3,023	Q	43.6	61.4	
Unoccupied	N	Q	Q	N	2,574 Q	0,0 <u>2</u> 0	N N	Q Q	Q	
Government Owned	Q	55	146	Q	1,289	2,777	Q	42.9	52.6	
					-					
Federal	Q	Q	Q	Q	Q	Q	Q		Q	
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Local	Q	49	113	Q	1,028	2,018	Q	48.0	55.9	
Vacancy Status			_		_			_		
Completely Vacant	N	Q	Q	N	Q	Q	N	Q	Q	
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Partially Vacant	26	65	89	571	1,576	1,983	46.4	41.0	44.9	
Not At All Vacant	46	271	412	880	5,874	7,026	52.2	46.2	58.6	
Number of Establishments										
One	45	243	386	826	4,915	6,833	54.0	49.4	56.5	
2 to 5	Q	52	91	Q	1,515	1,700	Q	34.1	53.7	
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Currently Unoccupied	Ñ		Q	Ñ	Q	Q	Ñ		Q	
Predominant Exterior Wall Material										
Brick, Stone or Stucco	53	228	338	864	4,743	5,826	60.9	48.0	58.0	
Concrete (Block or Poured)	Q	60	90	Q	1,484	1,690	Q	40.2	53.1	
Concrete Panels	Q	Q	40	Q	Q	757	Q	Q	53.2	
Siding or Shingles	Q	Q	14	Q	Q	358	Q	Q	38.1	
Metal Panels	Q	Q	13	Q	Q	455	Q	Q	28.1	
Window Glass										
	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Other	Q			Q	Q	Q			Q	
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Co	I Natural G nsumption	n	Buildings	I Floorspaces Using Nation square	ural Gas	Ene	atural Gas ergy Intens feet/squar	sity
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Predominant Roof Material									
Built-Up	Q	126	205	Q	2,621	3,492	Q	48.1	58.6
Shingles (Not Wood)	Q	55	90	Q	970	1,705	Q	57.0	53.1
Metal Surfacing	Q	Q	31	Q	Q	786	Q	Q	39.0
Synthetic or Rubber	45	120	152	745	2,563	2,988	59.8	46.9	50.7
Slate or Tile	Q	Q	13	Q	Q	188	Q	Q	67.3
Wooden Materials Concrete	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q
Other	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	27	145	202	581	2,987	3,211	47.0	48.5	62.9
Addition or Annex	Q	58	80	Q	1,203	1,216	Q	47.8	65.6
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	Q	119	146	439	2,541	2,197	37.9	46.7	66.3
Wall or Roof Replacement	Q	55	84	Q	1,607	1,293	Q	34.2	65.3
Interior Wall	_			_			_		
Re-Configuration	Q	69	104	Q	1,748	1,630	Q	39.5	63.5
HVAC Equipment Upgrade	Q	95	135	Q	1,896	2,016	Q	50.1	66.7
Lighting Upgrade	Q	93	119	Q	2,136	1,876	Q	43.7	63.6
Window Replacement	Q Q	68 64	81 85	Q Q	1,739 1,613	1,196 1,111	Q Q	39.1 39.7	67.3 76.4
Plumbing System UpgradeInsulation Upgrade	Q	32	35	Q	771	664	Q	41.4	53.3
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	17	110	156	387	2,685	3,122	44.2	40.8	50.0
Building Newer than 1980	Q	88	154	Q	2,044	3,236	Q	43.2	47.6
Energy Sources (more than one may apply)									
Electricity	73	343	512	1,465	7,716	9,568	49.5	44.4	53.5
Natural Gas	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5
Fuel Oil	Q	124	96	Q	3,188	1,494	Q	39.0	64.2
District Heat District Chilled Water	Q Q	Q Q	Q Q	Q Q	482 Q	Q Q	Q Q	20.1 Q	Q Q
Propane	N N	Q	26	N	Q	630	N N	Q	42.0
Other	Q	Q	Q	Q	Q	Q	Q	Q	42.0 Q
Space-Heating Energy Sources									
Natural Gas	69	324	501	1,198	6,041	8,758	57.8	53.6	57.2
Natural Gas Main	66	301	477	1,061	5,377	8,230	62.0	56.0	57.9
Natural Gas Secondary	Q	23	24	Q	663	528	Q	34.0	45.5
Other Excluding Natural Gas	Q	17	10	Q	Q	781	Q	Q	13.1
Buildings without Heating	N	Q	Q	N	Q	Q	N	Q	Q
Primary Space-Heating Energy Source									
Electricity	Q	22	31	Q	636	795	Q	35.3	39.4
Natural Gas	66	301	477	1,061	5,377	8,230	62.0	56.0	57.9
Fuel Oil	Q	12	Q	Q	Q	Q	Q	Q	Q
District Heat	Q	Q	Q	Q	377	Q	Q	Q	Q
Propane	N	N	N	N	N	N	N	N	N
Other	N	Q	Q	N	Q	Q	N	Q	Q

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Buildings	I Floorspac s Using Nat on square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5	
Cooling Energy Sources										
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Other Excluding Natural Gas	57	284	459	1,197	7,006	8,566	47.3	40.6	53.6	
Buildings without Cooling	Q	27	38	Q	478	848	Q	56.6	45.2	
Water-Heating Energy Sources										
Natural Gas	49	269	389	682	4,919	6,417	71.2	54.6	60.7	
Other Excluding Natural Gas	20	65	110	693	2,467	2,733	28.7	26.5	40.1	
Bldgs without Water Heating	Q	Q	13	Q	Q	419	Q	Q	31.4	
Cooking Energy Sources										
Natural Gas	Q	154	202	Q	3,106	3,052	Q	49.7	66.2	
Other Excluding Natural Gas	Q	Q	54	Q	442	1,053	Q	58.9	51.4	
Buildings without Cooking	46	162	256	870	4,168	5,465	52.8	38.9	46.9	
Energy End Uses (more than one may apply)										
Buildings with Space Heating	73	340	511	1,465	7,711	9,539	49.5	44.1	53.6	
Buildings with Cooling	68	316	474	1,403	7,711	8,722	51.9	43.6	54.3	
	68									
Buildings with Water Heating		334	499	1,375	7,386	9,150	49.8	45.2	54.5	
Buildings with Cooking	27	181	256	595	3,548	4,105	44.7	50.9	62.4	
Buildings with Manufacturing	Q	27	13	Q	476	418	Q	57.6	32.0	
Buildings with Electricity	_	440	400	_	0.400	0.011	0	50.0	- 4 -	
Generation	Q	112	126	Q	2,136	2,311	Q	52.6	54.7	
Percent of Floorspace Heated		0	0		0	0		0	0	
Not Heated	N	Q	Q	N	Q	Q	N	Q	Q	
1 to 50	Q	21	20	Q	725	686	Q	29.1	29.9	
51 to 99	Q		65	Q	923	1,044	Q		62.2	
100	59	265	425	1,107	6,063	7,809	53.0	43.7	54.5	
Percent of Floorspace Cooled	_	<u></u>	00	_	470	242	_	5 0.0	45.0	
Not Cooled	Q		38	Q	478	848	Q	56.6	45.2	
1 to 50	Q	99	139	Q	2,777	2,921	Q	35.5	47.6	
51 to 99	Q 22		120 214	Q 410	2,043 2,418	2,060 3,741	Q 53.1	45.2 51.6	58.5 57.3	
Heating Equipment (more than one may apply)					, -	-,				
Heat Pumps	Q	37	22	Q	799	591	Q	46.2	36.7	
Packaged Heat Pumps	Q		18	Q	497	469	Q	47.3	37.6	
Split-System Heat Pumps	Q		Q	Q	Q	Q	Q	Q Q	Q Q	
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Furnaces	Q	92	211	Q	2,060	4,284	Q	44.9	49.2	
Individual Space Heaters	Q		99	Q	1,553	2,290	Q	43.5	43.3	
District Heat	Q	Q	Q	Q	399	2,230 Q	Q	19.5	43.5 Q	
Boilers	57	213	287	925	4,217	4,274		50.5	67.2	
Packaged Heating Units	Q	99	128	923 Q	2,078	2,302	01.2 Q	47.8	55.6	
LONGUEU LIEGUIU UIIIS	Q	99	13	Q	2,010	326	Q	41.0	55.0	

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Tetal Natural Con									
	Co	I Natural G nsumption on cubic fe	n	Buildings	I Floorspac s Using Nat ion square	ural Gas	Ene	latural Gas ergy Intens feet/squar	sity	
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5	
Cooling Equipment (more than one may apply) Residential-Type Central										
Air Conditioners	Q	76	106	Q	1,739	1,890	Q		56.2	
Heat Pumps	Q	39	25	Q	817	618	Q		40.4	
Packaged Heat Pumps	Q	25	21	Q	515	491	Q	49.2	42.2	
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Individual Air Conditioners	Q	85	126	Q	2,263	2,026	Q	37.6	62.2	
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Central Chillers	Q	96	120	Q	1,177	1,863	Q	81.3	64.2	
Packaged Air Conditioning										
Units	48	196	295	676	4,633	5,119	70.4	42.4	57.7	
Swamp Coolers	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Main Equipment Replaced Since										
1990 (more than one may apply)										
Heating	Q	97	175	Q	2,384	3,072	Q		56.9	
Cooling	29	139	225	628	3,549	3,491	45.4	39.1	64.6	
Water Heating Equipment										
Centralized System	40	246	330	921	4,599	6,013	43.4	53.5	54.8	
Distributed System	Q	36	76	Q	1,618	1,523	Q	22.2	49.9	
Combination of Centralized										
and Distributed System	Q	52	93	Q	1,169	1,614	Q	44.3	57.8	
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	27	181	256	595	3,548	4,105	44.7	50.9	62.4	
Activities with Large										
Amounts of Hot Water	38	130	221	652	2,652	3,310	58.7	48.9	66.9	
Separate Computer Area	48	190	220	685	4,197	4,260	69.7	45.3	51.8	
HVAC Conservation Features										
(more than one may apply)	^	404	400	^	0.500	0.004	^	40.0	E0 4	
Variable Air-Volume System	Q		192	Q 640	2,526	3,281	Q 67.6		58.4	
Economizer Cycle	43	135	236	640	2,738	3,973	67.6 51.0	49.1	59.3	
HVAC Maintenance	62	303	439	1,221	6,927	8,008	51.0	43.8	54.9	
Energy Management and Control System (EMCS)	Q	90	141	Q	1,961	2,522	Q	45.8	55.9	
Equipment Usage Reduced When Building Not In Full Use										
(more than one may apply) ^a	-									
Heating	33			961	6,062	6,822	33.9		50.0	
Cooling	34	249	328	931	5,928	6,398	36.8	42.0	51.2	
Lighting	31	209	392	890	5,013	7,425	34.3			
Office Equipment	Q	96	140	Q	2,632	3,116	Q	36.3	44.9	

Table C27. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

	Total Natural Gas Consumption (billion cubic feet)			Buildings	I Floorspac S Using Nat	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	New England	Middle Atlantic	East North Central	
All Buildings*	73	343	512	1,465	7,716	9,570	49.5	44.4	53.5	
Annual Consumption (hundred cubic feet)										
1,000 or Less	Q	3	7	Q	Q	425	Q	Q	16.4	
1,001 to 5,000	11	38	57	331	1,303	1,910	31.8	29.2	30.1	
5,001 to 10,000	Q	40	74	Q	859	1,445	Q	46.8	51.0	
10,001 to 25,000	Q	67	86	Q	1,595	1,554	Q	41.9	55.3	
25,001 to 50,000	Q	48	86	Q	1,265	1,601	Q	38.2	53.6	
50,001 to 100,000	Q	31	53	Q	638	960	Q	49.3	55.3	
Over 100,000	Q	115	149	Q	1,333	1,674	Q	86.1	89.1	
Provider of Natural Gas (more than one may apply)										
Local Utility	59	268	415	1,212	6,765	7,922	48.9	39.6	52.4	
Some Other Provider	Q	94	133	Q	1,212	2,071	Q	77.5	64.1	

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

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 that use natural gas.

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 3.8 percent of total natural gas 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.

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Co	I Natural G nsumption	n	Buildings	I Floorspaces Using Nation square	ural Gas	Ene	atural Gas rgy Intens feet/squar	sity
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3
Building Floorspace (Square Feet)									
1.001 to 5.000	23	25	11	346	325	209	66.6	75.3	53.5
5,001 to 10,000	13	34	Q	305	620	203 Q	44.0	54.9	33.3 Q
	29	28		756	987	565	37.9	28.6	Q
10,001 to 25,000	44	17	Q 13		714				
25,001 to 50,000		27	12	840		363	52.6	24.4	Q
50,001 to 100,000	Q		Q	Q 540	806	Q	Q 27.0	33.1	Q
100,001 to 200,000	19	Q	Q	512	1,238	Q	37.8	30.8	Q
200,001 to 500,000	Q	23	Q	Q	786	Q	Q	28.9	Q
Over 500,000	Q	18	Q	Q	Q	Q	Q	21.6	Q
Principal Building Activity									
Education	14	25	Q	380	1,274	Q	38.1	19.6	Q
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	42	Q	Q	339	Q	Q	123.8	Q
Health Care	Q	Q	17	Q	508	196	Q	87.5	86.2
Inpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	27	25	Q	508	630	Q	52.6	39.9	Q
Retail (Other Than Mall)	Q	9	Q	Q	465	Q	Q	20.4	Q
Office	19	12	Q	518	821	321	37.4	14.7	28.5
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q	Q	Q	Q	Q
Service	13	Q	Q	211	Q	Q	60.7	Q	Q
Warehouse and Storage	Q	Q	Q	662	Q	Q	41.8	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed		0	0	•	•	•		0	0
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	Q	Q	Q	385	Q	Q	73.1	Q	Q
1946 to 1959	18	Q	Q	321	496	Q	56.7	Q	Q
1960 to 1969	26	20	Q	603	556	Q 450	43.3	35.6	Q 47.7
1970 to 1979	28	22	22	758	815	459	36.5	27.3	47.7
1980 to 1989	Q	35	Q	Q	1,055	346	Q	32.8	73.0
1990 to 1999 2000 to 2003	31 Q	65 20	17 Q	723 Q	2,249 654	610 Q	42.7 Q	29.1 30.9	27.7 Q
	Q	20	Q	Q	054	Q	Q	30.9	Q
Climate Zone: 30-Year Average Under 2,000 CDD and									
More than 7,000 HDD	84	N	N	1,722	N	N	48.8	N	N
5,500-7,000 HDD	43	N	N	, Q	N	N	Q	N	N
4,000-5,499 HDD	44	58	Q	834	1,705	Q	52.3	33.9	Q
Fewer than 4,000 HDD	N	131	Q	N	3,643	Q	N	35.9	34.9
2,000 CDD or More and			_		-,	_			•
Fewer than 4,000 HDD	N	Q	Q	N	Q	Q	N	22.1	43.7
Number of Floors									
One	50	82	31	1,095	2,590	978	45.7	31.8	31.8
Two	64	46	34	1,461	1,439	571	43.7	31.9	58.9
Three	23	Q	Q	581	600	Q	39.2	Q	Q
Four to Nine	33	41	Q	417	1,182	Q	78.0	35.1	Q
Ten or More	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Co	I Natural Consumption	n	Building	Il Floorspac s Using Na ion square	tural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Number of Workers (main shift)										
Fewer than 5	29	26	Q	653	727	485	44.7	35.3	30.0	
5 to 9	19	23	10	447	616	393	42.4	37.5	24.9	
10 to 19	29	22	7	664	688	246	43.3	31.9	27.2	
20 to 49	46	36	31	764	900	498	59.6	40.4	62.8	
50 to 99	21	25	Q	572	1,067	Q	36.4	23.3	Q	
100 to 249	Q	Q	Q	Q	993	Q	Q	45.5	Q	
250 or More	Q	33	Q	Q	1,335	Q	Q	24.8	Q	
Weekly Operating Hours										
Fewer than 40	Q	8	Q	Q	334	Q	Q	23.3	Q	
40 to 48	20	21	16	553	834	564	36.5	25.8	28.8	
49 to 60	51	24	Q	919	1,203	323	55.7	19.8	Q	
61 to 84	24	31	11	665	1,211	482	35.8	25.4	23.2	
85 to 167	Q	41	Q	Q	1,010	Q	Q	40.1	Q	
Open Continuously	47	86	43	773	1,733	676	60.4	49.5	63.9	
Ownership and Occupancy										
Nongovernment Owned	147	170	72	3,002	4,621	1,575	48.8	36.7	46.0	
Owner Occupied	84	77	23	1,728	2,243	771	48.5	34.5	30.4	
Nonowner Occupied	63	92	49	1,253	2,368	799	50.0	38.9	61.2	
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Government Owned	25	41	26	591	1,705	706	41.7	23.8	37.2	
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Local	20	28	11	479	973	310	41.2	28.6	35.6	
Vacancy Status										
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Mostly Vacant	Q	Q	N	Q	Q	N	Q	Q	N	
Partially Vacant	24	24	7	467	1,088	270	51.0	22.4	27.6	
Not At All Vacant	142	186	91	3,023	5,212	2,006	47.0	35.6	45.4	
Number of Establishments										
One	121	172	83	2,582	4,735	1,810	47.0	36.4	45.7	
2 to 5	36	25	Q	721	1,018	Q	50.3	24.7	Q	
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	
More than 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Predominant Exterior Wall Material										
Brick, Stone or Stucco	72	112	51	1,541	3,205	1,336	46.8	35.1	37.9	
Concrete (Block or Poured)	48	Q	Q	776	1,055	467	61.3	Q	69.5	
Concrete Panels	19	Q	Q	315	Q	Q	59.1	20.3	Q	
Siding or Shingles	14		Q	326	Q	Q	44.0	Q	Q	
Metal Panels	17	22		595	725	Q	29.1	30.7	Q	
Window Glass	Q	Q	N	Q	Q	N	Q	Q	N	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
No One Major Type	Q		N	Q	Q	N	Q	Q	N	

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Co	I Natural G ensumption	n	Building	Il Floorspac s Using Na ion square	tural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Predominant Roof Material										
Built-Up	55	80	47	1,081	2,076	635	51.4	38.5	74.6	
Shingles (Not Wood)	30	35	15	714	1,009	458	42.6	34.5	33.7	
Metal Surfacing	31	27	16	756	1,117	603	41.1	24.3	26.5	
Synthetic or Rubber	42	57	16	779	1,792	483	53.7	31.7	33.6	
Slate or Tile	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
Concrete	Q	Q	Q N	Q	Q	Q N	Q	Q	Q N	
Other	N	Q	N	N	Q	N	N	Q	N	
No One Major Type	N	Q	N	N	Q	N	N	Q	N	
Renovations in Buildings Constructed Before 1980										
(more than one may apply)										
Any Type of Renovation Since 1980	75	59	29	1 101	1,279	613	50.9	46.5	47.1	
Addition or Annex	75 Q	59 Q	14	1,481 577	1,279 Q	235	63.0	40.5 Q	61.6	
Reduction In Floorspace	Q	Q	Q	3// Q	Q	233 Q	03.0 Q	Q	01.0 Q	
Cosmetic Improvements	50	32	24	1,112	814	508	45.0	39.1	46.4	
Wall or Roof Replacement	28	20	Q	717	557	Q	39.1	35.9	Q	
Interior Wall			-							
Re-Configuration	30	20	Q	717	665	Q	41.8	29.3	Q	
HVAC Equipment Upgrade	54	Q	21	987	896	345	54.6	53.3	61.7	
Lighting Upgrade	40	18	21	828	608	362	48.0	28.8	59.3	
Window Replacement	19	Q	Q	461	Q	Q	40.7	Q	Q	
Plumbing System Upgrade	25	16	Q	527	427	Q	47.3	37.6	Q	
Insulation Upgrade	18	Q	Q	427	Q	Q	41.1	Q	Q	
Other Renovation No Renovations Since 1980	N	Q	Q 21	N 040	Q 4.000	Q 537	N	Q	Q 38.2	
Building Newer than 1980	43 52	31 120	49	943 1,169	1,089 3,958	1,131	46.1 44.8	28.0 30.4	43.6	
Energy Sources (more than one may apply)										
Electricity	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Natural Gas	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Fuel Oil	40	74	Q	629	1,696	Q	64.1	43.5	Q	
District Heat	Q	Q	Q	Q	526	Q	Q	Q	Q	
District Chilled Water Propane	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q		Q Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Space-Heating Energy Sources										
Natural Gas	167	183	94	3,422	4,852	2,110	48.8	37.7	44.4	
Natural Gas Main	154	166	85	3,091	4,175	1,817	49.7	39.7	46.8	
Natural Gas Secondary	Q	17	Q	Q	677	Q	Q	25.0	Q	
Other Excluding Natural GasBuildings without Heating	Q Q	27 Q	Q Q	Q Q	1,398 Q	Q Q	Q Q		Q Q	
Primary Space-Heating Energy Source										
Electricity	14	37	10	390	1,463	331	35.6	25.3	29.0	
Natural Gas	154	166	85	3,091	4,175	1,817	49.7	39.7	46.8	
Fuel Oil	Q	Q	N	Q	Q	N	Q	Q	N	
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Propane	N	Q	N	N	Q	N	N	Q	N	
Other	Q	Q	N	Q	Q	N	Q	Q	N	

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Building	Il Floorspac s Using Na ion square	tural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Cooling Energy Sources	0	0	0	0	0	0	0	0	0	
Natural Gas	Q	Q	Q	Q	Q	Q	Q 47.5	Q	Q	
Other Excluding Natural Gas	155	195	97	3,269	6,147	2,245	47.5	31.8		
Buildings without Cooling	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Water-Heating Energy Sources	100									
Natural Gas	123	157	81	2,382	3,649	1,456	51.7	43.0	55.5	
Other Excluding Natural Gas	41	48	15	952	2,425	715	43.5	19.6	21.6	
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Cooking Energy Sources										
Natural Gas	60	131	47	913	2,741	786	65.4	47.6	59.8	
Other Excluding Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Buildings without Cooking	104	70	48	2,496	3,208	1,320	41.8	21.9	36.1	
Energy End Uses (more than one may apply)										
Buildings with Space Heating	171	210	99	3,591	6,250	2,256	47.7	33.5	43.7	
Buildings with Cooling	163	207	98	3,368	6,258	2,254	48.4	33.1	43.3	
Buildings with Water Heating	165	204	96	3,334	6,074	2,171	49.4	33.6	44.3	
Buildings with Cooking	67	140	51	1,097	3,118	961	61.0	44.9	53.2	
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Buildings with Electricity			-							
Generation	39	73	24	591	1,672	301	66.2	43.5	80.1	
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	
1 to 50	Q	19	Q	Q	525	Q	Q	35.3	Q	
51 to 99	14	26	10	292	1,201	224	49.0		42.4	
100	154	165	82	3,109	4,525	1,774	49.6	36.4	46.2	
				0,.00	.,020	.,		00		
Percent of Floorspace Cooled	0	0	0	0	0	0	0	0	0	
Not Cooled	Q 48	Q 36	Q 8	Q 1,033	Q 1 570	Q 391	Q 46.2	Q 23.2	Q 21.5	
1 to 50 51 to 99	48 57	36 37	8 14	1,033	1,570 1,611	391	46.2 54.1	23.2	21.5 44.0	
100	58	134	75	1,031	3,076	1,551	45.5	43.5	48.6	
Heating Equipment (more										
than one may apply)										
Heat Pumps	Q	66	17	Q	1,947	373	Q	33.8	45.1	
Packaged Heat Pumps	Q	Q	Q	Q	1,057	Q	Q	Q	Q	
Split-System Heat Pumps	Q	20	Q	Q	737	Q	Q	27.8	Q	
Individual Room Heat Pumps	Q	19	Q	Q	736	Q	Q	25.4	Q	
Furnaces	87	64	21	1,981	2,050	784	43.8	31.5	26.2	
Individual Space Heaters	56	31	12	1,072	1,195	399	51.9	25.5	29.8	
District Heat	Q	Q	Q	Q	514	Q	Q	Q	Q	
Boilers	78	93	58	1,454	1,795	767	53.9	51.8	75.6	
Packaged Heating Units	39	92	34	907	2,361	966	42.8	39.1	35.2	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

		<u> </u>								
	Total Natural Gas Consumption (billion cubic feet)			Building	Il Floorspac s Using Na ion square	tural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Cooling Equipment (more than one may apply) Residential-Type Central										
Air Conditioners	65	31	15	1,142	1,001	407	57.3	31.2	36.6	
Heat Pumps	Q	68	16	Q	2,023	392	Q	33.4	42.0	
Packaged Heat Pumps	Q	Q	Q	Q	1,045	Q	Q	Q	Q	
Split-System Heat Pumps	Q	21	Q	Q	755	Q	Q	28.2	Q	
Individual Room Heat Pumps	Q	20	Q	Q	776	Q	Q	25.2	Q	
Individual Air Conditioners	38	45	17	809	1,232	484	47.4	36.6	35.0	
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Central Chillers	38	54	29	635	1,495	453	59.1	35.9	64.2	
Packaged Air Conditioning					•					
Units	96	125	55	2,080	3,426	1,313	46.0		42.2	
Swamp Coolers	N	Q	Q	N	Q	Q	N	Q	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Main Equipment Replaced Since										
1990 (more than one may apply)										
Heating	66	57	33	1,320	1,344	545	49.8	42.4	Q	
Cooling	83	56	46	1,631	1,666	777	50.8	33.9	59.8	
Water Heating Equipment										
Centralized System	100	123	58	2,109	3,334	1,495	47.5	36.8	38.6	
Distributed System	25	30	7	576	1,005	260	43.7	29.5	27.2	
Combination of Centralized										
and Distributed System	39	52	Q	649	1,735	416	60.6	29.9	75.4	
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	67	140	51	1,097	3,118	961	61.0	44.9	53.2	
Activities with Large										
Amounts of Hot Water	86	130	49	1,391	2,806	833	62.1	46.5	58.9	
Separate Computer Area	63	89	37	1,345	3,137	900	46.7	28.3	41.1	
HVAC Conservation Features										
(more than one may apply)		_								
Variable Air-Volume System	49		48	1,067	2,053	619	45.7	29.5	77.0	
Economizer Cycle	60		37	1,258	2,413	608	47.9	30.8	61.0	
HVAC Maintenance	127	187	83	2,776	5,494	1,767	45.8	34.0	46.7	
Energy Management and										
Control System (EMCS)	30	49	22	735	1,805	488	40.4	27.4	45.9	
Equipment Usage Reduced When Building Not In Full Use										
(more than one may apply) ^a										
Heating	106	126	69	2,362	4,413	1,576	45.0	28.5	44.0	
Cooling	108	128	73	2,347	4,811	1,635	45.9	26.7	44.7	
Lighting	118	121	54	2,645	4,449	1,529	44.7	27.1	35.6	
Office Equipment	58	41	11	1,323	1,369	421	44.1	29.8	26.7	
• •										

Table C28. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

	Total Natural Gas Consumption (billion cubic feet)			Building	Il Floorspac s Using Na ion square	tural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	West North Central	South Atlantic	East South Central	
All Buildings*	171	210	99	3,593	6,326	2,281	47.6	33.2	43.3	
Annual Consumption (hundred cubic feet)										
1,000 or Less	4	5	2	272	639	225	15.7	8.1	8.9	
1,001 to 5,000	27	32	18	860	1,484	815	31.6	21.6	22.4	
5,001 to 10,000	23	27	Q	538	1,123	Q	43.2	23.6	Q	
10,001 to 25,000	33	38	16	678	1,074	463	49.1	35.7	35.1	
25,001 to 50,000	28	29	Q	534	629	Q	52.7	46.7	Q	
50,001 to 100,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Over 100,000	Q	60	Q	Q	766	Q	Q	77.9	Q	
Provider of Natural Gas (more than one may apply)										
Local Utility	153	190	94	3,356	5,730	2,205	45.6	33.2	42.5	
Some Other Provider	22	27	Q	307	Q	Q	71.8	31.4	Q	

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

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 that use natural gas.

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 3.8 percent of total natural gas 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.

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Co	I Natural G Insumption	n	Buildings	Floorspac Using Nat on square	ural Gas	Ene	atural Gas ergy Intens feet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Building Floorspace									
(Square Feet)									
1,001 to 5,000	29	18	Q	334	265	363	87.9	68.4	60.2
5,001 to 10,000	23	Q	Q	519	Q	496	44.2	Q	53.4
10,001 to 25,000	14	38	22	514	630	748	28.1	61.1	29.0
25,001 to 50,000	17	23	21	512	464	733	33.5	49.1	28.7
50,001 to 100,000	18	Q	18	888	Q	730	20.5	Q	24.2
100,001 to 200,000	16	Q	12	760	Q	651	21.5	Q	17.8
200,001 to 500,000	Q	Q	14	470	Q	675	Q	Q	20.8
Over 500,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
Principal Building Activity									
Education	16	21	28	797	420	802	20.6	48.8	34.8
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	37	Q	Q	211	Q	Q	175.7	Q	Q
Health Care	26	19	19	282	162	274	91.4	115.5	68.7
Inpatient	23	Q	Q	235	Q	Q	96.0	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	Q	Q	16	Q	Q	515	Q	Q	31.5
Retail (Other Than Mall)	7	Q	5	436	Q	455	16.2	Q	11.4
,	12	19	17	430 Q	379	1,165	15.2	50.0	14.2
Office									
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	Q	Q	336	Q	Q	19.4	Q	Q
Service	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	614	Q	Q	11.3	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	Q	Q	Q	Q	Q	Q	Q	Q	Q
1920 to 1945	8	Q	12	271	Q	580	29.9	Q	21.5
1946 to 1959	14	Q	15	358	Q	478	37.7	Q	32.2
1960 to 1969	14	27	18	567	441	672	25.4	62.2	27.0
1970 to 1979	30	49	25	991	712	782	29.8	68.8	31.7
1980 to 1989	30	38	37	1,119	525	1,067	26.4	72.8	34.8
1990 to 1999	38	18	28	848	487	908	45.4	36.8	31.0
2000 to 2003	Q	Q	8	433	Q	415	27.9	Q	19.9
Climate Zone: 30-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	N	104	Q	N	1,722	Q	N	60.4	46.8
5,500-7,000 HDD	N	53	13	N	829	383	N	63.5	33.7
4,000-5,499 HDD	Q	N	14	Q	N	443	Q	N	30.8
Fewer than 4,000 HDD	72	N	99	1,777	N	3,761	40.3	N	26.2
2,000 CDD or More and									
Fewer than 4,000 HDD	71	Q	Q	2,748	Q	Q	26.0	Q	Q
Number of Floors									
One	78	70	71	2,284	1,301	1,811	34.3	54.1	39.3
Two	18	44	35	771	836	1,367	23.7	52.9	25.3
Three	Q	Q	10	Q	Q	564	Q	Q	17.7
Four to Nine	26	Q	25	550	318	701	47.2	53.4	35.9
Ten or More	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Co	I Natural Consumption	n	Buildings	Floorspac Using Nat on square t	ural Gas	Ene	atural Gas rgy Intens eet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Number of Workers (main shift)									
Fewer than 5	15	22	17	762	462	787	19.6	47.2	22.2
5 to 9	21	15	21	456	294	401	45.7	49.4	51.9
10 to 19	31	22	13	598	334	424	51.8	65.7	29.9
20 to 49	30	26	37	884	445	910	33.8	58.3	40.9
50 to 99	15	23	15	657	500	577	22.5	46.9	26.4
100 to 249	Q	Q	17	Q	Q	786	Q	Q	21.1
250 or More	33	Q	29	Q	519	1,131	31.4	83.9	25.5
Weekly Operating Hours									
Fewer than 40	5	Q	Q	277	Q	427	19.5	Q	31.1
40 to 48	12	27	13	864	421	777	14.0	64.9	16.7
49 to 60	29	26	24	1,287	615	1,067	22.6	42.6	22.2
61 to 84	27	20	30	710	422	1,003	38.3	48.3	29.6
85 to 167	26	Q	21	520	Q	721	50.3	Q	28.5
Open Continuously	51	66	49	1,046	866	1,020	49.0	75.8	47.7
Ownership and Occupancy									
Nongovernment Owned	125	119	111	3,692	2,073	3,916	33.8	57.6	28.3
Owner Occupied	44	41	45	1,859	828	1,719	23.9	49.9	26.3
Nonowner Occupied	80	78	65	1,789	1,238	2,114	44.7	63.0	30.6
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	27	43	38	1,011	724	1,101	26.2	58.8	34.5
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	343	Q	Q	53.0
Local	12	29	17	578	457	678	20.6	63.3	24.8
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	N	Q	Q	N	Q	Q	N	Q	Q
Partially Vacant	23	31	19	1,051	507	933	22.0	60.4	19.9
Not At All Vacant	128	131	128	3,603	2,266	3,955	35.4	57.7	32.4
Number of Establishments									
One	110	141	117	3,306	2,214	3,299	33.4	63.5	35.5
2 to 5	26	17	23	656	436	915	38.9	38.8	25.0
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q		Q	Q	Q	Q	Q	Q
More than 20	Q	Q		Q	Q	Q	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Exterior Wall Material									
Brick, Stone or Stucco	93	63	84	2,583	1,094	2,358	35.9	57.4	35.6
Concrete (Block or Poured)	20	19	29	574	322	816	34.8	57.4 57.8	35.2
Concrete Panels	10	Q	15	636	322 Q	892	15.2	70.9	16.9
	Q	Q	Q	030 Q	Q	092 Q	15.2 Q	70.9 Q	16.9 Q
Siding or Shingles Metal Panels	15		9	529	504	482	ب 27.5	ب 51.1	ب 17.8
		Q							
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Co	l Natural G nsumption on cubic fe	n	Buildings	Floorspac Using Nat on square	ural Gas	Ene	atural Gas ergy Intens feet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Predominant Roof Material									
Built-Up	57	76	61	1,738	1,048	2,203	32.7	72.1	27.9
Shingles (Not Wood)	18	22	26	471	377	616	37.3	58.5	41.5
Metal Surfacing	24	32	13	1,007	730	397	23.5	43.6	33.5
Synthetic or Rubber	42	28	25 15	1,016	498	974	41.5	55.5	25.3
Slate or Tile Wooden Materials	Q Q	Q Q	15 Q	Q Q	Q Q	406 Q	Q Q	Q Q	35.8 Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	N	Q	Q	Ñ	Q	Q	N	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)									
Any Type of Renovation Since 1980	35	53	38	917	874	1,328	38.0	60.3	28.4
Addition or Annex	21	35	16	416	532	351	49.4	66.0	44.8
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q Q	77.0 Q
Cosmetic Improvements	25	38	32	689	598	1,174	36.6	63.8	27.3
Wall or Roof ReplacementInterior Wall	13	28	18	448	452	661	28.2	62.0	27.6
Re-Configuration	17	35	21	483	565	684	36.1	62.7	30.4
HVAC Equipment Upgrade	19	38	25	472	658	843	39.8	57.3	29.9
Lighting Upgrade Window Replacement	15 Q	34 Q	26 14	384	592 Q	873 380	38.9	56.8 Q	29.5 35.9
Plumbing System Upgrade	Q	25	19	Q Q	486	766	Q Q	52.3	24.9
Insulation Upgrade	Q	Q	Q	Q	Q	700 Q	Q	02.5 Q	24.9 Q
Other Renovation	N N	Q	Q	N	Q	Q	N	Q	Q
No Renovations Since 1980	36	46	38	1,387	672	1,299	26.2	68.2	28.9
Building Newer than 1980	80	63	74	2,400	1,251	2,390	33.4	50.7	30.8
Energy Sources (more than one may apply)									
Electricity	151	162	149	4,698	2,797	5,016	32.2	57.9	29.7
Natural Gas	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Fuel Oil	34	Q	37	Q	448	1,136	34.6	89.3	32.1
District Heat District Chilled Water	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q	Q Q	Q Q
Propane	Q	Q	Q	Q	Q	Q	Q Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources									
Natural Gas	133	157	122	3,731	2,547	4,301	35.7	61.6	28.4
Natural Gas Main	127	148	113	3,308	2,277	3,633	38.2	65.1	31.2
Natural Gas Secondary	Q	Q	9	Q	Q	668	Q	Q	13.1
Other Excluding Natural Gas Buildings without Heating	17 Q	Q Q	15 Q	869 Q	Q Q	533 Q	19.8 Q	Q Q	28.9 Q
Primary Space-Heating Energy Source									
Electricity	23	11	22	1,160	334	1,015	19.5	31.9	21.9
Natural Gas	127	148	113	3,308	2,277	3,633	38.2	65.1	31.2
Fuel Oil	N	Q	N	N	Q	N	N	Q	N
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	N	N	N	N	N	N	N	N	N
Other	N	N	Q	N	N	Q	N	N	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

		•							
	Co	l Natural G nsumption	n	Buildings	Floorspac Using Nat on square	ural Gas	Ene	atural Gas ergy Intens feet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Cooling Energy Sources		•	•		0	•	0		0
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other Excluding Natural Gas	148	154	128	4,587	2,634	4,355	32.2	58.4	29.3
Buildings without Cooling	Q	Q	14	Q	Q	408	Q	Q	35.0
Water-Heating Energy Sources	400								
Natural Gas	126	143	127	3,201	2,276	3,838	39.3	62.9	33.1
Other Excluding Natural Gas	18	Q		1,117	381	831	16.3	40.3	
Bldgs without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources									
Natural Gas	82	58	77	1,953	796	1,616	41.9	73.4	47.3
Other Excluding Natural Gas	14	Q	Q	394	Q	Q	35.1	Q	Q
Buildings without Cooking	56	94	66	2,357	1,815	3,113	23.6	52.0	21.2
Energy End Uses (more than one may apply)									
Buildings with Space Heating	151	161	138	4,600	2,726	4,835	32.7	58.9	28.4
Buildings with Cooling	150	156	135	4,608	2,649	4,608	32.4	58.9	29.2
Buildings with Water Heating	144	159	145	4,318	2,656	4,669	33.3	59.7	31.0
Buildings with Cooking	96	68	83	2,346	982	1,904	40.7	68.8	43.4
Buildings with Manufacturing	Q	Q	Q	_,5 .6 Q	Q	Q	Q	Q	Q
Buildings with Electricity	•	Q.	•	•	•	•	•	•	•
Generation	36	44	39	1,154	583	1,237	31.6	75.3	31.8
Develops of Floorences Hooted									
Percent of Floorspace Heated	0	0	0	0	0	0	0	^	0
Not Heated	Q	Q	Q	Q 400	Q	Q	Q	Q	Q
1 to 50	Q	Q	10	499	Q	851	Q	Q	11.8
51 to 99	24	25	30	433	483	1,090	56.0		
100	123	127	97	3,667	2,054	2,894	33.5	62.0	33.7
Percent of Floorspace Cooled									
Not Cooled	Q	Q	14	Q	Q	408	Q	Q	35.0
1 to 50	24	45	18	1,064	873	1,059	22.8	52.0	16.6
51 to 99	28	31	32	439	682	1,072	63.3	46.0	29.9
100	97	79	85	3,106	1,095	2,478	31.4	72.5	34.3
Heating Equipment (more									
than one may apply)	^	^	10	^	^	040	^	^	20.0
Heat Pumps	Q	Q	18	Q	Q	849	Q	Q	
Packaged Heat Pumps	Q	Q	7	Q	Q	426	Q	Q	17.2
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	
Individual Room Heat Pumps	Q	Q 51	Q	Q 1.460	Q 1.045	Q 1 227	Q 30.6	Q 40.0	Q
Furnaces	58	51	44	1,469	1,045	1,337	39.6	49.0	32.8
Individual Space Heaters	17	29	32	506	595	920	33.9	49.1	34.5
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	
Boilers	56	95	71	1,380	1,216	2,146	40.5	78.5	
Packaged Heating Units	63	33		2,012	640	1,911	31.5	52.2	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Co	I Natural G nsumption	n	Buildings	Floorspac Using Nat on square t	ural Gas	Ene	atural Gas rgy Intens eet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Cooling Equipment (more than one may apply) Residential-Type Central									
Air Conditioners	25	17	19	764	304	538	32.7	55.9	35.7
Heat Pumps	Q	Q	17	Q	Q	914	Q	Q	18.8
Packaged Heat Pumps	Q	Q	6	Q	Q	404	Q	Q	15.9
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Air Conditioners	12	34	14	536	607	678	22.7	56.0	21.3
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q
Central Chillers	51	43	33	1,485	484	1,162	34.5	88.8	28.8
Packaged Air Conditioning									
Units	81	79	81	2,306	1,501	2,753	35.1	52.9	29.4
Swamp Coolers	Q	45	22	Q	763	315	Q	59.7	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since									
1990 (more than one may apply)	27		20	4 400	004	4 4 4 4	20.7	05.0	24.0
Heating	37 52	59 73	38 52	1,193 1,649	901 1,089	1,111 1,567	30.7 31.6	65.8 66.9	34.6 33.5
Cooling	52	73	52	1,049	1,009	1,507	31.0	00.9	33.3
Water Heating Equipment									
Centralized System	101	90	102	2,798	1,557	2,527	36.1	57.9	40.2
Distributed System	26	13	18	1,023	322	1,030	25.6	41.5	17.5
Combination of Centralized									
and Distributed System	17	55	25	497	777	1,112	33.9	70.8	22.7
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	96	68	82	2,346	982	1,892	40.7	68.8	43.3
Activities with Large									
Amounts of Hot Water	77	80	91	1,575	1,126	1,678	48.7	71.1	54.3
Separate Computer Area	65	77	59	2,253	1,296	2,543	29.0	59.5	23.2
HVAC Conservation Features									
(more than one may apply)	07	F.4	00	4 047	070	4.070	04.7	FF ^	25.0
Variable Air-Volume System	67 56	54 72	60	1,917	978	1,678	34.7	55.6	35.6
Economizer Cycle HVAC Maintenance	56 131	73 138	66 138	1,404 3,866	1,164 2,404	2,456 4,522	39.9 33.9	63.0 57.5	27.0 30.6
Energy Management and	131	130	130	3,000	2,404	4,322	33.9	37.3	30.0
Control System (EMCS)	39	44	37	1,448	680	1,657	26.8	64.0	22.3
Equipment Usage Reduced When Building Not In Full Use									
(more than one may apply) ^a			<u>.</u>						
Heating	100	117	89	3,227	1,933	3,824	31.1	60.5	23.3
Cooling	109	120	100	3,468	2,070	3,849	31.4	58.1	25.9
Lighting Office Equipment	97 28	95 40	95 38	3,440 1,180	1,864 721	3,817 1,538	28.2 23.8	51.0 55.1	25.0 24.7

Table C29. Natural Gas Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

	Co	Natural G nsumption on cubic fe	n	Buildings	Floorspac Using Nat on square	ural Gas	Ene	atural Gas rgy Intens eet/squar	sity
	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific	West South Central	Moun- tain	Pacific
All Buildings*	151	162	149	4,704	2,797	5,016	32.2	57.9	29.7
Annual Consumption (hundred cubic feet)									
1,000 or Less	4	Q	7	746	Q	925	5.5	Q	7.1
1,001 to 5,000	20	19	19	1,121	591	1,317	17.7	32.3	14.6
5,001 to 10,000	24	22	16	889	387	618	27.2	56.5	25.2
10,001 to 25,000	27	Q	38	625	Q	977	42.6	70.9	39.1
25,001 to 50,000	31	23	29	511	431	339	60.4	54.5	85.1
50,001 to 100,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 100,000	32	48	27	466	461	Q	68.8	104.4	57.9
Provider of Natural Gas (more than one may apply)									
Local Utility	129	138	135	4,132	2,399	4,641	31.1	57.6	29.1
Some Other Provider	Q	32	18	Q	487	366	Q	66.4	48.9

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.

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 that use natural gas.

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 3.8 percent of total natural gas 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.

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

Non Man Bundings, 20	Total Natural Gas Consumption (billion cubic feet)					Bu	ildings l	Floorspa Jsing Na	atural G	as	(6	Ener	atural G gy Inte		t)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Building Floorspace															
(Square Feet)															
1,001 to 5,000	56	81	35	55	16	660	979	421	789	234	85.0	82.9	82.5	69.8	66.6
5,001 to 10,000	47	53	27	59	16	644	944	526	1,212	367	72.5	56.5	51.2	49.0	43.9
10,001 to 25,000	88	103	50	47	13	1,679	2,134	958	1,781	501	52.4	48.0	51.7	26.4	25.9
25,001 to 50,000	59	87	52	34	18	1,251	1,839	1,031	1,441	463	47.2	47.2	50.4	23.7	38.6
50,001 to 100,000	55	88	42	41	11	1,043	2,129	1,300	1,569	642	52.4	41.5	32.3	26.0	16.5
100,001 to 200,000	35	114	31	Q	9	970	2,090	1,320	1,550	714	36.2	54.5	23.4	34.0	12.4
200,001 to 500,000	54	61	38	31	15	1,001	1,471	1,380	1,161	666	53.6	41.7	27.3	26.8	22.5
Over 500,000	Q	71	53	27	Q	Q	1,263	1,176	1,005	Q	Q	56.5	44.9	26.8	Q
Principal Building Activity	25	446	22	40	_	4.00=	0.001	222	4 700	000	50. 0	40 :	60 :	00.0	40.4
Education	65	113	26	48	9	1,227	2,281	968	1,700	869	53.0	49.4	26.4	28.2	10.1
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	27	49	Q	64	31	174	368	Q	393	277	154.3		Q		110.9
Health Care	38	69	36	64	29	383	665	454	720	323	98.4		78.3	89.5	89.4
Inpatient	27	56	30	59	26	237	414	302	589	264	114.1	136.3	99.9	99.4	98.8
Outpatient	Q	12	Q	Q	Q	Q	251	Q	Q	Q	Q		Q	Q	Q
Lodging	34	86	36	34	18	609	1,183	958	967	538	55.5	72.8	Q	35.3	32.8
Retail (Other Than Mall)	27 60	27 106	16 60	16 22	Q 14	593 1,252	595 2,575	451 1,977	931 1,539	Q 865	46.1 48.0	45.8 41.0	36.1 30.1	17.0	Q 16.1
Office								,						14.4	
Public Assembly	32	30	Q	25	Q	639	537	Q	700	Q	49.7	55.0	Q	35.4	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q 774	Q	Q 40.0	Q	Q	Q	Q
Religious Worship	14 49	38 37	14 18	13 23	Q Q	277 697	973 717	412 422	774 511		49.2 70.9		32.8 Q	16.5 44.8	Q Q
Service Warehouse and Storage	33	44	33	23 16	Q	963	1,672	1,071	1,463	Q Q	34.5		30.7	11.2	Q
Other	Q	Q	Q	Q	Q	903 Q	1,072 Q	1,071 Q	1,403 Q	Q	34.3 Q	20.4 Q	30.7 Q	11. <u>2</u>	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed															
Before 1920	55	46	25	Q	Q	832	1,042	599	Q	Q	66.4	43.7	41.9	Q	Q
1920 to 1945	49	70	77	17	Q	762	1,296	1,563	821	Q	64.8	54.1	49.0	21.3	Q
1946 to 1959	37	97	29	Q	Q	642	1,831	1,000	945	Q	57.5	52.8	29.0	44.8	Q
1960 to 1969	61	94	36	39	19	1,005	1,759	1,061	1,246	563	60.2	53.2	33.7	31.2	33.3
1970 to 1979	95	125	43	59	19	1,732	2,291	1,199	1,697	739	54.8	54.4	35.6	34.9	26.3
1980 to 1989	42	109	43	70	19	688	1,831	946	2,111	893	60.7	59.3	45.7	33.0	21.5
1990 to 1999	61	82	45	86	31	1,460	1,887	1,053	2,704	1,073	41.4	43.5	43.1	31.8	28.6
2000 to 2003	19	38	Q	24	13	524	913	693	785	517	36.5	41.1	41.6	30.6	25.6
Census Region and Division															
Northeast	Q	188	165	N	N	Q	3,692	4,328	N	N	53.3		38.1	N	N
New England	N	73	N	N	N	N	1,465	N	N	N	N	49.5	N	N	N
Middle Atlantic	Q	116	165	N	N	Q	2,227	4,328	N	N	53.3	52.0	38.1	Ν	N
Midwest	235	405	44	N	N	4382.0	7,947	834	N	N	53.6	51.0	52.3	Ν	N
East North Central	151	361	Ν	N	N	2660.0	6,909	N	N	N	56.7	52.3	N	Ν	N
West North Central	84	43	44	N	N	1722.0	Q	834	N	N	48.8	Q	52.3	Ν	N
South	N	Ν	104	249	107	N	N	2,508	6,748	4,054	N	N		36.8	26.5
South Atlantic	N	Ν	58	131	Q	N	N	1,705	3,643	Q	N	N	33.9	35.9	22.1
East South Central	N	Ν	Q	Q	Q	N	N	Q	Q	Q	N	N	Q	34.9	43.7
West South Central	N	Ν	Q	72	71	N	N	Q	1,777	2,748	N	N	Q	40.3	26.0
West	122	66	14	99	11	2102.0	1,211	443	3,761	296	57.9	54.1	30.8	26.2	37.9
Mountain	104	53	N	N	Q	1722.0	829	N	N	Q	60.4		N	N	Q
Pacific	Q	13	14	99	Q	Q	383	443	3,761	Q	46.8	33.7	30.8	26.2	117.3

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)						ildings l	Floorspa Jsing Na n square	atural G	as	(0	Ener	tural G gy Inte eet/squ		t)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Number of Floors															
One	140	213	81	161	49	2,572		1,862	-	1,715	54.3	54.7	43.4	32.9	28.7
Two	131	164	89	75	18	2,461	3,745	1,964	2,436	835	53.2	43.8	45.1	30.7	21.6
Three	60	96	35		Q	1,140		996	1,060	Q	52.5	42.9	34.8	34.7	Q
Four to Nine	74	133 53	74		27 Q	1,270		2,103	1,392 727		58.1	61.1 66.6	35.0	43.4	36.3
Ten or More	Q	53	49	14	Q	Q	790	1,188	121	Q	Q	00.0	41.3	19.3	Q
Number of Workers (main shift)															
Fewer than 5	65	108	35	49	7	1,279	2,639	807	1,797	501	50.9	41.0	43.0	27.1	14.7
5 to 9	41	63	30	46		796	1,164	616	1,166	341	51.5	54.6	48.2	39.4	35.0
10 to 19	62	81	31	37	23	997	1,575	1,055	1,196	494	62.1	51.4	29.8	31.3	46.6
20 to 49 50 to 99	100 60	112 93	80 33	71 38	19 10	1,748 1,338	2,227 1,838	1,742 1,036	1,894 1,363	601 580	57.3 45.0	50.3 50.6	46.1 31.9	37.6 27.7	31.9 16.8
100 to 249	44	83	37	54	10	872		1,030	1,418	357	50.4	58.8	34.5	38.3	26.6
250 or More	46	118	80	52		614	1,998	1,786		1,475	74.7	59.1	45.0	30.8	25.7
Weekly Operating Hours	22	5 0	0	_	_	477	1 526	0	746	0	46.0	22.6	_	20.2	0
Fewer than 4040 to 48	53	50 105	Q 35	Q 38	Q Q	477 1,049	1,536 1,988	Q 1,296	746 1,901	Q 680	46.8 50.7	32.6 52.7	Q 26.9	30.2 19.8	Q 16.6
49 to 60	107	116	70	57	12	2,297	3,050	1,525	2,372	948	46.8	38.1	45.8	24.2	12.9
61 to 84	71	108	53		14	1,182	-	1,450	2,020	579	59.8	48.5	36.6	28.9	24.6
85 to 167	68	74	43	50	13	1,127	1,348	1,060	1,107	582	60.5	55.0	40.6	45.5	22.9
Open Continuously	97	205	119	121	65	1,514	2,691	2,548	2,364	1,294	63.9	76.2	46.8	51.1	50.1
Ownership and Occupancy															
Nongovernment Owned	325	485	279	274	95	5,871	9,578	6,537	8,201	3,131	55.3	50.6	42.7	33.4	30.4
Owner Occupied		248	147	118	31	2,758	4,941	3,647	3,859	1,343	51.6	50.1	40.3	30.5	23.4
Nonowner Occupied	180	226	131	155	64	3,003	4,009	2,859	4,260	1,755	60.0	56.3	45.7	36.4	36.3
Unoccupied	Q	Q	Q			Q		Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	94	174	48		23	1,774		1,576	2,308		52.8	53.1	30.2	31.8	19.2
FederalState	Q 13	Q 28	Q 13		Q Q	Q 375	Q 447	Q 414	Q 878	Q Q	Q 34.9	Q 62.8	15.8 31.7	Q 38.5	Q Q
Local	78	125	30	36	15	1,331	2,281	872	1,289	856	58.2		34.3	27.6	17.2
	. •	0				.,	_,	0	.,_55	000	00.2	•	0		
Vacancy Status	_	_							_	_	_	_		_	_
Completely Vacant	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant Partially Vacant	Q 88	Q 108	Q 59			Q 1,640		Q 1.670	Q 1 5 1 5	Q 1,110	Q 53.4	Q 43.0	38.2 35.2		5.2 18.9
Not At All Vacant	323	539	262			5,798		1,679 6,297		3,192	55.7	55.6	41.6		
	320	300	_02	3.0	00	5,700	5,001	5,207	2,000	5,102	50.1	55.5	0	55.5	55.5
Number of Establishments			<i>-</i>									:			
One	300	501	247	289		5,184		5,555		2,706	58.0		44.4		
2 to 5	96	104	36		24	1,838		1,402	1,528	661	52.3 39.0	48.2		24.2	
6 to 10	14 Q	20 Q	Q Q		Q Q	360 Q		Q Q	Q Q	Q Q	39.0 Q	50.8 Q	Q Q	Q Q	Q Q
More than 20	Q	Q	Q			Q		Q	Q	Q	Q				
Currently Unoccupied	Q	Q	Q			Q		Q	Q		Q				

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)						ildings l	Floorspa Jsing Na n square	atural G	as	(0	Ener	tural G gy Inte eet/squ		t)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Predominant Exterior Wall Material															
Brick, Stone or Stucco	211	419	199	197	68	3,414	7,509	4,772	5,721	2,134	61.7	55.7	41.7	34.4	31.9
Concrete (Block or Poured)	99	92	63	67	19	1,712	1,918	1,231	1,695	767	57.7	48.1	51.3	39.4	24.7
Concrete Panels	43	70	28	21	13	788	1,144	969	938	840	54.7	61.3	28.9	22.0	15.0
Siding or Shingles	17	33	Q	Q	Q	501	833	Q	Q	Q	34.6	39.1	Q	Q	Q
Metal Panels	41	24	19	35	Q	1,017	774	592	1,424	Q	40.4	31.1	32.0	24.4	Q
Window Glass	Q	Q	Q		Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	28.3	Q
Predominant Roof Material Built-Up	156	240	138	143	43	2,588	4,234	2,924	3,909	1,554	60.3	56.7	47.3	36.6	27.7
Shingles (Not Wood)	67	111	51	61	11	1.115	2,379	983	1,594	448	59.7	46.8	51.7	38.3	24.5
Metal Surfacing	61	44	21	50	Q	1,500	1,111	656	1,913	601	40.9	39.4	32.3	25.9	20.7
Synthetic or Rubber	112	221	90	61	42	1,998	4,257	2,281	2,049		56.1	51.9	39.4		33.6
Slate or Tile	Q	20	Q	24	Q	Q	370	Q	627	Q	Q	54.9	Q	37.6	Q
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	N	Q	Q	Q	Q	N	Q	Q	Q		
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980															
(more than one may apply)															
Any Type of Renovation															
Since 1980	168	254	116	94	33	2,731	4,313	2,969	2,478	780	61.4	58.8	39.0	37.7	41.8
Addition or Annex	88	102	40	47	18	1,351	1,594	987	756	348	65.2	64.0	Q	62.2	52.7
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	140	171	84	61	25	2,172	2,912	2,428	1,918	642	64.7	58.8	34.7	31.6	39.6
Wall or Roof Replacement Interior Wall	81	96	47	29	17	1,327	1,835	1,727	1,046	393	61.2	52.3	27.0	27.6	43.5
Re-Configuration	98	122	57	38	17	1,605	1,958	1,881	1,162		61.0	62.2	30.2	33.0	40.1
HVAC Equipment Upgrade	123	154	88	68	20	1,956	2,537	1,996	1,488	506	62.7	60.7	44.0	46.0	39.6
Lighting Upgrade	121	138	66	45	Q	1,971	2,467	1,890	1,391	385	61.3	55.9	35.1	32.3	40.1
Window Replacement	70	102	41	19	Q	1,118	1,732	1,523	495	Q	62.5	58.9	26.7	38.4	Q
Plumbing System Upgrade	83	96	52	35	Q	1,272	1,545	1,588	1,051	Q	65.5	62.1	32.5	33.5	Q
Insulation Upgrade	38	38	28	20	Q	696	836	773	484		55.1	45.2		41.0	Q
Other Renovation No Renovations Since 1980	Q 120	Q 177	Q	Q 74	N	Q 2 242	Q 3.005	Q 2.452	Q 2.422	1 007	Q 57.6		Q 20.1		N 24.4
Building Newer than 1980	129 121	177 228	94 117	74 179	23 63	2,243 2,671	3,905 4,632	2,453 2,692	-	1,087 2,483	57.6 45.4	45.3 49.3	38.1 43.6	30.5 32.0	21.1 25.4
Energy Sources (more than															
one may apply)															
Electricity	418	659	327	347	119		12,850		10,509	,	54.7	51.3		33.0	27.3
Natural Gas	418	659	327	347	119		12,850	-	10,509		54.7	51.3	40.3	33.0	27.3
Fuel Oil	81	159	125	92	34	1,255	2,450	3,550		1,221	64.7		35.3	48.1	28.1
District Heat	Q	Q	Q	Q	Q	347	789	593	Q	Q	Q	22.1	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q 700	Q	Q	Q	Q	Q	Q	Q	Q
Propane	Q	37	Q			Q	789	Q	Q	Q	Q	46.7	Q		Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

14011-Mail Ballalligs, 20															
		Coi	Natura nsump	tion		Bu	ildings l	Floorspa Jsing Na n square	atural G	as	(0	Ener	tural G gy Inte eet/squ		ot)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Space-Heating Energy Sources Natural Gas Natural Gas Main Natural Gas Secondary Other Excluding Natural Gas Buildings without Heating	407 381 26 Q Q	637 603 33 21 Q	302 286 16 22 Q		88 78 10 30 Q	7,142 6,515 627 498 Q	11,538 10,640 898 1,267 Q	6,236 5,617 620 Q		2,679 2,233 446 1,452 Q	56.9 58.5 41.2 21.3 Q	55.2 56.7 37.2 16.2 Q	48.4 50.9 26.5 Q 483.0	33.7 36.2 19.7 21.2 Q	32.8 35.0 21.7 20.5 Q
Primary Space-Heating Energy Source Electricity Natural Gas Fuel Oil District Heat Propane Other	31 381 Q 3 N Q	41 603 Q Q N Q	25 286 Q Q N Q	38 288 Q Q Q Q	36 78 N Q N	700 6,515 Q 331 N Q	1,206 10,640 Q Q N Q	759 5,617 Q 482 N Q		1,564 2,233 N Q N	44.5 58.5 Q 8.2 N Q	34.2 56.7 Q Q N Q	32.7 50.9 Q 5.6 N	19.7 36.2 Q Q Q	22.9 35.0 N Q N
Cooling Energy Sources Natural Gas Other Excluding Natural Gas Buildings without Cooling	Q 383 27	Q 577 47	Q 282 Q	Q 319 15	Q 115 Q	Q 6,959 587	Q 11,282 1,213	Q 7,651 Q	Q 9,806 469	Q 4,307 Q	Q 55.0 46.3	Q 51.2 38.8	Q 36.9 Q	Q 32.5 32.4	Q 26.8 Q
Water-Heating Energy Sources Natural Gas Other Excluding Natural Gas Bldgs without Water Heating	335 76 Q	497 136 26	253 68 Q	278 56 14	101 15 Q	5,482 1,792 Q	8,466 3,649 735	4,892 2,994 Q		2,913 1,189 Q	61.2 42.5 Q	58.7 37.2 35.8	51.6 22.8 Q	39.3 20.6 18.2	34.7 12.5 Q
Cooking Energy Sources Natural Gas Other Excluding Natural Gas Buildings without Cooking	152 29 237	262 71 326	153 15 159	189 10 148	75 Q 32	2,217 511 4,917	4,071 1,343 7,437	3,464 559 4,091	396	2,167 410 1,773	68.4 57.6 48.3	64.3 52.8 43.9	44.2 26.3 38.8	53.6 25.9 22.5	34.8 27.5 18.0
Energy End Uses (more than one may apply) Buildings with Space Heating Buildings with Cooling Buildings with Water Heating Buildings with Cooking Buildings with Manufacturing Buildings with Electricity Generation	417 391 411 181 25	657 612 632 332 19	324 312 321 168 37	332 333 199 16	118 119 116 87 Q		12,805 11,637 12,115 5,413 480 3,236		10,040 9,757 3,915 522	,	55.4 56.6 66.4 47.3	51.3 52.6 52.2 61.4 38.8 61.1	40.0 39.3 40.7 41.7 53.9	33.1 34.2 50.8 31.3	27.3
Percent of Floorspace Heated Not Heated 1 to 50 51 to 99	Q 20 66 331	Q 22 62 573	Q 27 52 245	Q 22 57	Q 3 22	Q 597 1,082	Q 770 1,350 10,685	Q 946 1,132 6,030	Q 1,242 1,879	Q 451 522 3,159	Q 32.8 61.3		483.0 28.9		Q 6.2 42.9
Percent of Floorspace Cooled Not Cooled	27 129 110 153	47 159 155 297	Q 86 81 145	53 70	Q Q 21 86	587 2,420 1,984 2,654	1,213 3,668 2,806 5,162	Q 2,787 2,197 2,958	469 2,595 2,050 5,395	Q 661 694 2,990	46.3 53.3 55.2 57.6	38.8 43.4 55.4 57.5	Q 30.9 36.9 49.1	32.4 20.3 34.4 38.7	16.9 30.3

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

		Coi	Natura nsumpt n cubic	tion		Bu	ildings l	Floorspa Jsing Na 1 square	tural G	as	((Ener	atural G gy Inte eet/squ		t)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Heating Equipment (more															
than one may apply)	00	00	40	00	00	540	054	4.074	0.000	000	50.0	05.0	00.0	00.0	00.0
Heat Pumps Packaged Heat Pumps	30 Q	63 Q	42 25	62 Q	20 13	540 Q	951 655	1,274 778	2,090 1,093	698 505	56.3 Q	65.8 66.1	32.8 32.1	29.8 Q	28.9 26.6
Split-System Heat Pumps	Q	Q	23 Q	17	Q	Q	033 Q	7 7 Q	640	303 Q	Q	00.1 Q		27.3	20.0 Q
Individual Room Heat Pumps	Q	Q	15	17	Q	Q	Q	449	762	Q	Q		32.8	22.3	Q
Furnaces	168	248	87	119	31	3,534	5,239	1,911	3,529	1,091	47.6	47.3	45.6	33.8	28.1
Individual Space Heaters	108	120	72	52	16	2,259	2,849	1,662	1,685	513	47.6	42.2	43.1	30.9	31.9
District Heat	Q	Q	Q	Q	Q	323	Q	511	Q	Q	Q		Q		Q
Booksand Heating Units	227	383 180	204 94	148 131	47 54	3,450 1,863	5,903 3,229	4,328 2,380	3,273 4,441	1,219 1.704	65.7 56.4	64.8 55.9	47.2 39.4	45.2 29.5	38.3 31.7
Packaged Heating Units Other	105 17	14	94 Q	Q	Q Q	499	393	2,360 Q	4,441 Q	1,704 Q	33.7		39.4 Q	29.5 Q	31.7 Q
Cooling Equipment (more than one may apply) Residential-Type Central															
Air Conditioners	104	132	71	53	18	1,670	2,493	1,708	1,418	692	62.5	52.8	41.8	37.7	26.4
Heat Pumps	31	68	44	63	20	568	1,036	1,271	2,216	740	54.6	65.9	34.9	28.4	27.5
Packaged Heat Pumps	19	Q	27	Q	13	320	721	818	1,015	478	60.1	67.0	33.3	Q	28.0
Split-System Heat Pumps	Q	Q	Q	19	Q	Q	Q	Q	645	Q	Q	Q	Q	28.9	Q
Individual Room Heat Pumps	Q 100	Q 455	15	18	Q	Q	Q	412	931	Q 700	Q	Q	35.7	19.7	Q
Individual Air Conditioners District Chilled Water	109 Q	155 Q	59 Q	58 Q	18 Q	1,766 Q	2,730 Q	2,149 Q	1,739 Q	729 Q	61.8 Q	56.7 Q	27.3 Q	33.1 Q	24.4 Q
Central Chillers	84	176	103	77	47	1,360	2,353	1,824	2,057		61.5	74.7	56.2	37.4	31.0
Packaged Air Conditioning	٠.					.,000	_,000	.,0	_,	.,000	0		00.2	0	0
Units	235	373	186	202	61	4,195	6,748	4,769	6,199	1,896	56.1	55.3	39.0	32.5	32.0
Swamp Coolers	31	Q	Q	Q	Q	500	Q	Q	Q	Q	61.4	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1990 (more than one may apply)															
Heating	132	229	108	90	27	2,495	3,951	2,409	2,310	1,111	53.0	58.0	44.9	39.0	24.4
Cooling	171	292	144	105	43	2,936	4,728	3,755	3,021	1,608	58.1	61.8	38.4	34.8	27.0
Water Heating Equipment Centralized System	285	402	199	224	79	4,862	7,466	4,960	5 532	2,533	58.6	53.9	40.1	40.6	31.2
Distributed System	48	97	36	47	18	973	2,378	1,428	2,135	645	49.7	40.9	25.4	22.2	27.2
Combination of Centralized		٠.				0.0	_,0.0	.,0	_,	0.0					
and Distributed System	78	133	86	62	19	1,439	2,271	1,498	2,090	924	54.4	58.5	57.3	29.5	20.7
Energy-Related Space Functions															
(more than one may apply) Commercial Food Preparation	181	332	168	199	87	2,728	5,402	4,023	3 015	2,577	66.4	61.4	41.7	50.8	33.7
Activities with Large	101	332	100	133	07	2,120	5,402	- ,∪∠3	5,915	2,311	00.4	01.4	71.7	50.0	JJ.1
Amounts of Hot Water	193	296	139	204	71	2,903	4,514	3,303	3.485	1,818	66.4	65.5	42.2	58.5	39.2
Separate Computer Area	158	332	164	135	60	3,065	5,960	4,677	4,731	2,182	51.4	55.8	35.0	28.5	27.4
HVAC Conservation Features (more than one may apply)															
Variable Air-Volume System	135	246	129	127	51	2,506	4,172	2,922	2 931	2,063	53.8	59.0	44.2	43.2	24.8
Economizer Cycle	185	298	125	122		3,349	4,824	3,401		1,508					33.0
HVAC Maintenance	342	577	282	302		6,236	10,916	7,234		3,767			39.0		28.2
Energy Management and															
Control System (EMCS)	103	170	79	73	37	2,071	3,275	2,224	2,549	1,507	50.0	51.9	35.7	28.7	24.6

Table C30. Natural Gas Consumption and Conditional Energy Intensity by Climate Zone^a for Non-Mall Buildings, 2003

		Total Natural Gas Consumption (billion cubic feet)					ildings l	loorspa Jsing Na square	atural Ga	as	(0	Ener	itural G gy Inte eet/squ		t)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Buildings*	418	659	327	347	119	7,645	12,850	8,113	10,509	4,350	54.7	51.3	40.3	33.0	27.3
Equipment Usage Reduced When Building Not In Full Use (more than one may apply) ^b															
Heating	271	445	252	205	82	5,471	9,069	6,259	7,493	2,887	49.4	49.0	40.2	27.3	28.3
Cooling	273	421	244	218	94	5,274	8,512	6,533	7,662		51.8	49.5	37.3	28.4	27.1
Lighting	309	432	201	218	52	5,799	9,297	5,309	,	2,869	53.3	46.5	37.8	28.0	18.3
Office Equipment	127	171	84	65	16	2,606	4,072	2,335	2,753	904	48.6	41.9	35.9	23.6	17.5
Annual Consumption (hundred cubic feet)															
1,000 or Less	7	9	4	13	3	512	709	863	1,556	697	13.5	12.8	Q	8.2	3.8
1,001 to 5,000	51	84	36	59	12	1,598	2,690	1,425	3,143	878		31.4	24.9	18.9	13.5
5,001 to 10,000	62	84	37	37	19	1,132	1,782	967	1,343	1,030	55.2	47.1	38.5	27.5	18.1
10,001 to 25,000	94	111	51	65	27	1,515	2,388	1,535	1,658	671	62.0	46.7	33.5	39.0	40.4
25,001 to 50,000	74	86	50	60	Q	1,198	1,780	1,309	842	405		48.4	38.0	71.3	34.6
50,001 to 100,000	39	75	58	Q	Q	673	1,321	859	Q	Q	58.6	56.6	67.1	Q	Q
Over 100,000	91	209	91	83	36	1,017	2,181	1,155	1,022	499	89.7	95.7	78.7	81.2	71.6
Provider of Natural Gas (more than one may apply)															
Local Utility	360	532	269	312	109	6,785	10,649	7,347	9,557	4,024	53.1	49.9	36.6	32.6	27.1
Some Other Provider	80	159	81	42	Q	1,143	2,543	1,276	1,032	Q	69.8	62.6	63.6	40.5	Q

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

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 3.8 percent of total natural gas consumption.

^a Climate zone (30-year average) definitions: Zone 1 = Under 2,000 CDD and more than 7,000 HDD; Zone 2 = Under 2,000 CDD and 5,500-7,000 HDD; Zone 3 = Under 2,000 CDD and 4,000-5,499 HDD; Zone 4 = Under 2,000 CDD and fewer than 4,000 HDD; Zone 5 = 2,000 CDD or more and fewer than 4,000 HDD. (See "Glossary" for definitions of CDD and HDD.)

^b 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 that use natural gas.

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	(tal Natural (Consumptio lion cubic f	n	Building	al Floorspac s Using Nat ion square	ural Gas	En	Natural Gas ergy Intens feet/squar	sity
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Principal Building Activity									
Education	Q	137	101	419	3,629	2,997	53.9	37.6	33.7
Food Sales	16	Q	Q	339	Q	Q	46.6	Q	Q
Food Service	149	48	N	774	622	N	192.5	77.2	N
Health Care	12	37	187	233	520	1,792	49.5	70.8	104.4
Inpatient	N	Q	181	N	Q	1,662	N	Q	109.0
Outpatient	12	20	Q	233	377	Q	49.5	52.3	Q
Lodging	Q	83	113	Q	1,750	2,374	Q	47.6	47.4
Retail (Other Than Mall)	38	39	12	726	1,406	734	52.7	27.7	15.7
Office	59	115	87	1,400	3,138	3,670	42.4	36.7	23.7
Public Assembly	19	54	26	464	1,259	1,000	41.5	42.9	Q
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	28	49	Q	663	1,785	Q	42.7	27.7	Q
Service	55	71	Q	783	1,394	Q	69.8	50.7	Q
Warehouse and Storage	18	66	45	522	2,538	2,434	34.2	26.0	18.4
Other	Q	42	38	Q	458	681	Q	91.1	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
Before 1920	32	76	31	560	1 520	CE0	EC C	49.4	47.1
			71	569	1,532	658	56.6		
1920 to 1945	61	90		987	1,917	1,776	62.1	47.2	39.9
1946 to 1959	48	94	68	797	2,407	1,455	60.0	39.1	46.7
1960 to 1969	47 82	123	78 142	867	2,894	1,873	53.8	42.5	41.7
1970 to 1979		117	142	1,225	3,166	3,268	66.7	37.0	43.5
1980 to 1989	60	114	108	855	2,727	2,887	70.2	41.9	37.5
1990 to 1999	97	123	85	1,189	3,634	3,353	81.2	33.9	25.2
2000 to 2003	19	48	55	287	1,484	1,660	65.7	32.6	33.4
Census Region and Division	0.4	455	470	4 404	0.705	4.054	7.4.4	40.7	44.5
Northeast	84	155	176	1,134	3,795	4,251	74.4	40.7	41.5
New England	Q	28	Q	Q	772	Q 0.700	Q	35.7	Q
Middle Atlantic	73	127	143	899	3,024	3,793	80.9	42.0	37.7
Midwest	148	327	208	2,033	6,628	4,501	72.7	49.4	46.2
East North Central	111	234	167	1,382	4,656	3,531	80.6	50.2	47.3
West North Central	36	94	41	651	1,972	970	56.0	47.4	42.4
South	129	175	156	2,218	5,808	5,285	58.2	30.2	29.5
South Atlantic	59	72	79	946	2,508	2,873	61.9	28.9	27.6
East South Central	18	53	27	418	1,387	476	43.7	38.3	57.5
West South Central	52	50	49	854	1,914	1,936	61.3	26.0	25.4
West	84	129	98	1,391	3,529	2,893	60.1	36.6	33.9
Mountain Pacific	35 48	69 60	58 40	532 859	1,318 2,211	947 1,947	66.4 56.3	52.1 27.3	61.3 20.6
					, .	,			
Climate Zone: 30-Year Average Under 2.000 CDD and									
More than 7,000 HDD	103	202	114	1,304	3,972	2,369	78.8	50.8	48.1
5,500-7,000 HDD	134	278	247	1,923	6,102	4,824	69.9	45.5	51.1
4,000-5,499 HDD	62	143	121	948	3,289	3,877	65.1	43.6	31.3
Fewer than 4,000 HDD	114	122	111	2,001	4,792	3,717	57.2	25.4	29.8
2,000 CDD or More and	114	122	111	2,001	7,132	3,111	51.2	20.4	23.0
Fewer than 4,000 HDD	32	41	46	601	1,606	2,144	52.8	25.8	21.2
1 GWC1 (11a11 4,000 HDD	32	41	40	001	1,000	۷, ۱44	5∠.0	20.0	۷۱.۷

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	c	tal Natural (Consumptio lion cubic f	n	Building	Il Floorspac s Using Nat ion square	ural Gas	En	Natural Gas ergy Intens feet/squar	sity
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Number of Floors									
One	301	287	56	4,443	7,865	2,632	67.7	36.5	21.3
Two	100	268	109	1,638	6,281	3,522	60.8	42.7	
Three	39	116	78	614	3,190	1,864	64.3	36.3	
Four to Nine	Q	110	252	Q	2,339	5,250	Q	46.9	
Ten or More	Ñ	Q	143	N	2,000 Q	3,663	N	Q	
Tell of More	IN	Q	143	IN	Q	3,003	IN	Q	33.1
Number of Workers (main shift)									
Fewer than 5	175	77	Q	3,395	3,081	Q	51.6	25.2	Q
5 to 9	108	80	Q	1,575	2,330	Q	68.6	34.2	Q
10 to 19	96	120	Q	1,110	3,353	Q	86.8	35.8	Q
20 to 49	59	279	45	635	5,694	1,883	92.4	49.1	23.8
50 to 99	Q	140	87	Q	3,265	2,834	Q	42.8	30.8
100 to 249	Q	75	153	Q	1,709	3,414	Q	43.6	
250 or More	Ñ	15	319	N	329	7,220	Ñ	45.8	44.2
200 01 WOIC		10	010		020	7,220		40.0	77.2
Weekly Operating Hours									
Fewer than 40	55	37	Q	1,239	1,460	Q	44.5	25.4	Q
40 to 48	74	132	36	1,787	3,605	1,521	41.5	36.6	23.4
49 to 60	88	209	66	1,636	5,552	3,003	53.8	37.7	21.9
61 to 84	90	153	62	945	3,915	2,607	95.3	39.1	23.6
85 to 167	94	104	52	691	2,141	2,393	135.5	48.5	
Open Continuously	44	151	412	477	3,088	6,846	92.1	48.9	
Ownership and Occupancy									
Nongovernment Owned	403	601	453	6,048	15,230	12,039	66.7	39.5	
Owner Occupied	166	272	248	3,099	7,592	5,856	53.7	35.8	
Nonowner Occupied	234	323	198	2,881	7,222	5,783	81.4	44.8	
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	
Government Owned	42	185	185	728	4,531	4,891	57.4	40.9	
Federal	Q	Q	23	Q	Q	765	Q	Q	
State	Q	39	44	Q	1,036	1,295	Q	37.3	34.0
Local	27	138	118	583	3,215	2,831	46.3	42.9	41.6
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	
Partially Vacant	29	130	150	618	2,912	4,916	46.3	44.5	
Not At All Vacant	413	641	480	6,071	16,209	11,565	68.1	39.5	
Number of Establishments									
One	384	604	430	5,549	14,298	10,672	69.2	42.2	40.3
2 to 5	54	139	105	1,065	3,911	2,617	50.6	35.5	
6 to 10	Q	25	18	1,000 Q	625	664	Q Q	39.3	
11 to 20	N	8	25	N	386	885	N	21.3	
More than 20	Q	Q	51	Q	200 Q	1,655	Q	21.3 Q	
Currently Unoccupied	Q	Q	Q	Q			Q		
Currently Offoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	c	tal Natural (Consumptio lion cubic f	n	Building	al Floorspac s Using Nat ion square	ural Gas	En	Natural Gas ergy Intens feet/squar	sity
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7
Predominant Exterior									
Wall Material	070	454	070	0.700	44 404	0.000	70.5	00.7	44.0
Brick, Stone or Stucco	270	454	370	3,722	11,431	8,398	72.5	39.7	
Concrete (Block or Poured)	75	165	100	1,102	3,702	2,520	67.9	44.6	
Concrete Panels	Q	59	101	Q 700	1,217	3,292	Q	48.1	30.7
Siding or Shingles	42	33	Q	720	996	Q	58.0	33.5	
Metal Panels	38	62	26	903	1,991	1,129	41.5	31.4	
Window Glass	Q	Q	9	Q	Q	549	Q	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q
Predominant Roof Material				. =00					
Built-Up	149	297	275	1,736	6,828	6,644	85.8	43.4	
Shingles (Not Wood)	108	133	59	2,009	3,345	1,165	54.0	39.7	
Metal Surfacing	64	100	25	1,350	3,225	1,206	47.1	30.9	
Synthetic or Rubber	80	189	257	922	4,482	6,434	86.7	42.1	40.0
Slate or Tile	28	33	Q	418	935	Q	67.2	35.8	
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	
Other No One Major Type	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
Renovations in Buildings									
Constructed Before 1980									
(more than one may apply)									
Any Type of Renovation	110	273	071	1 767	E 0.E.7	E 646	67.0	46.7	48.0
Since 1980 Addition or Annex	118 28	110	271 157	1,767 391	5,857 2,028	5,646 2,618	67.0 72.9	54.3	
Reduction In Floorspace	20 Q	Q	137 Q	391 Q	2,026 Q	2,010 Q	72.9 Q	04.3 Q	
Cosmetic Improvements	85	195	202	1,296	4,379	4,398	65.5	44.5	
Wall or Roof Replacement	40	91	139	736	2,253	3,338	54.1	40.3	
Interior Wall	40	01	100	700	2,200	0,000	04.1	40.0	71.7
Re-Configuration	46	108	178	770	2,479	3,769	59.7	43.5	47.1
HVAC Equipment Upgrade	51	181	220	769	3,566	4,148	66.8	50.8	
Lighting Upgrade	46	153	187	793	3,286	4,025	58.0	46.5	
Window Replacement	34	99	102	539	2,206	2,255	63.9	44.9	
Plumbing System Upgrade	44	91	142	570	2,049	3,095	77.8	44.6	
Insulation Upgrade	18	49	60	341	1,285	1,334	54.2	38.4	
Other Renovation	Q	Q	Q	Q	Q Q	,,551 Q	Q	Q	
No Renovations Since 1980	151	227	119	2,678	6,058	3,384	56.5	37.4	
Building Newer than 1980	175	286	248	2,331	7,845	7,900	75.3	36.4	
Energy Sources (more than									
one may apply)									
Electricity	445	786	638	6,775	19,761	16,926	65.7	39.8	37.7
Natural Gas	445	786	638	6,776	19,761	16,931	65.7	39.8	
Fuel Oil	Q	97	385	Q	2,030	8,102	Q	47.5	
District Heat	Q	Q	40	Q	Q	1,955	Q	Q	
District Chilled Water	Q	Q	21	Q	Q	1,375	Q	Q	
Propane	Q	26	67	Q		1,672	Q	37.1	
Other	Q	17	24	Q		334	Q	39.4	

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	C	tal Natural (Consumptio lion cubic f	n	Building	al Floorspac s Using Nat ion square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7	
Space-Heating Energy Sources										
Natural Gas	401	740	608	6,187	17,733	13,038	64.8	41.7	46.6	
Natural Gas Main	376	689	572	5,741	15,927	11,302		43.2		
Natural Gas Secondary	25	51	36	446	1,807	1,736	56.2	28.5		
Other Excluding Natural Gas	30	43	29	454	1,807	3,683	66.9	23.1	7.9	
S S S S S S S S S S S S S S S S S S S										
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Primary Space-Heating										
Energy Source										
Electricity	52	85	35	749	2,816	2,597	69.4	30.0	13.3	
Natural Gas	376	689	572	5,741	15,927	11,302	65.4	43.2	50.6	
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	
District Heat	Q	Q	18	Q	Q	1,672	Q	Q	11.0	
Propane	N	Q	N	N	Q	N	N	Q	N	
Other	Q	Q	Q	Q	Q	Q		Q		
Cooling Energy Sources										
Natural Gas	Q	Q	66	Q	Q	683	Q	Q	96.1	
Other Excluding Natural Gas	397	725	554	6,098	18,102	15,806	65.2	40.1	35.1	
Buildings without Cooling	43	42	Q	641	1,362	Q Q	66.8	31.0	Q	
Water-Heating Energy Sources										
Natural Gas	316	604	543	3,995	13,529	11,296	79.1	44.6	48.1	
Other Excluding Natural Gas	107	153	91	2,024	4,942	5,348	52.8	30.9	17.0	
Bldgs without Water Heating	22	29	Q	2,024 757	1,290	5,546 Q		22.9	17.0 Q	
Cooking Energy Sources										
Natural Gas	173	246	412	1,190	4,975	9,273	145.1	49.3	44.5	
	173		70	201			63.1			
Other Excluding Natural Gas Buildings without Cooking	260	53 487	156	5,385	1,549 13,237	1,468 6,190	48.2	34.5 36.8	47.9 25.2	
Energy End Uses (more than										
one may apply)	404	700	007	0.044	10.011	10 700	04.0	40.0	20.4	
Buildings with Space Heating	431	783	637	6,641	19,611	16,722	64.9	40.0	38.1	
Buildings with Cooling	402	744	620	6,135	18,399	16,489	65.6	40.4	37.6	
Buildings with Water Heating	423	757	634	6,019	18,471	16,644	70.3	41.0	38.1	
Buildings with Cooking	185	299	483	1,391	6,524	10,741	133.3	45.8	44.9	
Buildings with Manufacturing Buildings with Electricity	Q	47	43	Q	938	1,164	Q	49.8	36.8	
Generation	Q	124	388	Q	2,431	7,893	Q	50.9	49.1	
Percent of Floorspace Heated										
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	
1 to 50	34	51	9	712	2,271	1,024	48.3	22.6		
51 to 99	60	97	103	930	2,420	2,615	64.1	40.2		
100	337	635	526	4,999	14,920	13,083	67.4	42.5		
	551	000	520	₹,555	17,020	10,000	U1.4	7∠.∪	⊤∪.∠	

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	, 						1			
	(tal Natural (Consumptio lion cubic f	n	Building	al Floorspac s Using Nat ion square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7	
Percent of Floorspace Cooled										
Not Cooled	43	42	Q	641	1,362	Q	66.8	31.0	Q	
1 to 50	84	250	104	1,708	6,358	4,066		39.3	25.6	
51 to 99	79	154	205	1,136	3,879	4,717		39.6	43.5	
100	240	340	310	3,291	8,162	7,706		41.7	40.3	
100	210	0.10	0.0	0,201	0,102	1,100	72.0		10.0	
Heating Equipment (more than one may apply)										
Heat Pumps	19	82	116	294	2,402	2,857	65.8	34.0	40.7	
Packaged Heat Pumps	Q	45	79	Q	1,359	1,801	Q	33.0	43.9	
Split-System Heat Pumps	Q	22	12	Q	738	600	Q	30.5	20.7	
Individual Room Heat Pumps		33	46	Q	881	1,298	Q	38.0	35.4	
Furnaces	234	278	140	4,068	7,668	3,568	57.6	36.3	39.3	
Individual Space Heaters	65	169	134	1,210	4,315	3,444			38.9	
District Heat	Q	Q	32	1, <u>2</u> 10	4,010 Q	1,813	Q Q		17.7	
Boilers	66	405	538	741	7,270	10,163	89.3		52.9	
Packaged Heating Units	134	235	196	1,633	6,393	5,592		36.7	35.1 15.2	
Other	Q	23	14	Q	636	941	Q	36.1	15.2	
Cooling Equipment (more than one may apply) Residential-Type Central										
Air Conditioners	112	164	103	2,034	3,775	2,173	55.1	43.4	47.6	
Heat Pumps	28	82	117	415	2,373	3,043	68.2	34.4	38.4	
Packaged Heat Pumps	Q	44	79	Q	1,315	1,784	Q	33.6	44.0	
Split-System Heat Pumps	Q	23	12	Q	753	589	Q	30.6	20.2	
Individual Room Heat Pumps		33	48	Q	851	1,513		39.1	31.4	
Individual Air Conditioners	53	177	168	922	4,330	3,862			43.4	
District Chilled Water	Q	Q	21	Q	4,000 Q	1,375		Q	15.5	
Central Chillers	Q	120	363	Q	2,163	6,896	Q	55.5	52.7	
	Q	120	303	Q	2,103	0,090	Q	55.5	32.7	
Packaged Air Conditioning	222	444	204	2 400	40.000	0.000	70.0	40.5	20.4	
Units	232	444	381	3,180	10,963	9,663			39.4	
Swamp Coolers	23	41	Q	218	703	Q		58.0	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Main Equipment Replaced Since 1990 (more than one may apply)										
Heating	123	301	162	1,980	6,674	3,621	62.3	45.2	44.7	
Cooling	152	349	255	2,507	7,544	5,997			42.6	
Water Heating Equipment										
Centralized System	333	528	328	4,557	12,516	8,279	73.1	42.2	39.6	
Distributed System		108	62	1,283	3,389	2,887			21.5	
Combination of Centralized	11	100	02	1,203	5,509	۷,007	38.7	31.9	21.0	
and Distributed System	Q	120	244	Q	2,566	5,478	Q	46.9	44.6	
Energy-Related Space Functions										
(more than one may apply)										
Commercial Food Preparation	185	298	483	1,391	6,512	10,741	133.3	45.8	44.9	
Activities with Large										
Amounts of Hot Water	157	290	455	1,022	5,671	9,329	153.5	51.2	48.8	
Separate Computer Area		307	513	578	7,533	12,505			41.0	
, p	_•		•		.,	_,			•	

Table C31. Natural Gas Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Building	I Floorspac S Using Nation square	ural Gas	Natural Gas Energy Intensity (cubic feet/square foot)			
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	
All Buildings*	445	786	638	6,776	19,761	16,931	65.7	39.8	37.7	
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	67	213	409	665	4,638	9,292	100.5	45.8	44.0	
Economizer Cycle	63	271	447	704	5,534	10,418	88.9	49.0	42.9	
HVAC Maintenance	312	669	628	4,256	16,257	16,471	73.4	41.1	38.1	
Energy Management and										
Control System (EMCS)	Q	155	287	Q	3,554	7,882	Q	43.7	36.4	
Equipment Usage Reduced When Building Not In Full Use (more than one may apply) ^a Heating	300 302	548 551	405 396	4,846 4,731	14,185 14,114	12,149 12,593	61.9 63.8	38.6 39.0	33.4 31.5	
Lighting	388	613	212	5,980	15,710	9,381	64.8	39.0	22.6	
Office Equipment	137	246	79	2,579	6,854	3,237	53.1	36.0	24.3	
Annual Consumption (hundred cubic feet)										
1,000 or Less	32	3	Q	2,069	1,293	974	15.7	2.1	0.2	
1,001 to 5,000	168	72	2	3,508	5,095	1,128	47.9	14.1	1.4	
5,001 to 10,000	107	127	5	714	4,273	1,266	150.2	29.8	3.6	
10,001 to 25,000	93	239	17	390	5,306	2,071	239.5	45.0	8.0	
25,001 to 50,000	Q	193	47	Q	2,755	2,685	Q	70.0	17.5	
50,001 to 100,000	N	108	103	N	844	3,125	N	127.4		
Over 100,000	N	Q	465	N	Q	5,681	N	Q	81.8	
Provider of Natural Gas (more than one may apply)										
Local Utility	422	707	453	6,480	18,272	13,611	65.1	38.7	33.3	
Some Other Provider	26	100	251	336	1,653	4,383	77.2	60.7	57.2	

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.

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 3.8 percent of total natural gas 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 that use natural gas.

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	С	al Natural (onsumptic ion cubic f	n	Building	al Floorspa s Using N lion squar	atural Gas	En	Natural Ga ergy Intens feet/squa	sity
	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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Building Floorspace									
(Square Feet)									
1,001 to 5,000	85	98	59	1,222	1,214	648	69.5	81.0	91.5
5,001 to 10,000	56	90	56	1,131	1,733	828	49.8	51.9	67.7
10,001 to 25,000	103	141	57	2,392	2,909	1,752	42.9	48.4	32.3
25,001 to 50,000	90	102	58	1,827	2,700	1,498	49.3	37.7	38.7
50,001 to 100,000	68	112	57	1,636	3,178	1,869	41.4	35.1	30.5
100,001 to 200,000	63	120	59	1,501	2,745	2,399	42.0	43.6	24.5
200,001 to 500,000	45	104	50	1,496	2,748	1,435	30.1	37.8	34.8
Over 500,000	62	105	Q	893	2,535	Q		41.4	Q
Principal Building Activity									
Education	109	110	41	2,581	2,816	1,648	42.3	39.2	24.6
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	47	72	78	491	422	482	95.8	169.4	162.6
Health Care	66	131	39	633	1,410	501	104.1	92.6	77.5
Inpatient	58	112	28	444	1,141	220	130.2	98.3	128.2
Outpatient	Q	18	11	Q	269	282	Q	68.4	37.9
Lodging	38	129	41	Q	2,123	1,154	Q	61.0	35.7
Retail (Other Than Mall)	34	27	27	675	1,028	1,162	50.5	26.7	23.4
Office	91	129	42	2,109	4,459	1,640	43.0	29.0	25.3
Public Assembly	30	43	26	1,047	965	711	Q	45.0	36.4
Public Order and Safety	Q	Q	Q	Q	Q	Q		Q	Q
Religious Worship	37	29	14	1,086	943	600	33.7	31.2	22.7
Service	35	64	37	608	1,278	610	57.0	49.9	59.8
Warehouse and Storage	35	64	29	1,039	2,667	1,788	33.8	24.0	16.4
Other	Q	Q	29	,,000 Q	408	521	Q	75.7	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division									
Northeast	185	153	76	4,201	3,454	1,525	44.1	44.4	50.0
New England	30	Q	Q	677	Q	Q	44.9	Q	Q
Middle Atlantic	155	131	57	3,525	2,985	1,206	44.0	43.7	47.2
Midwest	245	310	129	4,201	5,898	3,064	58.2	52.5	42.1
East North Central	180	242	91	3,138	4,321	2,110	57.2	56.0	42.9
West North Central	65	68	38	1,063	1,577	954	61.3	42.9	40.4
South	87	213	160	2,129	6,213	4,969	40.7	34.3	32.3
South Atlantic	Q	77	86	996	2,426	2,903	48.0	31.6	29.5
East South Central	12	63	24	386	1,110	785	30.2	56.8	30.6
West South Central	27	74	51	746	2,677	1,280	36.5	27.5	39.5
West	54	195	62	1,566	4,198	2,049	34.8	46.4	30.1
Mountain	22	115	25	393	1,677	726		68.3	34.7
Pacific	32	80	36	1,173	2,521	1,323	27.6	31.8	27.5
Climate Zone: 30-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	142	197	80	2,237	3,425	1,984	63.3	57.6	40.1
5,500-7,000 HDD	212	327	120	4,168	5,882	2,800		55.6	42.7
4,000-5,499 HDD	131	122	74	3,161	3,207	1,745		37.9	42.5
Fewer than 4,000 HDD	70	168	110	1,966	5,054	3,489	35.4	33.2	31.5
2,000 CDD or More and	. 0			.,555	-,	=, .50	30.1	JU. <u>-</u>	5
Fewer than 4,000 HDD	17	57	44	565	2,195	1,590	30.7	26.1	27.6

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	C	al Natural onsumption	on	Building	al Floorspa s Using Na ion square	atural Gas	Natural Gas Energy Intensity (cubic feet/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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8	
Number of Floors										
One	117	312	214	2,559	7,157	5,224	45.6	43.7	41.0	
Two	153	237	86	3,223	5,432	2,786	47.5	43.7	30.8	
Three	119	71	43	2,688	1,666	1,313	44.3	42.8	32.9	
Four to Nine	132	176	60	2,602	3,266	1,802	50.6	53.8	33.0	
Ten or More	51	74	Q	1,025	2,242	Q	49.4	33.1	Q	
Number of Workers (main shift)										
Fewer than 5	100	112	53	2,447	2,975	1,601	40.7	37.7	32.8	
5 to 9	66	80	46	1,359	1,696	1,029	48.7	47.1	44.8	
10 to 19	85	89	60	2,026	1,886	1,406	42.2	47.4	42.8	
20 to 49	117	172	94	2,622	3,332	2,258	44.7	51.6	41.4	
50 to 99	62	116	56	1,136	3,005	2,016	54.9	38.5	27.8	
100 to 249	62	111	55	1,147	2,613	1,367	53.9	42.5	40.0	
250 or More	79	191	64	1,361	4,256	1,932	57.8	44.9	33.3	
Weekly Operating Hours										
Fewer than 40	40	50	14	1,120	1,487	653	35.8	33.5	21.5	
40 to 48	97	107	38	2,678	2,907	1,328	36.1	36.9	28.6	
49 to 60	132	158	72	2,841	4,918	2,432	46.5	32.2	29.8	
61 to 84	103	132	70	2,168	3,236	2,064	47.5	40.7	34.0	
85 to 167	55	103	91	1,039	2,155	2,031	53.0	47.7	45.0	
Open Continuously	144	321	141	2,251	5,059	3,101	64.2	63.5	45.6	
Ownership and Occupancy										
Nongovernment Owned	441	666	350	9,318	15,243	8,756	47.4	43.7	40.0	
Owner Occupied	271	262	154	5,409	7,195	3,943	50.0	36.4	39.1	
Nonowner Occupied	170	392	194	3,788	7,504	4,594	44.8	52.3	42.2	
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Government Owned	130	205	77	2,779	4,519	2,852	46.8	45.4	26.9	
Federal	7	21	Q	163	569	Q	42.3	36.4	Q	
State	16	67	12	477	1,360	601	32.7	49.6	20.7	
Local	108	117	58	2,139	2,591	1,900	50.3	45.1	30.5	
Vacancy Status										
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Partially Vacant	125	135	48	2,555	4,155	1,737	49.0	32.5	27.6	
Not At All Vacant	439	719	377	9,264	14,947	9,635	47.4	48.1	39.1	
Number of Establishments										
One	421	670	327	8,689	13,334	8,496	48.4	50.3	38.5	
2 to 5	99	125	74	2,172	3,365	2,056	45.3	37.1	36.1	
6 to 10	15	19	Q	372	618	Q	40.2	31.2	Q	
11 to 20	Q	22	Q	Q	689	Q	Q	31.8		
More than 20	Q	22	Q	Q	1,210	Q	Q	18.5		
Currently Unoccupied	Q	Q	_	_	, •	~	_		~	

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	C	al Natural onsumptic ion cubic t	n	Building	al Floorspa s Using Na lion square	tural Gas	Ene	latural Ga ergy Inten feet/squa	sity
	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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Predominant Exterior Wall Material									
Brick, Stone or Stucco	427	459	208	9,195	9,498	4,857	46.4	48.3	42.7
Concrete (Block or Poured)	103	175	62	1,883	3,739	1,701	54.8	46.7	36.4
Concrete Panels	Q	114	55	Q	2,597	1,942	Q	43.7	28.2
Siding or Shingles	24	30	29	553	685	759	42.7	44.4	
Metal Panels	Q	65	51	Q	2,163	1,647	Q	30.1	
Window Glass	Q	8	Q	Q	361	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Q	23.0	
Other	Q	Q	Q	Q	Q	Q	Q	Q	
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	
Predominant Roof Material									
Built-Up	254	358	108	4,836	7,622	2,751	52.5	47.0	39.2
Shingles (Not Wood)	122	119	60	2,074	2,762	1,683	58.6	43.2	35.5
Metal Surfacing	17	86	85	504	2,438	2,839	33.6	35.3	30.1
Synthetic or Rubber	130	248	148	2,731	5,411	3,696	47.6	45.8	
Slate or Tile	28	21	16	740	477	357	37.5	43.0	46.0
Wooden Materials	Q	Q	Q	Q	Q	Q	Q	Q	
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	
Other	Q	Q	Q	Q	Q	Q	Q	Q	
No One Major Type	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	348 128 Q 238 120	316 167 Q 244 149	N N N N	6,712 2,246 Q 5,105 3,225	6,558 2,791 Q 4,967 3,103	N N N N	51.8 57.1 Q 46.5 37.3	48.1 59.9 Q 49.2 48.2	N
Re-Configuration	151	181	N	3,465	3,554	N	43.5	50.8	N
HVAC Equipment Upgrade	229	224	N	4,163	4,319	N	54.9	51.9	N
Lighting Upgrade	191	195	N	4,254	3,850	N	44.9	50.6	N
Window Replacement	141	95	N	3,280	1,720	N	42.9	55.0	N
Plumbing System Upgrade	146	132	N	3,137	2,578	N	46.5	51.3	N
Insulation Upgrade	69	59	N	1,595	1,364	N	43.3	43.0	N
Other Renovation	Q	Q	N	Q	Q	N	Q	Q	N
No Renovations Since 1980	224	273	N	5,385	6,735	N	41.6	40.5	N
Building Newer than 1980	N	282	427	N	6,469	11,608	N	43.7	36.8
Energy Sources (more than									
one may apply)				40:					
Electricity	571	871	427	12,091	19,763	11,608	47.2	44.1	36.8
Natural Gas	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Fuel Oil	138	249	104	3,084	4,932	2,367	44.6	50.6	
District Heat	Q	25	Q	667	1,135	Q	Q	22.3	
District Chilled Water	Q	23	Q	Q	883	Q	Q	26.6	Q
Propane	Q	55	15	Q	1,250	724	Q	43.8	
Other	Q	24	Q	Q	484	Q	Q	48.9	Q

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	С	al Natural (onsumptic ion cubic f	n	Building	al Floorspa s Using Na lion square	atural Gas	En	Natural Ga ergy Inten feet/squa	sity
	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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Space-Heating Energy Sources									
Natural Gas	541	814	394	10,050	17,081	9,828	53.9	47.6	40.1
Natural Gas Main	520	754	362	9,431	15,149	8,390	55.1	49.8	43.2
Natural Gas Secondary	22	59	32	619	1,932	1,438		30.7	22.1
Other Excluding Natural Gas	26	51	26	1,937	2,502	1,576		20.3	16.7
Buildings without Heating	Q	Q	Q	1,937 Q	2,302 Q	1,570 Q		20.5 Q	Q
Primary Space-Heating Energy Source									
Electricity	29	90	52	726	3,223	2,213	40.5	27.8	23.6
			362		-				
Natural Gas	520	754		9,431	15,149	8,390	55.1	49.8	43.2
Fuel Oil	13	Q	Q	Q	Q	Q		Q	Q
District Heat	4	16	Q	514	968	Q	7.6	16.3	Q
Propane	N	N	Q	N	N	Q	N	N	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources Natural Gas	Q	38	Q	Q	419	Q	Q	90.1	Q
Other Excluding Natural Gas	468	806	403	10,345	18,622	11,038	45.2	43.3	36.5
Buildings without Cooling	68	27	Q	1,428	722	Q		37.7	Q
Water-Heating Energy Sources									
Natural Gas	439	681	343	8,044	13,116	7,661	54.6	51.9	44.7
Other Excluding Natural Gas	107	168	76	3,013	5,766	3,534	35.5	29.1	21.4
Bldgs without Water Heating	25	22	Q	1,041	881	Q	24.2	24.8	Q
Cooking Energy Sources									
Natural Gas	264	364	203	4,847	6,307	4,284	54.4	57.7	47.4
Other Excluding Natural Gas	41	74	22	727	1,755	736	57.0	41.9	29.3
Buildings without Cooking	266	434	203	6,523	11,701	6,588	40.8	37.1	30.8
Energy End Uses (more than one may apply)									
Buildings with Space Heating	567	865	420	11,988	19,582	11,404	47.3	44.2	36.8
Buildings with Cooling	503	844	419	10,669	19,041	11,313	47.2	44.3	37.0
Buildings with Water Heating	546	849	419	11,057	18,882	11,195		45.0	37.4
	305	437	225	5,574	8,062	5,020	54.7	54.3	44.7
Buildings with Cooking									
Buildings with Manufacturing	35	42	20	648	1,229	424	54.5	34.4	46.9
Buildings with Electricity Generation	123	285	110	1,836	5,646	2,920	67.1	50.5	37.6
Paraont of Electronics Heated									
Percent of Floorspace Heated	^	0	0	^	^	^	^	^	^
Not Heated	Q	Q	Q	Q 1 244	Q 1 565	Q 1.007	Q	Q	Q
1 to 50	31	35	28	1,344	1,565	1,097		22.3	25.6
51 to 99	105 431	92 738	63 329	2,111 8,532	2,231 15,787	1,623 8,683		41.2 46.7	38.7 37.9
Porcont of Electronese Cooled									
Percent of Floorspace Cooled	00	07	^	4.400	700	^	47.0	27.7	^
Not Cooled	68	27	Q	1,428	722	Q 0.500		37.7	Q
1 to 50	178	185	74	4,377	5,173	2,582		35.8	28.8
51 to 99	137	185	115	2,879	4,188	2,666		44.3	43.0
100	187	473	230	3,414	9,680	6,065	54.9	48.9	37.9

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	C	al Natural onsumptic ion cubic t	n	Building	al Floorspa s Using Na lion square	atural Gas	En	Natural Ga ergy Inten feet/squa	sity
	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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8
Heating Equipment (more than one may apply)									
Heat Pumps	52	108	58	1,122	2,673	1,757	46.0	40.5	32.7
Packaged Heat Pumps	Q	78	24	519	1,899	904		41.1	26.7
Split-System Heat Pumps	Q	18	19	Q	736	545	Q Q	24.4	34.2
	21	33							
Individual Room Heat Pumps			27	642	785	768	33.1	42.0	35.0
Furnaces	221	274	158	4,508	6,468	4,327		42.3	36.6
Individual Space Heaters	116	157	95	2,594	3,986	2,389	44.8	39.4	39.7
District Heat	Q	19	Q	652	996	Q	Q	19.3	Q
Boilers	374	472	162	6,850	8,165	3,160	54.7	57.8	51.3
Packaged Heating Units	117	260	187	2,183	6,825	4,610	53.5	38.2	40.6
Other	Q	24	14	Q	870	672	Q	27.5	21.2
Cooling Equipment (more than one may apply)									
Residential-Type Central	440	4.40	00	0.004	0.400	4 000	50.4	40.5	40.4
Air Conditioners	140	149	90	2,694	3,429	1,860	52.1	43.5	48.4
Heat Pumps	61	107	59	1,182	2,705	1,945		39.5	30.2
Packaged Heat Pumps	Q	76	24	596	1,855	902	68.2	41.2	26.6
Split-System Heat Pumps	Q	18	19	Q	730	566	Q	24.1	33.4
Individual Room Heat Pumps	21	33	28	605	867	907	35.1	38.6	30.7
Individual Air Conditioners	186	156	56	4,111	3,461	1,542	45.3	45.0	36.2
District Chilled Water	Q	23	Q	Q	883	Q	Q	26.6	Q
Central Chillers	114	274	97	1,869	5,296	1,936	61.0	51.8	50.3
Packaged Air Conditioning				•	,	•			
Units	283	495	280	5,894	10,897	7,015	48.0	45.4	39.9
Swamp Coolers	Q	56	Q	Q	905	Q	_	61.8	Q
Other	Q	Q	Q	Q	Q	Q		Q	Q
						_	_	_	
Main Equipment Replaced Since 1990 (more than one may apply)									
Heating	221	365	N	4,630	7,645	N	47.8	47.8	N
Cooling	274	482	N	6,085	9,963	N	45.0	48.4	N
Water Heating Equipment									
Centralized System	343	577	270	6,539	12,019	6,795		48.0	39.7
Distributed System	92	91	63	2,462	3,051	2,046	37.5	29.9	30.9
Combination of Centralized									
and Distributed System	111	181	86	2,055	3,813	2,354	54.0	47.5	36.4
Energy-Related Space Functions (more than one may apply)									
	204	407	225	E E60	0.060	E 000	E 1 7	E4 0	447
Commercial Food Preparation	304	437	225	5,563	8,062	5,020	54.7	54.3	44.7
Activities with Large	^		2 .1-	,					
Amounts of Hot Water Separate Computer Area	249 238	437 418	217 192	4,152 5,023	7,176 10,078	4,694 5,514		60.9 41.5	46.2 34.9
HVAC Conservation Features						-			
(more than one may apply)									
Variable Air-Volume System	160	335	194	2,616	7,289	4,689	61.0	45.9	41.4
Economizer Cycle	156	429	196	2,876	8,712	5,068		49.3	38.7
HVAC Maintenance	456	760	393	9,645	16,923	10,416		44.9	37.7
Energy Management and	750	700	555	5,045	10,020	10,410	71.5	77.3	51.1
Control System (EMCS)	111	241	112	2,167	6,029	3,431	51.1	39.9	32.5
Control Cystem (LIVICS)	111	∠+ 1	112	۷, ۱۵/	0,029	J, 4 J1	51.1	39.9	32.5

Table C32. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

	Total Natural Gas Consumption (billion cubic feet)			Building	al Floorspa s Using N lion squar	atural Gas	Natural Gas Energy Intensity (cubic feet/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*	571	871	427	12,097	19,763	11,608	47.2	44.1	36.8	
Equipment Usage Reduced When Building Not In Full Use (more than one may apply) ^a										
Heating	409	569	275	8,877	14,453	7,850	46.1	39.4	35.1	
Cooling	387	566	296	8,632	14,308	8,498	44.9	39.6	34.8	
Lighting	415	523	274	9,376	13,751	7,944	44.3	38.0	34.5	
Office Equipment	164	189	109	4,362	4,975	3,333	37.7	37.9	32.8	
Annual Consumption (hundred cubic feet)										
1,000 or Less	14	15	7	1,617	1,670	1,049	8.5	8.9	6.5	
1,001 to 5,000	90	99	53	2,818	4,392	2,522	31.8	22.5	21.1	
5,001 to 10,000	75	100	65	1,466	2,803	1,984	51.1	35.6	32.5	
10,001 to 25,000	117	153	79	2,316	3,187	2,265	50.6	47.9	34.8	
25,001 to 50,000	75	127	82	1,497	2,376	1,661	50.4	53.4	49.1	
50,001 to 100,000	52	118	42	810	2,293	866	63.6	51.4	48.0	
Over 100,000	149	260	101	1,572	3,042	1,261	94.8	85.4	79.9	
Provider of Natural Gas (more than one may apply)										
Local Utility	463	733	385	10,701	17,234	10,427	43.2	42.6	37.0	
Some Other Provider	131	188	57	1,773	3,432	1,167	74.1	54.9	48.9	

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.

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 that use natural gas.

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 3.8 percent of total natural gas 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.