Table B12. Consumption of District Heat by End Use, 1989

Building Characteristics					
	Total	Space Heating	Water Heating	Other a	RSE Row
RSE Column Factor:	1.0	NF	NF	NF	Factor
All Buildings	585	355	129	101	21.30
Building Floorspace					
(Square Feet)				_	
1,001 to 10,000	Q	Q	Q	Q	NF
10,001 to 25,000	63	42	Q	Q	44.51
25,001 to 50,000	Q	Q	Q	Q	NF
50,001 to 100,000	119	58	Q	25	49.81
100,001 to 200,000	106	71	Q	Q	38.40
Over 200,000	209	120	Q	31	36.55
Year Constructed					
1945 or Before	161	96	Q	20	42.01
1946 to 1959	Q	Q	15	Q	NF
1960 to 1969	156	86	Q	26	39.95
1970 to 1979	110	67	15	28	33.59
1980 to 1989	Q	24	Q	Q	NF
BUILDING USE					
Principal Building Activity					
Assembly	49	44	Q	Q	35.38
Education	Q	Q	Q	Q	NF
Food Sales and Service	Q	Q	Q	Q	NF
Health Care	92	23	Q	Q	48.56
Lodging	Q	Q	Q	Q	NF
Mercantile and Service	6	Q	Q	Q	46.28
Office	167	127	15	26	22.80
Warehouse	Q	Q	Q	Q	NF
Other	49	33	Q	Q	41.02
Vacant	Q	Q	Q	Q	NF
Weekly Operating Hours					
39 or Fewer	Q	Q	Q	Q	NF
40 to 48	105	79	Q	20	34.46
49 to 60	66	55	3	8	25.76
61 to 84	60	39	Q	Q	38.50
85 to 167	Q	Q	Q	Q	NF
168 (Open Continuously)	272	124	90	59	33.33
Workers					
4 or Fewer	Q	Q	Q	Q	NF
5 to 9	Q	Ò	Q	Ò	NF
10 to 19	16	10	Q	Q	32.36
20 to 49	Q	87	Q	Q	NF
50 to 99	Q	51	Q	Q	NF
100 to 249	99	54	Q	Q	34.67
250 or More	225	127	Q	38	34.30
Ownership and Occupancy					
Nongovernment Owned	284	141	Q	65	27.16
Owner Occupied	263	130	Q	58	28.65
Single Establishment	228	108	Q	53	33.34
Multiple Establishment	35	21	Q	4	23.86
Nonowner Occupied	Q	Q	Q	Q	NF
Single Establishment	ò	Q	Q	Q	NF
Multiple Establishment	Q	5	Q	Q	NF
Vacant	ò	Q	NC	Q	NF
Government Owned	301	214	51	36	28.07
	Q	Q	Q	Q	NF
Federal					
Federal State	201	146	Q	21	35.62

See footnotes at end of table.

Table B12. Consumption of District Heat by End Use, 1989 (Continued)

		District Heat Consumption (trillion Btu)					
Building Characteristics	Total	Space Heating	Water Heating	Other a	RSE Row		
RSE Column Factor:	1.0	NF	NF	NF	Factor		
Multibuilding Facility Not on Multibuilding Facility Part of Multibuilding Facility On Facility with Central	58 527	38 317	Q 116	7 94	30.76 24.33		
Plant	476	277	108	91	25.31		
Percent Vacant at Least Three Months	440	24		7.5	22.00		
0	412 131	261 67	75 Q	75 17	22.89 38.91		
51 to 99	Q	Q	Q	Q	NF		
100	Q	Q	Q	Q	NF		
Months in Use Out of Past 12 Months	0	0	0		NIE		
0 to 8 9 to 11	Q O	Q Q	Q O	Q O	NF NF		
12	555	335	121	99	21.28		
LOCATION							
Census Region	150		20	20	24.50		
Northeast	179 159	111 70	39 Q	29 30	34.50 39.48		
South	126	90	Q	21	44.55		
West	121	84	17	Q	39.73		
Census Division							
Northeast New England	Q	Q	Q	Q	NF		
Middle Atlantic	127	87	22	18	27.22		
Midwest East North Central	88	42	Q	Q	46.67		
West North Central	Q	Q	Q	12	NF		
South South Atlantic	0	0	0	0	NF		
East South Central	Q Q	Q Q	Q Q	Q Q	NF NF		
West South Central	Q	Q	Q	Q	NF		
West Mountain	Q	55	7	Q	NF		
Pacific	Q	Q	9	Q	NF		
Climate Zone: 45-Year Average							
Under 2,000 CDD and			^				
Over 7,000 HDD5,500-7,000 HDD	Q 199	Q 120	Q Q	Q 43	NF 34.35		
4,000-5,499 HDD	152	84	Q	24	40.29		
Under 4,000 HDD	83	Q	Q	Q	46.05		
Under 4,000 HDD	Q	Q	Q	Q	NF		
1989 Degree-Days							
Under 2,000 CDD and							
Over 7,000 HDD	Q 25.4	74	Q	Q	NF		
5,500-7,000 HDD 4,000-5,499 HDD	254 84	136 55	Q 16	Q 53	32.06 29.91		
Under 4,000 HDD	Q	Q	12	Q	NF		
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	NF		
STRUCTURE Floors	`	`	`	,			
1	Q	Q	Q	Q	NF		
2	70	48	Q	Q	44.61		
3	Q 168	68 109	Q Q	26 O	NF 40.67		
	100	107	~	27	. 3.07		

See footnotes at end of table.

Table B12. Consumption of District Heat by End Use, 1989 (Continued)

Building Characteristics					
	Total	Space Heating	Water Heating	Other a	RSE Row
RSE Column Factor:	1.0	NF	NF	NF	Factor
Wall Materials					
Masonry	385	226	107	52	27.08
Siding or Shingles	Q	Q	Q	Q	NF
Metal Panels	Q 113	Q 73	Q 11	Q 29	NF 41.24
Window Glass	23	15	Q	Q 29	37.95
Other	Q	Q	Q	Q	NF
coof Materials					
Built-Up	309	190	59	60	21.20
Shingles (Not Wood)	Q	Q	Q	Q	NF
Metal Surfacing	Q Q	Q 70	Q Q	Q 23	NF NF
Slate or Tile	40	33	3	Q 23	25.53
Concrete		Q	Q	Q	NF
Wooden Materials	Q Q	Q	Q	NC	NF
Other	Q	Q	Q	Q	NF
uilding Shell Conservation eatures (Solely or in Combination)					
Roof or Ceiling Insulation	459	267	109	83	26.14
Wall Insulation	265	139	Q	52	31.63
Storm or Multiple Glazing	212	95	Q	40	33.22
Tinted, Reflective, or Shading Glass Exterior or Interior Shadings	246	150	Q	40	34.57
or Awnings	331	199	0	63	27.28
Weather Stripping or Caulking	495	289	112	94	24.03
None of the Above	Q	Q	Q	Q	NF
ENERGY SOURCES AND END USES Energy Sources Solely or in Combination)					
Solely or in Combination) Electricity	585	355	129	101	20.66
Natural Gas	290	158	Q	44	34.05
Fuel Oil	143	55	Q	Q	45.15
District Heat	585	355	129	101	21.30
Other	192	115	Q	Q	41.83
Cnergy End Uses Solely or in Combination)					
Heated Buildings	584	355	128	101	21.30
Air-Conditioned Buildings	506	312	109	85	20.96
Buildings with Water Heating	580	350	129	101	21.30
Buildings with CookingBuildings with Manufacturing	298 Q	171 Q	Q Q	52 26	28.83 NF
pace-Heating Energy Source					
District Heat	520	355	76 76	89	19.83
Main	511	346 79	76	89	20.34
With Secondary Electricity Only	134 Q	Q /9	Q Q	Q ²⁸	40.97 NF
Other Energy Sources or	~	~	~	*	-11
Combinations	60	34	13	13	39.13
With No Secondary	377	267	49	61	25.57
Secondary	Q	Q	Q	Q	NF
Other Excluding District HeatBuilding Not Heated	Q Q	Q NC	Q Q	Q NC	NF NF
ain Space-Heating Energy Source			-		
Electricity	Q	Q	Q	Q	NF
Natural Gas	Q	Q	Q	Q	NF
Fuel Oil	4	Q	Q	Q	11.54
District Heat	511	346	76	89	20.34
Other	Q	Q	Q	Q	NF

See footnotes at end of table.

Table B12. Consumption of District Heat by End Use, 1989 (Continued)

Building					
	Total	Space Heating	Water Heating	Other a	RSE Row
Characteristics	1.0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	N E	\	Factor
RSE Column Factor:	1.0	NF	NF	NF	
HEATING AND COOLING					
Percent Heated					
Not Heated	Q	Q	Q	NC	NF
1 to 50	Q	Q	Q	Q	NF
51 to 99	59	48	8	Q	32.59
100	519	304	119	96	22.47
Percent Cooled					
Not Cooled	Q	Q	Q	Q	NF
1 to 50	113	75	16	Q	33.77
51 to 99	137	100	22	Q	25.15
100	256	137	Q	47	28.59
Heating Equipment Solely or in Combination)					
Furnaces	Q	Q	Q	NC	NF
Boilers	50	Q	Q	Q	49.84
Individual Space Heaters	189	114	Q	30	40.89
Packaged Heating Units	Q	Q	Q	Q	NF
Heat Pumps	Q	Q	Q	Q	NF
Air Ducts	430	265	101	65	25.56
	339	208		53	27.57
Heating or Reheating Coils			Q		
Fan-Coil Units	267	156	Q	48	36.14
Steam or Hot Water Radiators		***			
or Baseboards	378	218	85	75	26.62
Other	Q	Q	Q	Q	NF
ENERGY MANAGEMENT Occupant Control					
Any Control of Heating	206	92	Q	40	37.85
With Thermostats	203	89	Q	40	38.28
Any Control of Cooling	223	113	Q	42	33.97
With Thermostats	216	108	Q	42	34.76
Reduced Use During Off-Hours					
Heating Only	Q	39	Q	Q	NF
Cooling Only	Q	19	Q	27	NF
Heating and Cooling	289	203	Q	33	33.27
Computerized Energy Management and Control System					
Present in Building	272	166	Q	35	32.90
Controls Heating and Cooling	271	165	Q	34	32.98
Controls Lighting	Q	Q	5	Q	NF
Controls Other	Q	12	Q	Q	NF
Other Energy Management					
Regular HVAC Maintenance	530	319	117	95	21.97
Participated in Utility	220	J.,			21.57
Conservation Program	154	96	Q	Q	38.56

^a Includes cooking and cooling.

NC = No cases in responding sample.

NF = No applicable RSE row/column factor.

Q = Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or data were reported for fewer than 20 buildings. Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for

explanation of abbreviations and definitions of terms used in this report. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1989 Commercial Buildings Energy Consumption Survey.

Table B13. Energy End-Use Intensities for District Heat, 1989

Building Characteristics			for District Heat tu per sq. ft.)			
	Total	Space Heating	Water Heating	Other ^a	RSE Row	
RSE Column Factor:	1.0	NF	NF	NF	Factor	
All Buildings	89.0	54.0	19.6	15.4	16.89	
Building Floorspace						
Square Feet)						
1,001 to 10,000	Q	Q	23.6	Q	NF	
10,001 to 25,000	117.3	77.5	Q	Q	37.13	
25,001 to 50,000	Q	Q	Q	Q	NF	
50,001 to 100,000	142.0	69.6	Q	29.7	42.63	
100,001 to 200,000	89.6	60.1	Q	12.8	24.64	
Over 200,000	61.9	35.5	17.3	9.1	18.00	
Year Constructed						
1945 or Before	94.5	56.5	26.3	11.7	21.71	
1946 to 1959	76.8	52.3	9.2	15.3	17.41	
1960 to 1969	128.3	70.9	35.7	21.8	32.88	
1970 to 1979	89.4	54.3	12.3	22.8	28.76	
1980 to 1989	44.0	27.7	13.0	Q	23.52	
BUILDING USE Principal Building Activity						
Assembly	59.5	53.3	4.4	Q	18.37	
Education	82.3	55.0	Q _	8.3	18.33	
Food Sales and Service	55.8	Q	11.7	Q	49.57	
Health Care	135.1	34.2	68.8	32.2	11.83	
Lodging	Q	59.8	Q	Q	NF	
Mercantile and Service	56.2	Q	2.7	Q	34.98	
Office	72.1	Q	6.3	11.0	44.69	
Warehouse	172.5	95.6	.3	Q	45.53	
OtherVacant	109.7 20.9	74.4 14.8	Q Q	Q Q	30.63 17.30	
v acant	20.9	14.0	Q	Q	17.30	
Weekly Operating Hours	0	0	0		NIE	
39 or Fewer	Q	Q	Q	Q	NF	
40 to 48	113.3	84.8	Q	21.7	32.72	
49 to 60	56.0	46.6	2.9	6.5	24.14	
61 to 84	Q 62.2	Q 44.0	Q	Q 10.5	NF	
85 to 167	62.3 126.6	44.0 57.4	7.8 41.7	10.5 27.5	6.27 22.14	
2.	120.0	37.4	41./	21.3	22.14	
Workers	50.4	20.1	10.5		16 00	
4 or Fewer	50.4	29.1	10.5	Q	16.88	
5 to 9	79.4	47.1	Q O	Q	46.17	
10 to 19	86.4	55.2	*	Q	23.94	
20 to 49	Q	96.0	Q	Q	NF	
50 to 99	Q 110.0	80.7	8.8	Q 20.2	NF	
100 to 249	110.0 69.2	59.9 39.0	29.9 18.5	20.2 11.7	12.83 22.59	
Ownership and Occupancy Nongovernment Owned	84.3	42.0	23.1	19.2	23.52	
Owner Occupied	85.2	42.1	24.5	18.7	23.27	
Single Establishment	112.8	53.7	32.6	26.5	16.71	
Multiple Establishment	33.0	20.1	9.0	Q Q	24.53	
Nonowner Occupied	74.4	40.8	Q	Q	34.14	
Single Establishment	110.9	63.3	Q	Q	7.82	
Multiple Establishment	59.6	30.9	Q	Q	38.89	
Vacant			-	Q	36.69 NF	
	Q 93.8	Q 66.6	NC 15.0			
Government Owned		66.6	15.9	11.3	21.48	
	58.4	43.0	3.8	11.6	4.51	
State	121.3	88.3	Q	Q	31.38	
Local	80.8	44.8	30.9	Q	27.05	

See footnote at end of table.

Table B13. Energy End-Use Intensities for District Heat, 1989 (Continued)

			for District Heat tu per sq. ft.)		RSE Row
Building Characteristics	Total	Space Heating	Water Heating	Other a	
RSE Column Factor:	1.0	NF	NF	NF	Factor
Multibuilding Facility Not on Multibuilding Facility Part of Multibuilding Facility On Facility with Central	44.9 99.7	29.6 59.9	9.8 22.0	5.5 17.8	34.61 16.93
Plant	107.3	62.4	24.2	20.6	17.80
Percent Vacant at Least Three Months					
0	102.8	65.3	18.7	18.8	19.78
1 to 50	71.4 66.2	36.7 42.3	25.5 Q	9.2 16.0	25.75 7.15
100	36.4	19.8	Q	2.1	17.77
Months in Use Out of Past 12 Months					
0 to 8	35.7	15.1	13.0	Q	17.02
9 to 11	66.6 92.2	Q 55.6	Q 20.1	Q 16.5	37.09 16.69
	92.2	33.0	20.1	10.5	10.09
LOCATION Census Region					
Northeast	80.1	49.5	17.5	Q	36.85
Midwest	105.3	46.6	38.7	20.0	12.36
South West	Q 97.1	Q 67.2	Q Q	13.4 16.4	NF 13.69
Census Division					
Northeast					
New England Middle Atlantic	Q 68.3	Q 46.6	Q 12.0	Q Q	NF 27.89
Midwest				`	
East North Central	104.0 106.9	49.6 42.7	33.4 45.4	21.0 18.8	16.02 14.36
South	100.9	42.7	43.4	16.6	14.50
South Atlantic	Q	Q	Q	Q	NF
East South Central	Q Q	Q O	Q Q	Q Q	NF NF
West		`		`	
Mountain Pacific	99.1 94.4	74.8 56.4	Q 18.3	14.1 Q	12.73 22.50
	24.4	30.4	16.5	Q	22.30
Climate Zone: 45-Year Average Under 2,000 CDD and					
Over 7,000 HDD	206.3	117.8	Q	Q	43.76
5,500-7,000 HDD	90.4	54.7	Q	19.3	15.92
4,000-5,499 HDD Under 4,000 HDD	71.8 70.6	39.8 Q	20.6 13.2	Q Q	28.13 40.97
2,000 CDD or More and	70.0	Q	13.2	۷	40.77
Under 4,000 HDD	Q	Q	Q	Q	NF
1989 Degree-Days					
Under 2,000 CDD and	0	01.1	0		NIE
Over 7,000 HDD	Q 92.5	91.1 49.4	Q 23.7	Q 19.3	NF 15.79
4,000-5,499 HDD	63.0	Q 49.4	12.3	Q Q	33.84
Under 4,000 HDD	67.2	Q	11.3	Q	46.66
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	NF
STRUCTURE				-	
Floors					
1	Q	111.7	Q	Q	NF
3	82.8 Q	56.2 59.3	Q Q	Q 22.6	27.67 NF
4 to 6	101.2	65.8	Q	13.4	15.37
7 or More	67.9	36.6	21.1	10.2	24.83

See footnote at end of table.

Table B13. Energy End-Use Intensities for District Heat, 1989 (Continued)

Building Characteristics RSE Column Factor: Wall Materials Masonry	98.4 Q 104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	Space Heating NF 57.9 Q Q 56.2 Q Q 56.6 83.6 96.7	Water Heating NF 27.3 Q Q 8.1 9.5 Q	Other a NF 13.2 66.2 Q 22.8 Q Q	RSE Row Factor 18.73 NF 11.99 19.80 NF
RSE Column Factor: Wall Materials Masonry	98.4 Q 104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	57.9 Q Q 56.2 Q Q	27.3 Q Q 8.1 9.5 Q	13.2 66.2 Q 22.8 Q	18.73 NF 11.99 19.80
Masonry Siding or Shingles Metal Panels Concrete Panels Window Glass Other Roof Materials Built-Up Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials Other Building Shell Conservation	Q 104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	Q Q 56.2 Q Q	Q Q 8.1 9.5 Q	66.2 Q 22.8 Q	NF 11.99 19.80
Masonry Siding or Shingles Metal Panels Concrete Panels Window Glass Other Roof Materials Built-Up Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials Other Building Shell Conservation	Q 104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	Q Q 56.2 Q Q	Q Q 8.1 9.5 Q	66.2 Q 22.8 Q	NF 11.99 19.80
Siding or Shingles Metal Panels Concrete Panels Window Glass Other Roof Materials Built-Up. Shingles (Not Wood) Metal Surfacing. Synthetic or Rubber Slate or Tile Concrete. Wooden Materials Other Building Shell Conservation	Q 104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	Q Q 56.2 Q Q	Q Q 8.1 9.5 Q	66.2 Q 22.8 Q	NF 11.99 19.80
Metal Panels Concrete Panels Window Glass Other Roof Materials Built-Up Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials Other Building Shell Conservation	104.7 87.1 Q Q 92.1 Q 103.2 Q 118.2 26.5	Q 56.2 Q Q 56.6 83.6	Q 8.1 9.5 Q	Q 22.8 Q	11.99 19.80
Concrete Panels	Q Q 92.1 Q 103.2 Q 118.2 26.5	56.2 Q Q 56.6 83.6	8.1 9.5 Q	22.8 Q	
Other	92.1 Q 103.2 Q 118.2 26.5	Q 56.6 83.6	Q		NF
Roof Materials Built-Up Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials Other Building Shell Conservation	92.1 Q 103.2 Q 118.2 26.5	56.6 83.6		Q	- 1-
Built-Up Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials. Other Building Shell Conservation	Q 103.2 Q 118.2 26.5	83.6	17.6		NF
Shingles (Not Wood) Metal Surfacing Synthetic or Rubber Slate or Tile Concrete Wooden Materials Other Guilding Shell Conservation	Q 103.2 Q 118.2 26.5	83.6	176		
Metal Surfacing	103.2 Q 118.2 26.5		17.6	18.0	13.19
Synthetic or Rubber	Q 118.2 26.5	96.7	Q	Q	NF
Slate or Tile	118.2 26.5	71.0	5.5	Q	33.13
Concrete	26.5	51.2	Q	16.7	NF
Wooden Materials Other Building Shell Conservation		96.8	9.2	12.2	19.74
Other	71.4	Q 37.4	Q Q	Q NC	10.27 20.16
	107.3	Q 37.4	93.1	9.4	8.42
eatures (Solely or in Combination)					
			***	4.0	
Roof or Ceiling Insulation	88.2	51.3	20.9	16.0	15.71
Wall Insulation	90.4	47.4	25.3	17.8	13.78
Storm or Multiple Glazing	90.2	40.4	32.8	17.0	14.80
Tinted, Reflective, or Shading Glass	77.1	46.8	17.8	12.5	25.91
Exterior or Interior Shadings	77.1	10.0	17.0	12.5	23.71
or Awnings	75.8	45.6	15.8	14.4	19.76
Weather Stripping or Caulking	87.3	51.0	19.7	16.6	17.94
None of the Above	Q	69.9	12.8	Q	NF
ENERGY SOURCES AND END USES Energy Sources					
Solely or in Combination)					
Electricity	89.0	54.0	19.6	15.4	18.75
Natural Gas	85.0	46.2	25.7	13.0	20.68
Fuel Oil	101.2	38.9	Q	Q	36.54
District Heat	89.0	54.0	19.6	15.4	16.89
Other	87.0	52.0	Q	15.6	15.37
Energy End Uses Solely or in Combination)					
Heated Buildings	89.0	54.1	19.4	15.4	16.89
Air-Conditioned Buildings	84.9	52.4	18.3	14.3	15.57
Buildings with Water Heating	89.8	54.3	19.9	15.6	17.01
Buildings with Cooking	76.4	43.9	19.3	13.3	17.88
Buildings with Manufacturing	64.5	41.2	3.0	20.3	15.33
pace-Heating Energy Source	057	5 0 /	12.5	147	10.25
District Heat	85.7 85.7	58.6 58.1	12.5 12.7	14.7 14.9	18.25 17.86
With Secondary	116.0	68.7	Q 12.7	24.0	42.07
Electricity Only	Q Q	94.1	Q	Q Q	42.07 NF
Other Energy Sources or	~	77.1	~	٧	111
Combinations	88.7	50.8	Q	Q	39.57
With No Secondary	78.4	55.6	10.1	12.7	14.50
Secondary	Q	Q	Q	Q	NF
Other Excluding District Heat	129.1	Q	104.5	24.6	13.41
Building Not Heated	Q	NC	Q	NC	NF
fain Space-Heating Energy Source	50.0	6	24.7		45.50
Electricity	52.3	Q	24.7	Q	47.59
Natural Gas	127.6	Q	83.8	18.6	11.34
Fuel Oil	88.2	Q 59.1	Q 12.7	Q 14.9	45.92 17.86
Other	85.7 Q	58.1 Q	12.7	14.9	17.86

See footnote at end of table.

Table B13. Energy End-Use Intensities for District Heat, 1989 (Continued)

Building	Total	Space Heating	Water Heating	Other ^a	RSE Row
Characteristics	1.0	NF	NF	NF	Factor
RSE Column Factor:	1.0	111		111	
HEATING AND COOLING					
Percent Heated					
Not Heated	Q	Q	Q	NC	NF
1 to 50	46.9	Q	6.4	Q	41.52
51 to 99	50.2	40.8	6.9	Q	28.01
100	98.8	57.9	22.6	18.3	18.75
Percent Cooled	0	-a-	-		
Not Cooled	Q	69.7	Q	Q	NF
1 to 50	104.1	68.6	15.1	Q	35.07
51 to 99	77.6	56.7	12.2	8.7	15.35
100	82.4	44.2	22.9	15.3	28.04
Heating Equipment					
(Solely or in Combination)					
Furnaces	Q	Q	Q	NC	NF
Boilers	Q	Q	Q	Q	NF
Individual Space Heaters	84.9	51.3	Q	13.6	16.32
Packaged Heating Units	82.9	51.3	Q	Q	37.04
Heat Pumps	73.9	62.0	9.2	Q	27.99
Air Ducts	76.8	47.2	18.0	11.6	17.11
Heating or Reheating Coils	72.8	44.7	16.6	11.4	18.14
Fan-Coil Units	85.9	50.1	20.3	15.4	13.52
Steam or Hot Water Radiators					
or Baseboards	96.9	55.9	21.7	19.2	19.24
Other	128.7	Q	73.9	Q	22.08
ENERGY MANAGEMENT					
Occupant Control					
Any Control of Heating	106.9	47.6	38.6	20.8	25.14
With Thermostats	107.8	47.2	39.4	21.2	25.26
Any Control of Cooling	99.5	50.4	30.3	18.8	17.32
With Thermostats	100.1	49.9	30.6	19.5	17.60
Reduced Use During Off-Hours			_		
Heating Only	Q	71.7	Q	Q	NF
Cooling Only Heating and Cooling	130.1 69.6	46.9 48.7	Q Q	66.4 7.9	47.68 20.28
			•		
Computerized Energy Management and Control System					
Present in Building	72.5	44.1	19.1	9.3	21.37
Controls Heating and Cooling	72.7	44.4	19.2	9.1	21.50
Controls Lighting	72.4	45.7	5.8	20.9	22.10
Controls Other	88.9	20.7	57.7	10.5	14.93
Other Energy Management					
Regular HVAC Maintenance	87.7	52.7	19.3	15.7	17.26
Participated in Utility					
Conservation Program	92.3	57.5	Q	13.6	35.95

^a Includes cooking and cooling.

NC = No cases in responding sample.

NF = No applicable RSE row/column factor.

Q = Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or data were reported for fewer than 20 buildings. Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for

explanation of abbreviations and definitions of terms used in this report. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1989 Commercial Buildings Energy Consumption Survey.