Table 3.27a. Conservation by Census Region and Climate Zone, Million U.S. Households, 1993

			Census	Region	T			Climate Zon	ie	T	
								er than DD and	ı	More than 2,000 CDD	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	and Few- er than 4,000 HDD	
RSE Column Factor:	0.4	0.8	0.8	0.7	0.8	2.3	1.4	1.3	1.5	1.2	RSE Row Factors
Total	96.6	19.5	23.3	33.5	20.4	8.7	26.5	22.5	17.8	21.2	6.5
Adequacy of Insulation											
(all households) Well Insulated	36.0	7.2	8.8	13.1	6.9	3.5	10.3	8.1	5.9	8.2	6.2
Adequately Insulated	38.4	8.1	9.5	12.7	8.1	3.5	10.3	9.4	6.8	8.5	5.2
Poorly Insulated	22.2	4.2	5.0	7.7	5.4	1.7	6.0	4.9	5.1	4.5	7.2
Demand-Side Management Programs											
Were Any Offered by a Utility Yes	34.8	7.1	8.9	10.4	8.4	4.8	9.8	6.9	6.3	7.0	6.2
No	40.0	8.2	9.0	15.6	7.1	2.3	10.4	11.0	7.3	9.0	7.9
Don't Know	21.8	4.1	5.4	7.5	4.8	1.6	6.3	4.5	4.3	5.2	8.5
Program Participation											
in Past 12 Months  No Program Offered	40.0	8.2	9.0	15.6	7.1	2.3	10.4	11.0	7.3	9.0	7.9
Don't Know	2.7	0.6	0.7	0.8	0.6	0.3	0.6	0.9	0.6	0.4	16.8
No	46.4	9.0	11.7	14.8	10.9	5.0	13.4	8.8	8.8	10.4	5.9
Yes (more than one may apply) Energy Audit	7.6 1.4	1.6 0.3	1.9 0.5	2.4 0.3	1.8 0.4	1.2 0.3	2.1 0.4	1.8 0.3	1.2 0.2	1.4 0.3	13.0 23.0
Load-Control Program	2.6	0.3	0.8	1.3	0.4	0.5	0.4	0.6	0.2	0.5	25.0
Equipment or Service	1.7	0.4	0.3	0.4	0.5	0.3	0.5	0.3	0.2	0.3	25.2
Rebate or Incentive	0.5	Q	0.2	Q	0.2	0.1	Q	Q	Q	Q	35.6 NF
Encouraged to Switch Fuels Time-of-Use Rate	Q 1.6	Q 0.4	Q 0.5	Q 0.5	Q 0.2	Q 0.4	Q 0.3	Q 0.4	Q 0.2	Q 0.3	29.5
Does the Home Have Any of the Following:											
Set-Back/Clock Thermostat											
Yes No	10.8 85.8	2.9 16.6	2.0 21.3	2.9 30.6	3.2 17.2	0.5 8.2	2.9 23.6	2.8 19.7	2.0 15.8	2.7 18.5	12.4 4.5
Regular Heating System/ Furnace Maintenance											
Yes No	49.4 47.2	12.9 6.6	13.8 9.5	14.1 19.4	8.7 11.6	5.7 3.0	15.9 10.6	12.4 10.1	6.0 11.8	9.5 11.7	5.8 6.5
Trees Shading the Afternoon Summer Sun											
Yes	44.9	7.9	10.6	17.1	9.4	4.1	11.3	10.1	8.5	11.0	6.5
No	51.7	11.6	12.7	16.4	10.9	4.6	15.2	12.3	9.3	10.2	5.6

Table 3.27b. Conservation by Census Region and Climate Zone, Percent of U.S. Households, 1993

			Census	Region				Climate Zon	ie		
								er than DD and		More than 2,000	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	CDD and Few- er than 4,000 HDD	
RSE Column Factor:	0.5	1.0	1.0	0.9	1.0	1.4	1.0	1.1	1.2	1.1	RSE Row Factors
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Adequacy of Insulation (all households)											
Well Insulated	37.3	37.1	37.9	39.0	34.0	40.3	38.8	36.2	33.4	38.7	3.8
Adequately Insulated	39.7	41.5	40.8	38.0	39.6	40.3	38.7	41.8	38.0	40.0	3.2
Poorly Insulated	23.0	21.4	21.2	23.0	26.4	19.4	22.5	22.0	28.6	21.3	5.3
Demand-Side Management Programs											
Were Any Offered by a Utility											
Yes	36.0	36.7	38.3	30.9	41.3	55.6	37.1	30.7	35.2	33.1	4.8
No Don't Know	41.3 22.6	42.3 21.0	38.5 23.2	46.6 22.5	35.0 23.7	25.9 18.5	39.3 23.6	49.2 20.1	40.9 23.9	42.3 24.6	5.8 6.8
Program Participation											
in Past 12 Months											
No Program Offered	41.3	42.3	38.5	46.6	35.0	25.9	39.3	49.2	40.9	42.3	5.8
Don't Know	2.8 48.0	3.1 46.2	3.0 50.3	2.3 44.1	3.0 53.3	3.2 57.5	2.3 50.5	3.9 39.0	3.1 49.3	1.7 49.3	16.5 3.9
No Yes (more than one may apply)	7.9	8.3	8.2	7.0	8.6	13.4	7.9	7.9	49.3 6.6	49.3 6.6	12.0
Energy Audit	1.5	1.4	2.0	1.0	1.9	3.7	1.4	1.2	1.3	1.2	22.3
Load-Control Program	2.7	0.9	3.4	3.9	1.4	5.5	1.6	2.8	1.8	3.3	24.6
Equipment or Service	1.7	2.0	1.3	1.3	2.7	3.5	2.1	1.5	1.1	1.3	24.9
Rebate or Incentive	0.5	Q	0.9	Q	0.9	1.6	Q	Q	Q	Q	32.7
Encouraged to Switch Fuels Time-of-Use Rate	Q 1.6	Q 1.9	Q 2.1	Q 1.4	Q 1.2	Q 4.2	Q 1.2	Q 2.0	Q 0.9	Q 1.3	NF 29.5
Does the Home Have Any of the Following:											
Set-Back/Clock Thermostat											
Yes No	11.2 88.8	14.7 85.3	8.5 91.5	8.6 91.4	15.5 84.5	5.6 94.4	11.0 89.0	12.4 87.6	11.4 88.6	12.5 87.5	11.8 1.6
Regular Heating System/ Furnace Maintenance											
Yes No	51.1 48.9	66.0 34.0	59.2 40.8	42.0 58.0	42.8 57.2	65.5 34.5	59.9 40.1	55.1 44.9	33.8 66.2	44.7 55.3	3.8 4.1
Trees Shading the Afternoon Summer Sun											
Yes	46.5	40.3	45.4	51.0	46.2	46.7	42.5	45.1	47.5	51.9	4.0
No	53.5	59.7	54.6	49.0	53.8	53.3	57.5	54.9	52.5	48.1	3.4

Table 3.27a. Conservation by Census Region and Climate Zone, Million U.S. Households, 1993 (Continued)

			Census	Region			(	Climate Zon	ie		
								r than DD and		More than 2,000	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	CDD and Few- er than 4,000 HDD	
RSE Column Factor:	0.4	0.8	0.8	0.7	0.8	2.3	1.4	1.3	1.5	1.2	RSE Row Factors
Doors and Windows								•		•	
Glass in Sliding Doors to the Outside											
Single Pane	12.2	0.4	0.8	5.4	5.6	0.2	1.2	1.5	4.1	5.2	11.3
Double Pane	18.3	3.7	6.0	4.7	3.9	1.9	6.7	5.0	1.9	2.8	9.1
Untreated	17.5	3.5	5.7	4.5	3.8	1.8	6.4	4.8	1.8	2.7	9.4
Low-E Coating	0.8	0.2	0.2	0.2	0.1	0.1	0.3	0.2	Q	Q	24.8
Triple Pane	0.4	0.1	Q	Q	Q	Q	0.2	Q	Q	Q	43.3
No Doors	65.8	15.2	16.3	23.4	10.8	6.6	18.4	15.9	11.7	13.2	5.3
Glass in Most Windows											
Single Pane	61.5	10.0	13.0	24.0	14.4	4.8	14.3	11.9	14.3	16.2	4.4
Double Pane	34.2	9.2	9.9	9.2	5.9	3.8	11.8	10.3	3.4	4.8	5.9
Untreated	32.5	8.7	9.3	8.9	5.7	3.4	11.3	9.9	3.3	4.6	6.2
Low-E Coating	1.7	0.6	0.6	0.4	0.2	0.4	0.5	0.5	0.1	0.2	23.7
Triple Pane	0.9	0.2	0.4	0.1	0.1	0.1	0.4	0.2	Q	Q	26.2
Coverings on Windows											
Storm Windows	36.5	10.5	14.1	9.8	2.1	5.5	14.4	10.0	3.4	3.1	8.5
Plastic Coverings	3.7	0.5	1.0	1.3	0.9	0.4	1.1	0.8	0.6	0.8	17.9
Neither	56.4	8.5	8.2	22.3	17.3	2.8	10.9	11.7	13.8	17.2	5.2
Farmer in Mant Windows											
Frames in Most Windows  Metal	53.3	8.0	8.4	22.4	14.5	2.1	11.0	11.8	11.3	17.1	5.9
Nonmetal	43.3	11.5	14.9	11.0	5.9	6.6	15.5	10.6	6.4	4.0	7.1
Number of Original											
Number of Original Windows Replaced											
All	10.7	4.3	2.8	2.3	1.4	1.0	3.5	3.8	1.3	1.0	11.5
Some	15.5	3.6	4.4	3.7	3.8	2.2	4.5	3.5	3.0	2.4	9.8
None	70.3	11.6	16.1	27.4	15.2	5.4	18.5	15.2	13.5	17.7	4.4
Type of Replacement Windows											
Single Pane	10.3	2.0	2.0	3.3	2.9	1.0	2.1	2.0	2.8	2.4	10.0
Double Pane	15.2	5.7	4.7	2.6	2.2	2.1	5.5	5.1	1.5	1.0	10.3
Untreated	13.7	5.2	4.2	2.4	2.0	1.8	5.0	4.6	1.4	0.9	10.7
Low-E Coating	1.5	0.5	0.6	0.2	0.2	0.4	0.5	0.5	0.2	Q	25.4
Triple Pane	0.7	0.2	0.4	Q	Q	Q	0.4	Q	Q	Q	21.7
None Replaced	70.4	11.6	16.1	27.5	15.2	5.4	18.5	15.2	13.5	17.8	4.4
Age of Replacement Windows											
Less than 2 Years	7.2	1.9	1.8	2.0	1.5	1.0	2.0	1.5	1.4	1.2	12.2
2-4 Years	7.1	2.3	1.7	1.8	1.4	0.7	1.9	2.5	1.1	1.0	12.8
5-9 Years	6.5	2.1	2.0	1.3	1.2	0.7	2.0	2.0	1.0	0.7	11.2
10-19 Years	4.2	1.3	1.3	0.8	0.8	0.6	1.6	1.0	0.6	0.5	15.2
20 Years or More	1.2	0.4	0.3	0.2	0.3	0.2	0.5	0.2	0.2	Q	24.4
None Replaced	70.4	11.6	16.1	27.5	15.2	5.4	18.5	15.2	13.5	17.8	4.4

Table 3.27b. Conservation by Census Region and Climate Zone, Percent of U.S. Households, 1993 (Continued)

			Census	Region			(	Climate Zon	ie		
								r than DD and		More than 2,000	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	CDD and Few- er than 4,000 HDD	
RSE Column Factor:	0.5	1.0	1.0	0.9	1.0	1.4	1.0	1.1	1.2	1.1	RSE Row Factors
Doors and Windows										•	
Glass in Sliding Doors to the Outside											
Single Pane	12.6	2.2	3.5	16.0	27.5	Q	4.6	6.6	23.3	24.6	10.2
Double Pane	18.9	19.1	25.6	13.9	19.2	21.9	25.2	22.3	10.7	13.0	8.4
Untreated	18.1	17.8	24.5	13.5	18.6	20.5	24.2	21.2	10.3	12.8	8.6
Low-E Coating	0.8	1.3	1.0	0.5	0.6	1.4	1.1	1.1	Q	Q	24.6
Triple Pane	0.4	0.6	Q	Q	Q	Q	0.7	Q	Q	Q	39.8
No Doors	68.1	78.1	70.1	69.9	53.1	75.4	69.5	70.7	66.0	62.3	3.0
Glass in Most Windows											
Single Pane	63.6	51.6	55.9	71.7	70.7	55.1	54.0	53.0	80.1	76.5	2.2
Double Pane	35.4	47.3	42.3	27.6	28.8	43.4	44.5	46.0	19.3	22.8	4.0
Untreated	33.6	44.4	39.9	26.5	27.8	39.3	42.5	44.0	18.5	21.9	4.3
Low-E Coating	1.7	2.9	2.4	1.1	0.9	4.1	2.0	2.1	0.8	0.9	23.4
Triple Pane	0.9	1.1	1.8	0.4	0.5	1.5	1.4	1.0	Q	Q	24.4
Coverings on Windows											
Storm Windows	37.8	53.8	60.6	29.2	10.4	63.6	54.5	44.4	19.3	14.8	5.9
Plastic Coverings	3.8	2.5	4.1	4.0	4.4	4.4	4.2	3.4	3.3	3.9	17.2
Neither	58.3	43.7	35.3	66.6	85.2	32.0	41.3	52.2	77.4	81.0	3.8
Frames in Most Windows Metal	55.1	41.0	36.0	66.9	71.1	23.6	41.4	52.7	63.7	80.6	4.1
Nonmetal	44.8	59.0	64.0	32.8	28.9	76.4	58.6	47.3	36.2	19.0	4.8
Number of Original											
Windows Replaced											
All	11.0	21.9	11.9	6.7	6.7	11.9	13.3	16.8	7.3	4.8	10.0
Some None	16.1 72.8	18.7 59.4	18.8 69.3	11.2 81.8	18.5 74.8	25.7 62.4	16.8 69.9	15.4 67.8	16.9 75.7	11.3 83.5	8.0 2.3
Type of Replacement Windows Single Pane	10.6	10.4	8.6	9.9	14.5	11.8	7.9	8.9	15.5	11.3	8.4
Double Pane	15.8	29.3	20.3	7.8	10.7	24.7	20.6	22.8	8.6	4.7	8.7
Untreated	14.2	26.7	17.8	7.1	9.7	20.5	18.9	20.7	7.6	4.3	8.9
Low-E Coating	1.6	2.6	2.5	0.7	1.1	4.1	1.7	2.1	1.0	Q	24.5
Triple Pane	0.7	0.9	1.8	Q	Q	Q	1.6	Q	Q	Q	18.3
None Replaced	72.9	59.4	69.3	82.1	74.8	62.4	69.9	67.8	75.8	83.9	2.3
Age of Replacement Windows											
Less than 2 Years	7.5	9.7	7.8	5.8	7.5	11.7	7.7	6.9	7.9	5.7	10.5
2-4 Years	7.3	11.6	7.3	5.3	6.7	8.3	7.1	11.0	5.9	4.6	11.5
5-9 Years	6.7	10.5	8.4	3.9	5.7	8.4	7.7	9.0	5.7	3.2	9.9
10-19 Years	4.3	6.6	5.6	2.4	3.8	6.4	5.9	4.5	3.4	2.2	13.9
20 Years or More	1.3	2.1	1.5	0.5	1.5	2.8	1.8	0.9	1.2	Q	23.9
None Replaced	72.9	59.4	69.3	82.1	74.8	62.4	69.9	67.8	75.8	83.9	2.3

Table 3.27a. Conservation by Census Region and Climate Zone, Million U.S. Households, 1993 (Continued)

			Census	Region			•	Climate Zor	ne		
								er than DD and		More than 2,000	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	CDD and Few- er than 4,000 HDD	
RSE Column Factor:	0.4	0.8	0.8	0.7	0.8	2.3	1.4	1.3	1.5	1.2	RSE Row Factors
Conservation Measures (Single-Family Units and Mobile Homes Only)	72.4	12.5	18.0	27.4	14.5	7.3	18.9	16.0	13.2	17.0	5.3
Types of Insulation in/around Home Roof/Ceiling											
Yes	58.6	10.4	15.1	21.8	11.4	6.5	15.8	13.1	9.8	13.5	6.0
No Don't Know	6.4 7.4	1.0 1.1	1.3 1.6	2.6 3.0	1.5 1.7	0.4 0.4	1.4 1.8	1.3 1.6	1.7 1.7	1.6 1.9	15.0 11.8
Outside Walls											
Yes No	50.7 11.4	9.4 1.7	13.7 2.1	18.6 4.4	8.9 3.3	6.0 0.6	14.3 2.3	11.5 2.4	7.5 3.2	11.4 2.9	7.0 12.5
Don't Know	10.3	1.4	2.2	4.4	2.3	0.7	2.3	2.1	2.5	2.7	11.5
Floor Insulation	17.0	1.4	1.2	10.2	4.0	0.3	1.6	2.2	4.0	0.6	12.0
No Basement/Crawlspace Basement/Crawlspace	17.8 49.0	1.4 10.5	1.3 15.3	10.2 14.6	4.9 8.6	0.3 6.3	1.6 15.9	2.3 12.9	4.0 8.3	9.6 5.6	13.9 6.4
Heated	20.8	5.1	9.2	3.7	2.8	4.2	8.5	5.8	1.5	0.9	10.4
None or Part Heated	28.2	5.4	6.1	10.9	5.7	2.1	7.4	7.2	6.8	4.7	8.9
Floor Not Insulated	15.7	3.0	4.1	5.6	3.0	1.5	4.2	3.6	3.6	2.7	12.3
Floor Insulated	12.5	2.4	2.0	5.4	2.7	0.6	3.2	3.6	3.2	2.0	12.2
All Parts InsulatedSome Parts Insulated	5.9 1.6	1.2 0.5	1.1 0.3	2.5 0.5	1.0 0.3	0.4 Q	1.6 0.6	1.9 0.5	1.3 0.2	0.7 0.2	14.3 26.5
Don't Know	5.0	0.7	0.6	2.3	1.5	Q	1.0	1.2	1.6	1.0	18.1
Water Heater Yes	17.4	3.1	3.8	5.3	5.2	2.2	4.4	3.6	3.9	3.3	9.0
No	51.5	8.9	13.6	20.4	8.6	5.0	13.8	11.6	8.3	12.8	6.4
Don't Know	3.5	0.5	0.6	1.7	0.7	0.1	0.8	0.8	1.0	0.8	17.4
Hot Water Pipes	21.9	4.2	4.8	9.2	3.7	2.4	5.5	4.8	3.8	5.4	9.2
Yes No	42.6	7.5	12.2	14.2	8.7	4.7	12.0	9.7	7.3	9.0	6.6
Don't Know	7.8	0.7	1.0	4.0	2.1	0.2	1.4	1.5	2.1	2.6	13.4
Heating/Cooling Ducts Yes	21.4	1.9	3.2	12.6	3.7	1.0	3.6	3.5	4.6	8.7	11.2
No	42.6	9.6	13.2	11.2	8.6	5.9	13.6	10.6	6.5	5.9	7.1
Don't Know	8.4	1.0	1.6	3.6	2.2	0.4	1.7	1.9	2.1	2.4	11.6
Weather Stripping Yes	45.7	8.7	12.1	16.8	8.1	5.1	12.9	10.1	7.1	10.5	7.2
No	23.3	3.5	5.3	8.9	5.6	2.0	5.5	5.2	5.1	5.5	8.9
Don't Know	3.4	0.3	0.6	1.7	0.8	0.2	0.5	0.7	1.0	0.9	18.3
Caulking Yes	51.2	9.2	13.7	19.7	8.6	5.7	13.9	11.5	7.9	12.2	6.7
No	17.1	2.9	3.5	5.9	4.9	1.3	4.1	3.6	4.2	3.9	9.9
Don't Know	4.1	0.4	0.9	1.8	1.0	0.3	0.9	0.9	1.1	0.9	16.9

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

<sup>•</sup> See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey.

(For specific titles of forms, see Appendix D.)

Table 3.27b. Conservation by Census Region and Climate Zone, Percent of U.S. Households, 1993 (Continued)

			Census	Region			(	Climate Zor	ie		
								er than DD and		More than 2,000	
Conservation-Related Items	Total	Northeast	Midwest	South	West	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Few- er than 4,000 HDD	CDD and Few- er than 4,000 HDD	
RSE Column Factor:	0.5	1.0	1.0	0.9	1.0	1.4	1.0	1.1	1.2	1.1	RSE Row Factors
										•	
Conservation Measures (Single-Family Units and Mobile Homes Only)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Types of Insulation in/around Home Roof/Ceiling											
Yes	81.0	83.3	83.7	79.5	78.4	89.4	83.4	81.9	74.1	79.2	1.7
No Don't Know	8.8 10.2	7.9 8.8	7.4 8.9	9.4 11.1	10.2 11.4	4.9 5.8	7.3 9.2	8.0 10.1	12.9 13.0	9.6 11.2	13.0 9.8
Outside Walls											
Yes No	70.0 15.8	75.4 13.4	76.4 11.6	67.9 16.1	61.6 22.4	82.1 8.2	75.4 12.4	72.0 15.1	56.9 24.4	67.1 16.9	3.1
Don't Know	14.2	11.2	12.0	16.0	16.0	9.7	12.2	12.9	18.7	16.0	9.9
Floor Insulation	24.6	44.4	7.0	27.1	22.0	4.7	0.2	112	20.6	EG 2	12.4
No Basement/CrawlspaceBasement/Crawlspace	24.6 67.7	11.4 84.2	7.0 85.1	37.1 53.4	33.9 59.1	4.7 86.3	8.3 84.0	14.3 80.9	30.6 62.8	56.2 32.9	12.4 2.9
Heated	28.8	40.8	51.1	13.5	19.6	57.5	44.9	36.0	11.1	5.4	7.9
None or Part Heated	38.9	43.4	34.0	39.8	39.5	28.8	39.2	44.9	51.7	27.5	5.7
Floor Not Insulated	21.6	24.2	22.7	20.2	20.8	21.0	22.4	22.2	27.5	15.9	9.3
Floor Insulated	17.3	19.3	11.2	19.6	18.7	7.8	16.7	22.6	24.2	11.6	10.4
All Parts InsulatedSome Parts Insulated	8.2 2.2	9.8 4.1	6.4 1.7	9.3 1.9	6.9 1.8	5.5 Q	8.2 3.0	11.9 3.1	9.9 1.8	4.3 1.4	13.1 24.5
Don't Know	6.9	5.4	3.1	8.4	10.1	Q	5.5	7.6	12.5	5.9	16.0
Water Heater	04.0	04.0	04.4	40.0	00.4	00.4	00.0	00.0	00.0	40.7	0.0
Yes No	24.0 71.1	24.9 71.1	21.1 75.5	19.2 74.5	36.1 59.1	30.1 68.3	23.2 72.6	22.6 72.2	29.3 63.3	19.7 75.6	6.9 2.7
Don't Know	4.9	4.0	3.4	6.2	4.8	1.7	4.2	5.1	7.4	4.8	15.6
Hot Water Pipes	20.2	22.0	20.0	22.0	25.0	20.0	20.4	20.0	20.0	24.0	
Yes No	30.3 58.9	33.8 60.5	26.6 67.7	33.6 51.8	25.6 60.1	32.6 64.3	29.1 63.5	30.3 60.5	28.8 55.4	31.8 52.7	6.2 3.3
Don't Know	10.8	5.8	5.6	14.6	14.3	3.2	7.4	9.2	15.8	15.5	12.1
Heating/Cooling Ducts	29.5	15.0	17.0	46.0	25.3	12.2	18.8	22.1	34.0	51.2	8.1
Yes No	29.5 58.8	77.0	17.9 73.4	46.0 40.7	25.3 59.3	13.3 81.8	72.0	66.0	34.9 49.3	34.9	3.7
Don't Know	11.7	8.1	8.7	13.2	15.4	4.9	9.2	11.8	15.8	13.9	11.1
Weather Stripping	63.2	69.7	67.4	61.1	56.2	69.9	68.3	63.0	53.8	62.0	3.5
Yes No	32.2	28.1	29.2	32.6	38.5	69.9 27.2	28.9	32.4	38.6	32.7	6.8
Don't Know	4.7	2.2	3.4	6.3	5.4	2.9	2.8	4.6	7.6	5.4	18.1
Caulking	70.7	74.0	76.0	71.0	59.1	70 1	72 5	72.0	50.6	72.0	2.7
Yes No	23.6	74.0 22.9	76.0 19.2	71.9 21.4	33.8	78.1 18.4	73.5 21.7	72.0 22.4	59.6 31.7	72.0 22.7	7.8
Don't Know	5.7	3.0	4.8	6.7	7.1	3.5	4.8	5.6	8.7	5.3	15.8

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

<sup>•</sup> See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey.

(For specific titles of forms, see Appendix D.)

Table 3.28a. Conservation by Year of Construction, Million U.S. Households, 1993

					Year	of Constru	ction				
Conservation-Related Items	Total	1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
Conservation-Related items											RSE
RSE Column Factor:	0.3	1.7	1.4	1.5	1.1	0.9	1.0	0.9	1.2	0.8	Row Factors
Total	96.6	4.5	4.7	5.5	8.5	18.1	15.0	13.1	6.9	20.4	5.2
Adequacy of Insulation (all households)											
Well Insulated	36.0	2.7	2.6	2.6	3.4	6.7	5.9	4.5	2.2	5.5	7.0
Adequately Insulated	38.4	1.4	1.5	2.0	3.8	7.9	6.0	5.1	2.7	8.0	7.6
Poorly Insulated	22.2	0.4	0.6	8.0	1.3	3.6	3.1	3.5	2.0	6.9	9.5
Demand-Side Management Programs											
Were Any Offered by a Utility											
Yes	34.8	1.8	1.9	2.4	3.0	6.1	5.1	5.1	2.4	7.1	7.8
No Don't Know	40.0 21.8	1.5 1.2	2.0 0.8	2.0 1.1	3.4 2.1	8.2 3.9	6.1 3.8	5.2 2.8	2.9 1.6	8.7 4.6	7.6 9.2
Program Participation in Past 12 Months											
No Program Offered	40.0	1.5	2.0	2.0	3.4	8.2	6.1	5.2	2.9	8.7	7.6
Don't Know	2.7	0.2	0.1	Q	0.2	0.6	0.3	0.4	0.2	0.7	25.2
No	46.4	2.4	2.0	2.8	4.0	8.0	7.8	6.5	3.4	9.5	6.9
Yes (more than one may apply)	7.6	0.4	0.6	0.6	0.8	1.4	0.8	1.0	0.5	1.5	15.3
Energy AuditLoad-Control Program	1.4 2.6	Q 0.2	0.1 0.3	0.1 0.3	Q 0.4	0.3 0.4	0.2 0.3	0.2 0.3	Q Q	0.3 0.3	29.8 26.7
Equipment or Service	1.7	Q.2	0.3	0.3	0.4	0.4	0.3	0.3	Q	0.3	30.3
Rebate or Incentive	0.5	ã	Q	Q	Q.	Q	Q.	Q	ã	Q	61.1
Encouraged to Switch Fuels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Time-of-Use Rate	1.6	Q	0.1	0.1	0.1	0.3	Q	0.3	Q	0.3	31.6
Does the Home Have Any of the Following:											
Set-Back/Clock Thermostat											
Yes No	10.8 85.8	1.0 3.4	0.9 3.8	0.7 4.8	0.9 7.6	1.9 16.2	1.5 13.5	1.7 11.4	0.4 6.5	1.7 18.6	13.7 5.5
Regular Heating System/ Furnace Maintenance											
Yes	49.4	2.2	2.5	3.0	4.5	8.6	8.1	6.5	3.3	10.8	6.8
No	47.2	2.2	2.2	2.5	4.0	9.6	6.9	6.6	3.7	9.6	6.9
Trees Shading the Afternoon Summer Sun											
Yes	44.9	1.2	1.4	2.1	3.5	8.4	7.6	7.3	3.7	9.8	7.2
No	51.7	3.2	3.3	3.4	5.0	9.7	7.4	5.8	3.3	10.6	6.6

Table 3.28b. Conservation by Year of Construction, Percent of U.S. Households, 1993

Conservation-Related Items	Total	1991 to													
- Conservation-Related items		1993 <sup>1</sup>	to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before					
											RSE				
RSE Column Factor:	0.4	1.4	1.4	1.4	1.2	0.9	1.0	0.9	1.2	0.8	Row Factors				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0				
Adequacy of Insulation															
(all households) Well Insulated	37.3	60.2	55.5	47.3	39.9	36.8	39.2	34.2	32.3	27.0	5.2				
Adequately Insulated	37.3 39.7	31.2	32.0	47.3 37.2	39.9 44.8	36.8 43.6	39.2 40.1	34.2 38.8	32.3 39.2	27.0 39.1	5.2				
Poorly Insulated	23.0	8.6	12.6	15.4	15.3	19.6	20.7	27.0	28.5	33.9	8.3				
Demand-Side Management Programs															
Were Any Offered by a Utility															
Yes	36.0	39.8	39.7	42.9	35.2	33.4	34.1	39.4	35.2	34.8	5.9				
No Don't Know	41.3 22.6	34.4 25.9	42.8 17.6	36.9 20.2	40.0 24.9	45.2 21.3	40.3 25.5	39.5 21.1	41.3 23.4	42.8 22.4	5.8 7.9				
Program Participation															
in Past 12 Months															
No Program Offered	41.3 2.8	34.4 4.2	42.8	36.9	40.0 2.5	45.2 3.1	40.3 2.3	39.5	41.3 2.8	42.8	5.8 24.5				
Don't Know No	2.8 48.0	4.2 53.5	1.7 42.7	Q 50.8	2.5 47.7	3.1 44.1	2.3 51.8	2.8 49.8	2.8 48.9	3.2 46.5	4.5				
Yes (more than one may apply)	7.9	7.9	12.9	10.7	9.8	7.5	5.6	8.0	7.0	7.4	14.5				
Energy Audit	1.5	Q	3.2	1.4	Q	1.8	1.6	1.2	Q	1.4	29.0				
Load-Control Program	2.7	3.6	6.8	6.3	4.6	2.4	2.1	2.1	Q	1.4	26.1				
Equipment or Service	1.7	Q	3.3	2.7	1.8	2.3	1.2	1.1	Q	2.0	29.2				
Rebate or Incentive Encouraged to Switch Fuels	0.5 Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	49.6 NF				
Time-of-Use Rate	1.6	Q	2.9	2.7	1.7	1.4	Q	2.1	Q	1.5	30.1				
Does the Home Have Any of the Following:															
Set-Back/Clock Thermostat															
Yes	11.2	23.3	18.9	13.1	10.6	10.5	10.1	13.0	6.2	8.6	12.7				
No	88.8	76.7	81.1	86.9	89.4	89.5	89.9	87.0	93.8	91.4	1.7				
Regular Heating System/ Furnace Maintenance	_		_		_										
Yes	51.1 48.9	49.7	53.7	54.2	53.0	47.3 52.7	54.2	49.4	47.1 52.9	53.0	4.6 4.9				
No	48.9	50.3	46.3	45.8	47.0	52.7	45.8	50.6	52.9	47.0	4.9				
Trees Shading the Afternoon Summer Sun															
Yes No	46.5 53.5	27.5 72.5	29.5 70.5	37.4 62.6	40.8 59.2	46.4 53.6	50.8 49.2	55.7 44.3	52.9 47.1	48.1 51.9	5.3 4.1				

Table 3.28a. Conservation by Year of Construction, Million U.S. Households, 1993 (Continued)

		Year of Construction												
Conservation-Related Items	Total	1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	RSE			
RSE Column Factor:	0.3	1.7	1.4	1.5	1.1	0.9	1.0	0.9	1.2	0.8	Row Factors			
Doors and Windows									1					
Glass in Sliding Doors to the Outside														
Single Pane	12.2	0.6	0.6	1.1	1.7	3.7	2.5	1.3	0.4	0.4	14.4			
Double Pane	18.3	1.3	1.4	1.5	2.6	4.7	3.7	1.7	0.4	0.9	11.7			
Untreated	17.5	1.1	1.3	1.5	2.6	4.5	3.6	1.5	0.4	0.9	12.0			
Low-E Coating	0.8	0.1	0.1	0.1	Q	0.1	Q	Q	Q	Q	22.2			
Triple Pane	0.4	Q	Q	Q	Q	0.2	Q	Q	Q	Q	52.4			
No Doors	65.8	2.5	2.7	2.9	4.2	9.5	8.8	10.0	6.1	19.0	5.9			
Glass in Most Windows														
Single Pane	61.5	1.6	1.8	2.4	4.9	11.5	9.6	9.5	5.3	15.0	5.8			
Double Pane	34.2	2.9	2.9	3.1	3.6	6.4	5.2	3.5	1.6	5.1	7.6			
Untreated	32.5	2.6	2.7	2.9	3.5	6.2	5.0	3.2	1.4	4.9	7.9			
Low-E Coating	1.7	0.2	0.2	0.1	Q	0.2	0.3	0.3	0.1	0.2	24.8			
Triple Pane	0.9	Q	Q	Q	Q	0.2	Q	Q	Q	0.2	31.9			
Coverings on Windows														
Storm Windows	36.5	0.9	1.1	1.3	1.9	5.5	5.9	5.2	3.2	11.4	9.0			
Plastic Coverings	3.7	Q	0.1	0.2	0.3	0.8	0.3	0.5	0.4	0.9	22.1			
Neither	56.4	3.5	3.5	4.1	6.3	11.8	8.7	7.3	3.3	8.0	6.2			
Frames in Most Windows														
Metal	53.3	3.0	3.2	4.0	6.7	12.8	9.9	6.3	2.5	4.7	7.0			
Nonmetal	43.3	1.5	1.5	1.4	1.7	5.2	5.1	6.8	4.4	15.6	7.7			
Number of Original Windows Replaced														
All	10.7	Q	Q	Q	0.2	0.8	1.7	2.5	1.3	4.1	14.0			
Some	15.5	0.2	0.3	0.2	8.0	2.1	2.7	2.9	1.6	4.8	12.7			
None	70.3	4.3	4.4	5.2	7.5	15.2	10.7	7.7	4.1	11.5	5.5			
Type of Replacement Windows	40.0	0.4	0.0	0.4	0.0			0.4		0.0	45.4			
Single Pane	10.3	0.1	0.2	0.1	0.3	1.1	1.4	2.1	1.4	3.6	15.4			
Double Pane	15.2	Q	0.1	0.2	0.7	1.7	2.8	3.3	1.4	4.9	12.3			
Untreated Low-E Coating	13.7 1.5	Q Q	0.1 Q	0.1 Q	0.7 Q	1.5 0.2	2.5 0.3	2.8 0.5	1.2 0.2	4.6 0.3	13.0 29.4			
	0.7		Q	Q	Q	0.2 Q	0.3 Q		0.2 Q	0.3	26.0			
Triple Pane None Replaced	70.4	Q 4.3	Q 4.4	5.2	Q 7.5	15.2	10.7	Q 7.7	Q 4.1	11.5	5.5			
Age of Replacement Windows	-				-	- '	-		•					
Less than 2 Years	7.2	0.2	0.1	0.1	0.3	1.1	1.1	1.4	0.9	1.8	16.7			
2-4 Years	7.1	Q.	0.2	0.1	0.4	0.9	1.4	1.3	0.6	2.2	16.5			
5-9 Years	6.5	Q	Q.	Q	0.2	0.8	1.2	1.4	0.7	2.2	15.1			
10-19 Years	4.2	ã	ã	ã	Q	Q	0.6	1.1	0.4	1.9	17.2			
20 Years or More	1.2	Q	Q	Q	Q	Q	Q	Q	0.2	0.8	25.9			
	70.4	4.3									5.5			

Table 3.28b. Conservation by Year of Construction, Percent of U.S. Households, 1993 (Continued)

					•						
					Year	of Constru	ction				
Conservation-Related Items	Total	1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.4	1.4	1.4	1.2	0.9	1.0	0.9	1.2	0.8	RSE Row Factors
			l								
Doors and Windows											
Glass in Sliding Doors to the Outside	40.0	440	10.0	10.1	10.5	00.0	10.5	40.4	5.0	4.0	40.0
Single Pane  Double Pane	12.6 18.9	14.2 28.5	12.3 29.6	19.1 28.1	19.5 30.4	20.6 25.8	16.5 24.9	10.1 12.9	5.3 6.3	1.9 4.6	13.2 9.8
Untreated	18.1	26.5 25.1	28.0	26.9	30.4	25.6 25.1	23.9	12.9	5.9	4.6	10.1
Low-E Coating	0.8	3.4	1.6	1.2	Q	0.7	Q	Q	Q.3	Q.	22.6
Triple Pane	0.4	Q	Q	Q	Q	1.0	Q	Q	Q	Q	46.6
No Doors	68.1	57.0	57.9	52.5	49.9	52.6	58.4	76.7	88.4	93.1	3.9
Glass in Most Windows											
Single Pane	63.6	35.0	38.7	43.5	57.3	63.3	64.1	72.4	76.3	73.8	3.6
Double Pane	35.4	64.3	60.6	55.6	42.2	35.4	34.9	26.9	22.5	25.0	5.4
Untreated	33.6	59.2	57.2	52.9	41.9	34.1	33.2	24.4	20.8	24.1	5.7
Low-E Coating	1.7 0.9	5.1	3.4 Q	2.7	Q Q	1.3 0.8	1.7 Q	2.5 Q	1.7 Q	0.9 1.2	25.0 30.0
Triple Pane	0.9	Q	Q	Q	Q	0.6	Q	Q	Q	1.2	30.0
Coverings on Windows											
Storm Windows	37.8	21.2	22.3	22.8	22.4	30.2	39.4	40.2	46.9	56.2	7.1
Plastic Coverings Neither	3.8 58.3	Q 78.2	2.9 74.7	3.3 73.9	3.6 74.0	4.4 64.9	2.3 58.2	4.2 55.6	5.8 47.2	4.5 39.2	21.1 3.8
Frames in Most Windows Metal	55.1	67.3	68.5	73.7	79.4	70.7	66.1	47.9	36.6	23.2	4.1
Nonmetal	44.8	32.7	31.5	26.3	20.6	28.9	33.8	52.1	63.4	76.8	6.1
Number of Original Windows Replaced											
All	11.0	Q	Q	Q	2.3	4.5	11.1	18.8	18.3	20.1	12.0
Some None	16.1 72.8	3.7 95.4	6.0 93.4	3.8 94.3	9.6 88.1	11.5 83.6	17.7 71.1	22.5 58.6	23.0 58.7	23.5 56.5	11.7 2.1
Type of Replacement Windows											
Single Pane	10.6	2.1	4.0	2.4	3.2	5.9	9.6	15.9	20.2	17.8	14.6
Double Pane	15.8	Q	2.4	3.2	8.6	9.6	18.4	25.1	20.3	24.2	10.8
Untreated	14.2	Q	2.3	2.7	8.3	8.4	16.4	21.6	18.0	22.5	11.5
Low-E Coating	1.6	Q	Q	Q	Q	1.2	2.0	3.5	2.3	1.7	28.1
Triple Pane	0.7	Q	Q	Q	Q	Q	Q	Q	Q	1.6	24.5
None Replaced	72.9	95.4	93.4	94.3	88.1	84.0	71.2	58.6	58.7	56.5	2.1
Age of Replacement Windows											
Less than 2 Years	7.5	4.5	3.0	2.5	4.1	6.2	7.3	11.0	12.6	9.0	16.0
2-4 Years	7.3	Q	3.4	2.0	5.1	4.8	9.6	9.9	9.2	10.6	15.4
5-9 Years 10-19 Years	6.7 4.3	Q Q	Q Q	Q Q	2.5 Q	4.2 Q	7.8 3.9	11.0 8.7	9.7 6.4	10.7 9.1	13.4 15.8
20 Years or More	4.3 1.3	Q	Q	Q	Q	Q	3.9 Q	8.7 Q	3.4	9.1 4.1	24.6
None Replaced	72.9	95.4	93.4	94.3	88.1	84.0	71.2	58.6	58.7	56.5	24.0
	. 2.0		30.4	3-1.0		5-1.0			30.7	30.0	

Table 3.28a. Conservation by Year of Construction, Million U.S. Households, 1993 (Continued)

					Year	of Constru	ction				
Conservation-Related Items	Total	1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.3	1.7	1.4	1.5	1.1	0.9	1.0	0.9	1.2	0.8	RSE Row Factors
							•	-	1	•	
Conservation Measures (Single-Family Units and Mobile Homes Only)	72.4	3.6	3.9	4.1	6.1	12.4	10.8	11.3	5.6	14.6	5.7
Types of Insulation in/around Home											
Roof/Ceiling Yes	58.6	3.3	3.4	3.6	5.4	10.3	9.3	8.9	4.4	10.1	6.3
No Don't Know	6.4 7.4	Q 0.2	Q 0.4	0.1 0.5	0.2 0.6	0.8 1.3	0.6 1.0	1.3 1.2	0.7 0.5	2.6 1.9	18.5 14.8
Outside Walls											
Yes	50.7	3.2	3.5	3.5	4.9	9.4	7.8	6.7	3.3	8.4	6.8
No Don't Know	11.4 10.3	Q 0.3	0.2 0.2	0.1 0.5	0.3 0.9	1.1 1.9	1.5 1.5	2.7 2.0	1.5 0.7	4.0 2.3	15.6 13.3
Floor Insulation											
No Basement/Crawlspace	17.8	1.4	1.4	1.6	2.9	3.7	2.9	2.4	0.7	1.0	12.6
Basement/Crawlspace	49.0	1.8	1.9	1.9	2.3	6.7	7.3	8.8	4.8	13.6	7.1
Heated None or Part Heated	20.8 28.2	0.9 0.8	1.0 0.9	0.8 1.0	1.2 1.1	3.4 3.3	3.5 3.9	3.2 5.6	1.5 3.3	5.4 8.2	11.0 9.3
Floor Not Insulated	26.2 15.7	0.8	0.9	0.3	0.4	3.3 1.3	2.1	3.2	3.3 2.1	6.2 5.7	13.7
Floor Insulated	12.5	0.6	0.5	0.7	0.7	2.1	1.8	2.4	1.2	2.5	12.7
All Parts Insulated	5.9	0.4	0.4	0.4	0.3	1.2	0.6	1.0	0.5	1.0	16.5
Some Parts Insulated	1.6	Q	Q	Q	Q	0.3	0.2	0.2	0.2	0.4	34.2
Don't Know	5.0	0.2	0.1	0.2	0.3	0.6	0.9	1.1	0.4	1.1	19.3
Water Heater Yes	17.4	0.7	1.1	1.0	1.6	3.4	2.5	2.7	1.5	2.8	9.9
No	51.5	2.7	2.6	2.9	4.2	8.3	7.8	8.0	3.9	11.1	6.5
Don't Know	3.5	0.2	0.2	0.2	0.4	0.7	0.4	0.6	0.2	0.7	20.1
Hot Water Pipes Yes	21.9	1.5	1.7	1.3	2.3	4.1	2.7	2.9	1.5	3.9	9.0
No	42.6	1.5	1.7	2.2	2.3 3.1	6.8	6.8	7.2	3.6	9.5	7.1
Don't Know	7.8	0.4	0.5	0.6	0.7	1.5	1.3	1.2	0.4	1.2	13.9
Heating/Cooling Ducts	~4.4	4.0	4.0	4.0	0.0	4.0	0.0	0.0	0.0	0.0	10.4
Yes	21.4 42.6	1.9 1.2	1.8	1.9 1.6	2.9 2.3	4.2 6.5	3.3 6.4	2.6 7.3	0.8 4.3	2.0 11.4	10.1 7.5
No Don't Know	8.4	0.4	1.5 0.5	0.6	1.0	1.6	1.1	1.4	0.5	11.4	14.2
Weather Stripping											
Yes	45.7	2.7	2.8	2.7	4.0	7.8	6.8	6.5	3.3	9.3	7.4
No Don't Know	23.3 3.4	0.8 0.2	0.9 0.2	1.3 0.2	1.7 0.5	3.9 0.7	3.6 0.4	4.3 0.5	2.2 Q	4.7 0.7	9.1 20.8
Caulking											
Yes	51.2	2.8	2.7	3.1	4.4	9.1	7.8	7.7	3.6	10.0	6.7
No Don't Know	17.1 4.1	0.6 0.2	0.9	0.9 0.2	1.3 0.4	2.5	2.4	2.8	1.8	3.9	10.6

<sup>&</sup>lt;sup>1</sup> Does not include all new construction for 1993.

Does not include all new construction for 1993.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

Table 3.28b. Conservation by Year of Construction, Percent of U.S. Households, 1993 (Continued)

					Year	of Constru	ction				
Conservation-Related Items	Total	1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.4	1.4	1.4	1.2	0.9	1.0	0.9	1.2	0.8	RSE Row Factors
		-							1	-	
Conservation Measures (Single-Family Units and Mobile Homes Only)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Types of Insulation in/around Home Roof/Ceiling											
Yes	81.0	91.6	87.8	86.5	87.5	83.3	85.9	78.7	79.0	69.2	2.2
No	8.8	Q	Q	1.5	2.9	6.5	5.3	11.1	12.7	17.8	16.9
Don't Know	10.2	6.3	9.1	12.0	9.7	10.2	8.8	10.2	8.3	13.0	14.6
Outside Walls											
Yes No	70.0 15.8	90.5 Q	89.4 4.8	84.9 2.4	79.9 5.3	76.2 8.8	72.1 13.7	59.1 23.6	59.0 27.7	57.4 27.2	2.9 14.1
Don't Know	14.2	7.6	5.8	12.7	14.8	15.0	14.2	17.3	13.4	15.4	12.6
Floor Insulation											
No Basement/Crawlspace	24.6	37.9	35.0	38.4	46.9	29.7	26.9	20.9	13.2	6.5	10.6
Basement/Crawlspace	67.7	48.9	48.8	44.7	37.9	54.1	67.9	78.0	85.9	92.8	4.2
Heated	28.8	25.8	26.7	20.3	19.6	27.2	32.1	28.1	26.3	36.7	9.5
None or Part Heated Floor Not Insulated	38.9 21.6	23.1 7.7	22.1 8.7	24.4 6.6	18.3 6.8	27.0 10.3	35.8 19.2	49.9 28.7	59.6 37.8	56.1 38.7	7.5 12.5
Floor Insulated	17.3	15.4	13.4	17.8	11.5	16.7	16.6	21.2	21.7	17.4	11.7
All Parts Insulated	8.2	10.5	9.5	10.1	5.4	9.8	5.8	8.9	9.7	7.1	15.9
Some Parts Insulated	2.2	Q	Q	Q	Q	2.4	2.1	2.1	4.0	2.8	32.3
Don't Know	6.9	4.3	3.2	5.7	4.7	4.5	8.7	10.1	8.1	7.5	19.1
Water Heater											
Yes	24.0	20.5	29.1	25.3	25.4	27.8	23.7	23.8	26.2	19.2	8.1
No Don't Know	71.1 4.9	75.1 4.3	66.5 4.4	70.2 4.5	68.8 5.8	66.9 5.3	72.3 4.0	71.0 5.2	69.7 4.1	75.8 5.1	3.0 19.7
	-	-		-			-	-		-	
Hot Water Pipes Yes	30.3	41.2	42.7	31.4	37.7	33.4	25.0	25.6	27.1	27.0	6.6
No	58.9	46.9	45.4	53.3	50.2	54.9	62.6	64.0	65.2	65.0	3.9
Don't Know	10.8	11.8	12.0	15.3	12.1	11.8	12.3	10.4	7.6	8.0	13.1
Heating/Cooling Ducts											
Yes	29.5	53.2	47.4	45.1	46.9	34.3	30.2	23.2	14.6	13.3	7.8
No	58.8	34.6	39.6	39.4	36.9	52.4	59.4	64.7	76.6	78.2	4.9
Don't Know	11.7	12.2	13.0	15.5	16.2	13.2	10.4	12.2	8.8	8.5	13.2
Weather Stripping											
Yes	63.2	74.2	71.3	63.9	64.7	63.5	63.3	57.2	58.9	63.2	3.9
No Don't Know	32.2 4.7	21.0 4.8	24.5 4.2	30.3 5.8	27.3 7.9	31.2 5.4	33.4 3.3	38.2 4.6	38.7 Q	32.3 4.5	7.7 20.3
		-			-	-		-		•	
Caulking Yes	70.7	77.6	70.5	73.7	71.7	73.8	72.5	68.3	64.2	68.3	3.1
No	23.6	17.1	24.2	21.0	21.1	19.9	22.5	25.1	32.0	26.4	9.1
Don't Know	5.7	5.3	5.2	5.2	7.2	6.3	5.0	6.5	3.8	5.3	19.6

<sup>&</sup>lt;sup>1</sup> Does not include all new construction for 1993.

Does not include all new construction for 1993.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

Table 3.29a. Conservation by Type and Ownership of Housing Unit, Million U.S. Households, 1993

														Т
					т	ype and	Ownersh	nip of Ho	using Ur	nit				
							Multi	family						
		Sir	ngle-Fam	ily	Two	to Four	Units	Five	or More	Units	M	obile Ho	me	
Conservation-Related Items	Total	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	
RSE Column Factor:	0.3	0.3	0.4	0.8	1.2	2.0	1.4	0.9	2.9	0.9	1.3	1.5	2.1	RSE Row Factors
Total	96.6	66.8	55.8	11.0	8.0	1.5	6.5	16.2	1.6	14.7	5.6	4.4	1.2	5.8
Adequacy of Insulation														
(all households) Well Insulated Adequately Insulated Poorly Insulated	36.0 38.4 22.2	27.3 25.9 13.7	25.0 21.9 8.8	2.3 3.9 4.8	2.2 3.3 2.5	0.4 0.7 0.4	1.8 2.6 2.1	5.0 6.9 4.3	0.7 0.6 0.2	4.3 6.3 4.1	1.6 2.3 1.7	1.5 1.8 1.1	0.1 0.5 0.5	8.7 7.9 10.3
Demand-Side Management Programs														
Were Any Offered by a Utility Yes	34.8	20.0	24.6	2.4	2.1	0.6	1 5	3.1	0.4	2.7	1.6	1.2	0.2	0.7
No	40.0 21.8	28.0 26.0 12.8	24.6 21.1 10.1	3.4 4.9 2.7	2.1 4.0 1.9	0.6 0.6 0.2	1.5 3.4 1.6	6.8 6.3	0.4 0.7 0.5	2.7 6.2 5.8	1.6 3.1 0.8	1.3 2.4 0.6	0.3 0.7 0.2	9.7 8.3 11.1
Program Participation in Past 12 Months														
No Program Offered	40.0 2.7	26.0 1.3	21.1 1.0	4.9 0.3	4.0 0.3	0.6 Q	3.4 0.3	6.8 1.0	0.7 Q	6.2 0.9	3.1 Q	2.4 Q	0.7 Q	8.3 23.8
Don't Know No	46.4	33.0	27.8	5.2	3.3	0.7	2.7	8.1	0.7	7.4	1.9	1.6	0.4	8.1
Yes (more than one may apply)	7.6	6.5	5.8	0.6	0.4	0.1	0.2 Q	0.4 Q	Q Q	0.3	0.4	0.3	Q Q	20.7
Energy Audit Load-Control Program	1.4 2.6	1.3 2.2	1.1 2.1	0.2 0.2	Q Q	Q Q	Q	0.1	Q	Q Q	Q 0.2	Q Q	Q	35.5 40.4
Equipment or Service	1.7	1.3	1.1	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	40.2
Rebate or Incentive Encouraged to Switch Fuels	0.5 Q	0.5 Q	0.5 Q	Q Q	60.3 NF									
Time-of-Use Rate	1.6	1.4	1.3	0.1	Q	Q	Q	Q	Q	Q	Q	Q	Q	44.6
Does the Home Have Any of the Following:														
Set-Back/Clock Thermostat	10.0	0.0	0.2	0.7	0.6	0.3	0.4	1.0	0	0.7	0.3	0.0	0	24.4
Yes No	10.8 85.8	9.0 57.8	8.3 47.5	0.7 10.3	0.6 7.4	0.3 1.2	0.4 6.1	1.0 15.3	Q 1.3	0.7 14.0	0.3 5.3	0.2 4.2	Q 1.1	21.4 6.2
Regular Heating System/ Furnace Maintenance	40.4	25.7	24.4	4.0	0.7	2.2	0.0	<b>77</b>	2.2	0.0	0.0	4.0	0.4	7.7
Yes No	49.4 47.2	35.7 31.1	31.1 24.6	4.6 6.5	3.7 4.3	0.9 0.6	2.8 3.7	7.7 8.5	0.9 0.7	6.9 7.8	2.3 3.3	1.9 2.5	0.4 0.8	7.7 8.0
Trees Shading the Afternoon Summer Sun														
Yes No	44.9 51.7	36.8 30.0	31.7 24.1	5.1 5.9	2.6 5.4	0.6 0.9	2.0 4.5	3.1 13.1	0.4 1.2	2.8 11.9	2.4 3.2	1.8 2.6	0.5 0.7	8.7 7.3
140	J1.1	50.0	۷4.۱	5.8	5.4	0.5	4.0	13.1	1.2	11.3	3.2	2.0		1.3

Table 3.29b. Conservation by Type and Ownership of Housing Unit, Percent of U.S. Households, 1993

					,									
					Т	ype and	Ownersh	nip of Ho	using Ur	nit				
							Multi	family						
		Sir	ngle-Fam	ily	Two	to Four	Units	Five	or More	Units	M	obile Ho	me	
Conservation-Related Items	Total	Total	Own	Rent										
RSE Column Factor:	0.4	0.4	0.4	0.8	1.1	2.0	1.3	0.9	2.6	0.9	1.1	1.3	1.9	RSE Row Factors
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Adequacy of Insulation (all households)														
Well Insulated Adequately Insulated Poorly Insulated		40.8 38.7 20.5	44.8 39.3 15.9	20.7 35.5 43.8	27.4 41.5 31.1	26.3 48.6 25.1	27.6 39.9 32.5	30.7 42.6 26.7	45.5 38.9 15.7	29.1 43.0 27.9	28.6 41.5 29.9	33.4 40.7 25.9	10.7 44.2 45.1	7.3 5.4 8.0
Demand-Side Management Programs														
Were Any Offered by a Utility Yes	36.0	41.8	44.0	30.7	26.7	42.0	23.3	19.1	24.3	18.5	29.5	30.0	27.6	8.0
No Don't Know	41.3	39.0 19.2	37.9 18.1	44.6 24.7	49.9 23.4	42.2 15.7	51.6 25.1	41.9 39.0	42.0 33.7	41.9 39.6	56.0 14.5	55.5 14.5	57.8 14.6	5.6 9.4
Program Participation in Past 12 Months														
No Program Offered		39.0	37.9	44.6 2.6	49.9 4.0	42.2 Q	51.6 4.1	41.9 5.9	42.0	41.9	56.0 Q	55.5 Q	57.8	5.6 22.0
Don't Know No		2.0 49.4	1.9 49.8	2.6 47.0	41.8	45.2	41.0	5.9 49.8	Q 46.8	6.1 50.2	34.9	35.2	Q 33.8	5.7
Yes (more than one may apply)		9.7	10.4	5.9	4.4	9.0	3.3	2.3	Q	1.9	7.8	7.7	Q	19.5
Energy Audit		1.9	1.9	1.7	Q	Q	Q	Q	Q	Q	Q	Q	Q	30.7
Load-Control Program Equipment or Service		3.3 2.0	3.7 2.0	1.5 2.1	Q Q	Q Q	Q Q	0.9 Q	Q Q	Q Q	3.0 Q	Q Q	Q Q	37.6 35.4
Rebate or Incentive		0.7	0.9	Q. 1	Q	Q	Q	Q	Q	Q	Q	Q	Q	50.4
Encouraged to Switch Fuels		Q.	Q	ã	ã	ã	ã	ã	ã	ã	ã	ã	ã	NF
Time-of-Use Rate	1.6	2.1	2.3	1.1	Q	Q	Q	Q	Q	Q	Q	Q	Q	38.7
Does the Home Have Any of the Following:														
Set-Back/Clock Thermostat	11.0	12.4	140	6.6	7.0	177	E G	E 0	0	4.0	4.0	4.0	0	20.8
Yes No	11.2 88.8	13.4 86.6	14.8 85.2	6.6 93.4	7.9 92.1	17.7 82.3	5.6 94.4	5.9 94.1	Q 84.8	4.9 95.1	4.9 95.1	4.9 95.1	Q 95.1	1.8
Regular Heating System/ Furnace Maintenance	F	<b>5</b> 0 <b>5</b>	<b>55.</b> 0	44.5	40.4	00.4	40.5	47.5	·	40.7	44.0	40.0	00.4	
Yes No	51.1 48.9	53.5 46.5	55.8 44.2	41.5 58.5	46.1 53.9	62.1 37.9	42.5 57.5	47.5 52.5	55.1 44.9	46.7 53.3	41.2 58.8	43.6 56.4	32.1 67.9	5.5 5.0
Trees Shading the Afternoon Summer Sun														
Yes	46.5	55.1	56.8	46.4	32.3	39.3	30.7	19.4	25.0	18.8	42.5	42.0	44.3	6.9
No	53.5	44.9	43.2	53.6	67.7	60.7	69.3	80.6	75.0	81.2	57.5	58.0	55.7	4.1

Table 3.29a. Conservation by Type and Ownership of Housing Unit, Million U.S. Households, 1993 (Continued)

					Т	ype and	Ownersh	nip of Ho	using Un	it				
							Multif	amily						
		Sir	ngle-Fam	ily	Two	to Four (	Units	Five	or More	Units	Me	obile Ho	me	
Conservation-Related Items	Total	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	
RSE Column Factor:	0.3	0.3	0.4	0.8	1.2	2.0	1.4	0.9	2.9	0.9	1.3	1.5	2.1	RSE Row Factors
Doors and Windows														
Glass in Sliding Doors to the Outside														
Single Pane	12.2	8.3	7.1	1.2	0.5	Q	0.4	3.0	0.6	2.4	0.4	0.3	Q	16.4
Double Pane	18.3	14.2	13.0	1.2	0.8	0.2	0.6	2.9	0.5	2.4	0.4	0.3	Q	16.1
Untreated	17.5	13.5	12.3	1.2	8.0	0.2	0.6	2.9	0.5	2.4	0.4	0.3	Q	16.2
Low-E Coating	0.8	0.7	0.7	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	40.8
Triple Pane No Doors	0.4 65.8	0.3	0.3	Q 0.7	Q	Q 1.2	Q 5.4	Q 10.3	Q 0.4	Q 9.9	Q 4.8	Q 3.7	Q 1.1	66.1
No Doors	8.60	44.1	35.4	8.7	6.6	1.2	5.4	10.3	0.4	9.9	4.8	3.7	1.1	0.1
Glass in Most Windows														
Single Pane	61.5	41.6	32.9	8.7	5.4	0.9	4.5	10.2	0.8	9.4	4.3	3.2	1.1	6.6
Double Pane	34.2	24.5	22.2	2.3	2.6	0.6	2.0	5.8	0.7	5.1	1.2	1.2	Q	8.9
Untreated	32.5	22.9	20.7	2.3	2.5	0.6	2.0	5.8	0.7	5.1	1.2	1.2	Q	8.9
Low-E Coating Triple Pane	1.7 0.9	1.6 0.7	1.6 0.7	Q Q	Q Q	33.9								
Triple Falle	0.9	0.7	0.7	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	30.0
Coverings on Windows														
Storm Windows	36.5	27.6	23.9	3.7	3.0	0.7	2.3	3.4	Q	3.4	2.4	2.1	0.3	9.4
Plastic Coverings	3.7	2.3	1.8	0.6	0.3	Q	0.3	0.5	Q	0.4	0.6	0.4	0.2	21.7
Neither	56.4	36.8	30.1	6.7	4.7	0.7	4.0	12.2	1.4	10.8	2.6	2.0	0.6	7.2
France in Mast Windows														
Frames in Most Windows Metal	53.3	31.1	26.1	5.0	3.8	0.6	3.2	13.2	1.2	12.0	5.2	4.0	1.1	7.7
Nonmetal	43.3	35.7	29.6	6.1	4.2	0.9	3.3	2.9	0.3	2.6	0.4	0.4	Q	9.1
Number of Original														
Windows Replaced	40.7	7.0		4.0	4.4	0.4	0.7	2.2	0.0	2.0	0.4	0.4	0	1440
All	10.7 15.5	7.3 13.0	6.2 11.3	1.0 1.7	1.1 1.0	0.4 0.3	0.7 0.7	2.2 0.6	0.2 0.2	2.0 0.5	0.1 0.9	0.1 0.7	Q 0.2	14.0
Some None	70.3	46.6	38.2	8.3	5.9	0.8	5.1	13.4	1.2	12.2	4.5	3.6	1.0	6.4
Type of Replacement Windows									_					
Single Pane	10.3	7.7	6.0	1.7	1.0	0.2	0.7	0.9	Q	0.8	0.7	0.5	0.2	13.5
Double Pane	15.2	11.9	10.9	1.0	1.1	0.4	0.7	1.9	0.2	1.6	0.3	0.3	Q	13.3
Untreated	13.7	10.5	9.5	1.0	1.0 Q	0.4 Q	0.7 Q	1.9 Q	0.2 Q	1.6 Q	0.3 Q	0.3 Q	Q Q	13.4 39.6
Low-E Coating Triple Pane	1.5 0.7	1.4 0.7	1.4 0.7	Q Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	39.6
None Replaced	70.4	46.6	38.2	8.3	5.9	0.8	5.1	13.4	1.2	12.2	4.5	3.6	1.0	6.4
·														
Age of Replacement Windows									_				_	
Less than 2 Years	7.2	5.5	4.5	0.9	0.6	0.1	0.5	0.6	Q	0.6	0.5	0.3	Q	17.0
2-4 Years	7.1 6.5	5.1 5.1	4.5 4.6	0.6	0.7	0.3	0.4	1.0	Q Q	0.8	0.4	0.3	Q Q	17.2 17.1
5-9 Years 10-19 Years	6.5 4.2	5.1 3.5	4.6 3.1	0.5 0.3	0.4 0.4	0.1 Q	0.2 0.2	0.8 0.3	Q	0.7 0.3	0.1 Q	Q Q	Q	22.0
20 Years or More	1.2	1.1	0.8	0.3	Q.4	Q	Q.2	Q.3	Q	Q.3	Q	Q	Q	41.9
None Replaced	70.4	46.6	38.2	8.3	5.9	0.8	5.1	13.4	1.2	12.2	4.5	3.6	1.0	6.4

Table 3.29b. Conservation by Type and Ownership of Housing Unit, Percent of U.S. Households, 1993 (Continued)

					Т	ype and	Ownersh	nip of Ho	using Un	nit				
							Multif	family						
		Sir	ngle-Fam	ily	Two	to Four	Units	Five	or More	Units	Mo	obile Ho	me	
Conservation-Related Items	Total	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	
RSE Column Factor:	0.4	0.4	0.4	0.8	1.1	2.0	1.3	0.9	2.6	0.9	1.1	1.3	1.9	RSE Row Factor
Doors and Windows		ļ	ı		l	l	ı	ı	ı	ı	ı		•	
Glass in Sliding Doors to the Outside														
Single Pane	12.6	12.4	12.7	10.9	6.1	Q	6.6	18.7	40.3	16.4	7.0	7.4	Q	14.6
Double Pane	18.9	21.2	23.3	10.7	10.6	14.2	9.8	17.9	32.8	16.3	6.3	7.6	Q	14.4
Untreated	18.1	20.2	22.1	10.7	10.2	12.1	9.8	17.6	31.3	16.1	6.3	7.6	Q	14.8
Low-E Coating	0.8	1.0	1.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	34.4
Triple Pane No Doors	0.4 68.1	0.4 65.9	0.5 63.5	Q 78.4	Q 82.8	Q 79.0	Q 83.6	Q 63.2	Q 25.3	Q 67.3	Q 86.7	Q 85.0	Q 92.9	55.6
140 20013	00.1	00.5	00.0	70.4	02.0	75.0	00.0	00.2	20.0	07.0	00.7	00.0	32.3	0.7
Glass in Most Windows														
Single Pane	63.6	62.2	58.9	78.7	67.4	57.8	69.6	63.1	54.3	64.0	76.8	71.6	96.1	3.2
Double Pane	35.4	36.7	39.8	20.9	32.4	41.7	30.3	35.9	44.2	35.0	22.2	27.1	Q	7.3
Untreated	33.6	34.3	37.0	20.8	31.5	37.9	30.0	35.7	42.7	35.0	22.0	26.8	Q	7.6
Low-E Coating Triple Pane	1.7 0.9	2.4 1.1	2.8 1.2	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	28.7
				_	-	-	-	-	-	_	-	-	-	
Coverings on Windows									_					
Storm Windows	37.8	41.4	42.8	33.9	37.3	48.6	34.7	21.2	Q	22.9	43.6	47.4	29.7	7.6
Plastic Coverings	3.8	3.5	3.1	5.3	3.8	Q 40.7	4.0	2.9	Q	3.1	10.0	8.1	17.1	20.7
Neither	58.3	55.1	54.0	60.7	58.9	48.7	61.3	75.3	91.9	73.6	46.4	44.6	53.2	4.3
Frames in Most Windows														
Metal	55.1	46.6	46.9	45.0	47.3	37.2	49.6	81.2	77.8	81.6	92.7	91.8	96.3	3.4
Nonmetal	44.8	53.4	53.1	55.0	52.7	62.8	50.4	18.2	20.7	17.9	7.3	8.2	Q	7.7
Number of Original Windows Replaced														
All	11.0	10.9	11.2	9.4	13.2	23.7	10.8	13.3	11.9	13.5	2.6	3.1	Q	13.4
Some	16.1	19.4	20.3	15.0	13.1	22.3	11.0	3.9	10.3	3.2	16.0	15.3	18.4	11.9
None	72.8	69.7	68.5	75.5	73.7	54.1	78.2	82.2	76.3	82.8	81.5	81.6	81.0	2.7
Type of Replacement Windows														
Single Pane	10.6	11.5	10.7	15.4	12.2	16.7	11.1	5.7	Q	5.5	12.8	11.8	16.8	12.3
Double Pane	15.8	17.9	19.6	9.0	14.0	28.7	10.7	11.6	15.3	11.2	5.7	6.6	Q	12.8
Untreated	14.2	15.7	17.1	8.7	12.9	24.3	10.3	11.5	15.3	11.1	5.5	6.3	Q	12.9
Low-E Coating	1.6	2.2	2.5	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	33.4
Triple Pane  None Replaced	0.7 72.9	1.0 69.7	1.2 68.5	Q 75.5	Q 73.7	Q 54.1	Q 78.2	Q 82.8	Q 77.8	Q 83.3	Q 81.5	Q 81.6	Q 81.0	28.9
None Replaced	12.3	03.1	00.0	75.5	13.1	J <del>-1</del> .1	10.2	02.0	11.0	00.0	01.0	01.0	51.0	2.7
Age of Replacement Windows														
Less than 2 Years	7.5	8.2	8.2	8.5	7.6	8.9	7.3	3.9	Q	3.9	8.4	7.9	Q	16.2
2-4 Years	7.3	7.6	8.0	5.8	8.3	17.4	6.3	5.9	Q	5.3	7.0	7.5	Q	16.0
5-9 Years 10-19 Years	6.7	7.7 5.2	8.2	5.0	4.8	10.1	3.6	5.1	Q	4.9	2.5	Q Q	Q Q	16.6
20 Years or More	4.3 1.3	5.2 1.6	5.6 1.5	2.9 2.2	4.6 Q	Q Q	3.8 Q	1.9 Q	Q Q	2.0 Q	Q Q	Q	Q	21.0 36.4
None Replaced	72.9	69.7	68.5	75.5	73.7	54.1	78.2	82.8	77.8	83.3	81.5	81.6	81.0	2.7

Table 3.29a. Conservation by Type and Ownership of Housing Unit, Million U.S. Households, 1993 (Continued)

					Т	ype and	Ownersh	nip of Ho	using Ur	nit				
							Multi	family						
		Sir	ngle-Fam	ily	Two	to Four	Units	Five	or More	Units	M	obile Hor	me	
Conservation-Related Items	Total	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	
RSE Column Factor:	0.3	0.3	0.4	0.8	1.2	2.0	1.4	0.9	2.9	0.9	1.3	1.5	2.1	RSE Row Factors
Conservation Measures (Single-Family Units and														
Mobile Homes Only)	72.4	66.8	55.8	11.0							5.6	4.4	1.2	5.3
Types of Insulation in/around Home														
Roof/Ceiling Yes	58.6	54.4	48.5	5.9							4.2	3.5	0.7	6.6
No	6.4	6.0	4.2	1.8							0.4	0.3	Q	16.7
Don't Know	7.4	6.5	3.1	3.3							0.9	0.5	0.4	13.8
Outside Walls														
Yes	50.7	46.1	41.7	4.3							4.6	3.9	0.7	7.3
No Don't Know	11.4 10.3	11.2 9.6	8.5 5.6	2.7 4.0							0.3 0.7	0.2 0.4	Q 0.3	15.5 14.4
Floor Inculation														
Floor Insulation No Basement/Crawlspace	17.8	17.8	13.8	4.0										14.1
Basement/Crawlspace	49.0	49.0	41.9	7.1										5.8
Heated	20.8	20.8	18.8	2.0										12.7
None or Part Heated	28.2	28.2	23.1	5.1										8.8
Floor Not Insulated	15.7	15.7	12.9	2.7										13.0
Floor Insulated	12.5	12.5	10.1	2.4										14.4
All Parts Insulated	5.9	5.9	5.3	0.6										19.2
Some Parts Insulated	1.6	1.6	1.5	0.2										41.1
Don't Know	5.0	5.0	3.4	1.6										21.2
Water Heater														
Yes	17.4	15.7	13.7	2.0							1.7	1.5	0.2	10.7
No	51.5	47.9	40.4	7.5							3.5	2.7	8.0	6.9
Don't Know	3.5	3.2	1.6	1.6							0.3	0.2	0.2	19.4
Hot Water Pipes														
Yes	21.9	18.8	17.0	1.9							3.1	2.7	0.4	9.5
No Don't Know	42.6 7.8	40.7 7.3	34.3 4.5	6.4 2.7							1.9 0.5	1.4 0.3	0.5 0.3	7.7 13.8
Heating/Cooling Ducts Yes	21.4	18.9	17.1	1.8							2.5	2.1	0.3	12.3
No	42.6	40.4	33.8	6.6							2.2	1.6	0.5	7.6
Don't Know	8.4	7.5	4.8	2.7							0.9	0.6	0.3	14.6
Weather Stripping														
Yes	45.7	42.5	37.6	4.9							3.2	2.6	0.6	7.2
No Don't Know	23.3 3.4	21.3 3.0	16.5 1.7	4.8 1.4							2.0 0.4	1.5 0.2	0.4 0.2	10.0 20.9
	J. <del>4</del>	5.0	1.7	1.7	-	-		-	.=		0.4	0.2	0.2	20.3
Caulking	E4 0	47.0	40 E	ΕΛ							2.2	2.0	0.5	6.0
Yes No	51.2 17.1	47.9 15.4	42.5 11.2	5.4 4.2							3.3 1.7	2.8 1.3	0.5 0.5	6.9
Don't Know	4.1	3.6	2.1	1.4							0.5	0.3	0.3	19.3
		0.0									0.0	0.0	·	1

<sup>-- =</sup> Data not applicable. NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

<sup>•</sup> See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

Table 3.29b. Conservation by Type and Ownership of Housing Unit, Percent of U.S. Households, 1993 (Continued)

					т	ype and	Ownersh	nip of Ho	using Un	nit				
							Multif	family						
		Sir	ngle-Fam	ily	Two	to Four	Units	Five	or More	Units	Me	obile Ho	me	
Conservation-Related Items	Total	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	
RSE Column Factor:	0.4	0.4	0.4	0.8	1.1	2.0	1.3	0.9	2.6	0.9	1.1	1.3	1.9	RSE Row Factors
		l			l			I		l	1		I	
Conservation Measures (Single-Family Units and														
Mobile Homes Only)	100.0	100.0	100.0	100.0							100.0	100.0	100.0	0.0
Types of Insulation in/around Home Roof/Ceiling														
Yes	81.0	81.4	86.9	53.6							75.6	80.5	57.5	4.2
No	8.8	8.9	7.5	16.1							7.4	7.4	Q	15.4
Don't Know	10.2	9.7	5.6	30.2							17.0	12.1	35.1	12.6
Outside Walls	70.0	00.0	74.0	00.0							00.5	07.0	00.5	
Yes No	70.0 15.8	69.0 16.7	74.8 15.2	39.3 24.5							82.5 4.9	87.6 4.3	63.5 Q	3.8 14.3
Don't Know	14.2	14.3	10.0	36.2							12.6	8.1	29.4	13.4
Floor Insulation														
No Basement/Crawlspace	24.6	26.6	24.8	35.8										10.3
Basement/Crawlspace	67.7	73.4	75.2	64.2										4.0
Heated	28.8	31.2	33.8	18.1										10.8
None or Part Heated	38.9	42.2	41.4	46.1										6.8
Floor Not Insulated	21.6	23.4	23.2	24.6										10.8
Floor Insulated	17.3	18.7	18.2	21.5										12.0
All Parts Insulated	8.2	8.8	9.5	5.6										16.4
Some Parts Insulated	2.2	2.4	2.6	1.4										35.9
Don't Know	6.9	7.5	6.1	14.6										18.0
Water Heater Yes	24.0	22.5	24.6	177							20.0	24.2	10.2	
No	24.0 71.1	23.5 71.7	24.6 72.4	17.7 68.2							30.9 63.3	34.3 61.9	18.3 68.6	9.0
Don't Know	4.9	4.8	2.9	14.1							5.7	3.8	13.1	18.8
Hot Water Pipes														
Yes	30.3	28.2	30.4	16.8							55.6	61.8	32.7	7.1
No	58.9	60.9	61.5	58.3							34.6	32.3	43.3	5.3
Don't Know	10.8	10.9	8.1	24.9							9.7	5.9	24.0	12.3
Heating/Cooling Ducts	00 -		0									4	0	
Yes	29.5	28.3	30.7	16.4							44.1	48.9	26.5	9.7
No Don't Know	58.8 11.7	60.5 11.2	60.7 8.6	59.4 24.2							38.9 16.9	36.9 14.3	46.8 26.7	6.1 12.4
Weather Stripping														
Yes	63.2	63.6	67.4	44.2							57.8	60.1	49.4	4.6
No	32.2	31.9	29.6	43.5							35.4	34.8	37.8	7.7
Don't Know	4.7	4.5	3.0	12.3							6.7	5.1	12.8	19.7
Caulking														
Yes	70.7	71.7	76.2	48.9							59.5	64.4	41.3	4.4
No	23.6	23.0	20.0	38.0							30.8	28.7	38.8	9.2
Don't Know	5.7	5.3	3.8	13.1							9.7	6.9	19.9	17.5

<sup>-- =</sup> Data not applicable. NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

Table 3.30a. Conservation by Family Income, Million U.S. Households, 1993

				1993	Family In	come				Poverty ine	Eli- gible	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	for Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.4	2.2	1.3	1.2	1.0	1.0	1.0	0.9	1.1	1.0	0.8	Row Factors
Total	96.6	4.1	10.6	11.1	18.4	14.1	17.5	21.0	14.4	19.4	30.7	3.4
Adequacy of Insulation												
(all households)												
Well Insulated	36.0	1.2	3.8	3.9	6.1	5.3	7.0	8.8	4.7	6.4	10.2	5.5
Adequately Insulated  Poorly Insulated	38.4 22.2	1.4 1.5	3.7 3.1	3.8 3.4	7.5 4.8	5.8 3.0	7.6 2.9	8.6 3.6	4.6 5.1	6.6 6.3	11.0 9.5	5.5 6.7
•	22.2	1.0	0.1	0.4	4.0	0.0	2.0	0.0	0.1	0.0	0.0	0.7
Demand-Side Management Programs												
Were Any Offered by a Utility												
Yes	34.8	0.8	2.1	3.1	5.7	5.6	7.2	10.4	3.1	4.4	7.7	6.4
No Don't Know	40.0 21.8	2.1 1.1	5.7 2.8	5.2 2.9	8.3 4.4	5.5 2.9	6.4 3.8	6.8 3.8	7.6 3.7	10.1 4.9	15.1 7.9	5.3 7.7
Program Participation in Past 12 Months No Program Offered	40.0	2.1	5.7	5.2	8.3	5.5	6.4	6.8	7.6	10.1	15.1	5.3
Don't Know	2.7	Q Q	0.6	0.2	0.5	0.3	0.4	0.6	0.4	0.7	1.1	19.8
No	46.4	1.8	3.7	5.0	8.5	7.2	9.1	11.1	5.6	7.4	12.6	5.2
Yes (more than one may apply)	7.6	0.2	0.6	0.7	1.1	1.0	1.5	2.5	0.7	1.1	1.9	15.2
Energy Audit	1.4	Q	Q	0.2	0.1	0.2	0.3	0.5	0.1	0.2	0.3	27.6
Load-Control Program Equipment or Service	2.6 1.7	Q Q	Q Q	0.2 0.2	0.4 0.2	0.3 0.3	0.6 0.2	0.9 0.6	Q 0.2	0.3 0.3	0.4 0.5	27.8 28.5
Rebate or Incentive	0.5	Q	Ö	Q.2	Q.2	Q.3	Q.2	0.0	Q.2	Q.3	Q.3	37.8
Encouraged to Switch Fuels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Time-of-Use Rate	1.6	Q	Q	Q	0.3	0.3	0.3	0.4	Q	0.1	0.2	32.1
Does the Home Have Any of the Following:												
Set-Back/Clock Thermostat												
Yes	10.8	0.3	0.6	0.7	1.3	1.3	2.3	4.4	0.8	1.1	1.9	14.2
No	85.8	3.8	10.0	10.5	17.0	12.8	15.1	16.6	13.6	18.2	28.8	3.5
Regular Heating System/ Furnace Maintenance	40.4	4.0	4.0	4.0	2.2	<b>-</b> .	2.2	40.7		<b>-</b> -	40.0	
Yes No	49.4 47.2	1.6 2.5	4.0 6.6	4.8 6.3	9.2 9.2	7.4 6.7	9.8 7.7	12.7 8.3	5.3 9.1	7.5 11.9	12.8 17.9	5.3 4.6
Trees Shading the Afternoon Summer Sun										-	-	
Yes	44.9	1.4	3.7	4.7	8.1	6.9	8.8	11.4	5.0	7.1	11.8	5.1
No	51.7	2.7	6.9	6.4	10.3	7.1	8.7	9.6	9.4	12.3	18.9	4.7

Table 3.30b. Conservation by Family Income, Percent of U.S. Households, 1993

				1993	Family In	come				Poverty ne	Eli- gible	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	to	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	for Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.5	2.0	1.3	1.2	1.0	1.1	0.9	0.8	1.1	0.9	0.8	Row
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Adequacy of Insulation												
(all households)												
Well Insulated	37.3	28.4	35.6	35.5	33.1	37.7	39.9	42.1	32.8	33.2	33.2	4.7
Adequately Insulated		34.3	35.1	34.4	40.7	41.3	43.6	40.9	31.7	34.1	36.0	4.5
Poorly Insulated	23.0	37.3	29.3	30.1	26.2	21.0	16.5	17.0	35.5	32.7	30.8	5.6
Demand-Side Management Programs												
Were Any Offered by a Utility												
Yes	36.0	20.5	19.5	27.6	31.0	39.7	41.4	49.4	21.3	22.6	25.3	5.3
No	41.3	51.6	53.7	46.4	45.0	39.5	36.8	32.4	53.1	52.1	49.1	4.4
Don't Know	22.6	27.9	26.8	26.1	24.1	20.9	21.8	18.2	25.6	25.4	25.6	6.9
Program Participation in Past 12 Months												
No Program Offered	41.3	51.6	53.7	46.4	45.0	39.5	36.8	32.4	53.1	52.1	49.1	4.4
Don't Know	2.8	Q	5.9	1.9	2.7	2.1	2.3	2.8	2.8	3.7	3.5	19.4
No	48.0	43.2	34.6	45.2	46.5	51.4	52.0	52.7	39.0	38.4	41.2	4.0
Yes (more than one may apply)	7.9	4.0	5.7	6.6	5.8	7.0	8.9	12.0	5.0	5.8	6.2	14.4
Energy Audit	1.5	Q	Q	1.4	0.8	1.5	1.8	2.5	0.9	0.9	1.0	26.9
Load-Control Program	2.7	Q	Q	1.6	2.1	2.5	3.6	4.1	Q	1.4	1.4	27.1
Equipment or Service	1.7	Q	Q	1.8	1.3	1.9	1.2	2.7	1.2	1.4	1.6	28.0
Rebate or Incentive	0.5	Q	Q	Q	Q	Q	Q	1.4	Q	Q	Q	35.1
Encouraged to Switch Fuels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Time-of-Use Rate	1.6	Q	Q	Q	1.9	1.9	1.8	2.1	Q	0.7	8.0	31.4
Does the Home Have Any of the Following:												
Set-Back/Clock Thermostat												
Yes	11.2	6.8	5.5	5.9	7.3	9.2	13.3	20.9	5.8	5.8	6.1	13.4
No	88.8	93.2	94.5	94.1	92.7	90.8	86.7	79.1	94.2	94.2	93.9	1.2
Regular Heating System/ Furnace Maintenance												
Yes	51.1	38.6	38.1	43.3	50.0	52.5	56.1	60.3	37.1	38.6	41.7	4.0
No	48.9	61.4	61.9	56.7	50.0	47.5	43.9	39.7	62.9	61.4	58.3	3.4
Trees Shading the Afternoon Summer Sun												
Yes	46.5	34.5	34.5	42.2	44.2	49.2	50.1	54.2	35.0	36.7	38.4	4.2
No	53.5	65.5	65.5	57.8	55.8	50.8	49.9	45.8	65.0	63.3	61.6	3.1

Table 3.30a. Conservation by Family Income, Million U.S. Households, 1993 (Continued)

				1993	Family In	come				Poverty ne	Eli- gible	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	for Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.4	2.2	1.3	1.2	1.0	1.0	1.0	0.9	1.1	1.0	0.8	Row Factors
Doors and Windows												
Glass in Sliding												
Doors to the Outside	40.0	0.0	0.0	4.0	0.0	0.0	0.4	0.0	4.0	4.0	0.0	40.7
Single Pane	12.2	0.3	0.9	1.2	2.2	2.0	2.4	3.3	1.3	1.8	2.9	10.7
Double Pane Untreated	18.3 17.5	0.4 0.4	0.8 0.8	1.0 1.0	2.7 2.6	2.6 2.6	4.2 4.0	6.6 6.1	1.1 1.1	1.6 1.6	2.9 2.9	11.2
	0.8	Q.4	0.8 Q	Q.	2.0 Q	Q.0	0.2	0.1	Q 1.1	Q.	2.9 Q	25.0
Low-E Coating Triple Pane	0.8	Q	Q	Q	Q	Q	0.2	0.5	Q	Q	Q	43.5
No Doors	65.8	3.3	8.9	9.0	13.5	9.4	10.7	11.0	12.0	15.9	24.9	4.1
140 00013	00.0	5.5	0.5	3.0	10.0	3.4	10.7	11.0	12.0	10.5	24.5	7.1
Glass in Most Windows												
Single Pane	61.5	3.0	7.8	8.2	12.4	9.1	9.8	11.1	10.8	14.2	22.2	4.0
Double Pane	34.2	1.0	2.7	2.8	5.7	4.9	7.5	9.6	3.5	5.0	8.2	5.9
Untreated	32.5	1.0	2.7	2.7	5.5	4.6	7.0	8.9	3.5	5.0	8.1	6.1
Low-E Coating	1.7	Q	Q	Q	0.2	0.2	0.5	0.7	Q	Q	0.1	25.8
Triple Pane	0.9	Q	Q	Q	0.2	0.1	0.2	0.2	Q	Q	0.2	32.9
Coverings on Windows												
Storm Windows	36.5	1.3	3.7	4.0	7.4	5.7	6.8	7.6	4.6	6.5	10.9	5.5
Plastic Coverings	3.7	0.4	0.4	0.6	1.0	0.5	0.4	0.4	0.9	1.2	1.6	14.8
Neither	56.4	2.4	6.5	6.5	9.9	7.8	10.3	13.0	8.9	11.6	18.1	4.7
France in Mast Windows												
Frames in Most Windows	53.3	2.4	6.2	6.2	10.2	7.8	9.5	10.0	8.6	11.6	176	4.9
Metal Nonmetal	43.3	1.6	4.4	4.9	10.3 8.0	6.2	8.0	10.8 10.2	5.8	7.8	17.6 13.0	5.4
Notifficial	43.3	1.0	4.4	4.3	0.0	0.2	0.0	10.2	5.0	7.0	13.0	3.4
Number of Original												
Windows Replaced												
All	10.7	0.4	1.3	1.2	2.2	1.6	2.2	1.9	1.7	2.3	3.5	10.4
Some	15.5	0.5	1.3	1.6	2.6	2.2	3.0	4.2	2.1	2.8	4.4	9.4
None	70.3	3.1	8.0	8.3	13.5	10.3	12.3	14.9	10.6	14.3	22.6	3.7
Type of Replacement Windows												
Single Pane	10.3	0.6	1.5	1.5	2.0	1.3	1.5	2.0	2.1	2.8	4.1	9.9
Double Pane	15.2	0.4	1.1	1.3	2.7	2.3	3.6	3.8	1.6	2.1	3.7	9.9
Untreated	13.7	0.4	1.1	1.2	2.5	2.1	3.2	3.2	1.6	2.1	3.6	10.1
Low-E Coating	1.5	Q	Q	Q	0.2	0.2	0.4	0.6	Q	Q	0.1	29.4
Triple Pane	0.7 70.4	Q 3 1	Q	Q	Q 13.6	Q 10.3	Q 12.3	0.2	Q 10.6	Q 14.3	Q 22.7	28.4
None Replaced	70.4	3.1	8.0	8.3	13.6	10.3	12.3	14.9	10.6	14.3	22.7	3.7
Age of Replacement Windows												
Less than 2 Years	7.2	0.4	0.8	0.7	1.1	1.1	1.4	1.6	1.3	1.7	2.3	12.6
2-4 Years	7.1	0.2	0.7	0.5	1.5	1.1	1.5	1.6	0.9	1.3	2.1	12.7
5-9 Years	6.5	0.2	0.5	0.8	1.1	0.7	1.4	1.7	0.8	1.2	1.9	13.0
10-19 Years	4.2	0.2	0.4	0.6	0.8	0.6	0.7	0.9	0.4	0.7	1.2	17.7
20 Years or More	1.2	Q.1	Q.4	0.0	0.3	0.0	Q.7	0.3	0.4	0.7	0.4	29.9
	70.4	3.1	8.0	8.3	13.6	10.3	12.3	14.9	10.6	14.3	22.7	3.7
None Replaced												

Table 3.30b. Conservation by Family Income, Percent of U.S. Households, 1993 (Continued)

				1993	Family In	come				Poverty ne	Eli- gible	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	for Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.5	2.0	1.3	1.2	1.0	1.1	0.9	0.8	1.1	0.9	0.8	Row
Doors and Windows												
Glass in Sliding												
Doors to the Outside												
Single Pane	12.6	8.0	8.2	10.8	11.8	14.0	13.5	15.9	9.0	9.5	9.4	10.4
Double Pane	18.9	9.6	7.8	8.6	14.5	18.7	24.2	31.3	7.7	8.3	9.4	10.6
Untreated	18.1	9.6	7.8	8.6	14.1	18.5	23.1	29.0	7.7	8.3	9.3	10.7
Low-E Coating		Q	Q	Q	Q	Q	1.1	2.2	Q	Q	Q	24.3
Triple Pane		Q	Q	Q	Q	Q	1.0	0.5	Q	Q	Q	42.5
No Doors	68.1	82.4	84.0	80.6	73.5	66.9	61.3	52.4	83.4	82.2	81.1	2.4
Glass in Most Windows												
Single Pane	63.6	74.8	74.0	73.6	67.6	64.4	56.2	53.1	74.9	73.2	72.3	2.4
Double Pane	35.4	23.9	25.7	25.3	31.0	34.6	42.8	45.9	24.4	26.0	26.9	5.1
Untreated	33.6	23.8	25.4	24.7	29.9	33.1	40.1	42.6	24.2	25.8	26.4	5.3
Low-E Coating	1.7	Q	Q	Q	1.1	1.5	2.7	3.3	Q	Q	0.5	25.0
Triple Pane	0.9	Q	Q	Q	1.2	1.0	0.9	1.0	Q	Q	0.7	32.3
Coverings on Windows												
Coverings on Windows Storm Windows	37.8	31.6	34.8	36.1	40.5	40.9	38.7	36.1	31.7	33.8	35.6	4.9
Plastic Coverings	3.8	8.9	4.2	5.1	5.3	3.5	2.3	2.1	6.4	6.2	5.3	14.6
Neither	58.3	58.9	61.0	58.5	54.0	55.6	59.1	61.9	61.8	59.9	58.9	3.2
Frames in Most Windows												
Metal	55.1	59.5	58.3	56.0	56.1	55.8	54.2	51.5	59.6	59.7	57.3	3.4
Nonmetal	44.8	39.9	41.7	43.7	43.6	44.2	45.8	48.5	40.2	40.2	42.5	4.5
Number of Original												
Windows Replaced												
All	11.0	10.4	12.0	10.4	12.0	11.1	12.5	8.9	11.7	11.6	11.5	9.8
Some	16.1	13.0	12.7	14.8	14.3	15.7	17.0	20.1	14.6	14.4	14.5	8.7
None	72.8	76.0	75.2	74.5	73.5	73.2	70.5	71.0	73.5	73.9	73.8	2.1
Type of Replacement Windows												
Single Pane	10.6	14.1	13.8	13.1	10.8	9.3	8.3	9.7	14.8	14.6	13.4	9.2
Double Pane	15.8	9.3	10.8	11.5	14.9	16.4	20.5	18.2	11.1	11.0	12.1	9.3
Untreated	14.2	9.2	10.6	11.1	13.7	14.7	18.2	15.3	11.0	10.8	11.7	9.6
Low-E Coating	1.6	Q	Q	Q	1.2	1.6	2.3	2.9	Q	Q	0.4	28.6
Triple Pane	0.7	Q	Q	Q	Q	Q	Q	1.0	Q	Q	Q	26.6
None Replaced	72.9	76.6	75.2	74.8	73.7	73.2	70.5	71.0	73.7	74.0	74.0	2.1
Age of Replacement Windows												
Less than 2 Years	7.5	8.9	7.9	6.3	6.2	8.1	8.2	7.5	9.3	8.6	7.6	12.1
2-4 Years	7.3	4.5	6.9	4.7	8.3	7.7	8.4	7.7	6.6	6.5	6.7	12.4
5-9 Years	6.7	4.8	5.1	7.0	5.9	5.3	8.2	8.2	5.7	6.0	6.3	12.7
10-19 Years	4.3	3.3	4.0	5.1	4.5	4.3	4.0	4.4	3.1	3.4	3.9	17.4
20 Years or More	1.3	Q	Q	2.2	1.4	1.3	Q	1.2	1.5	1.4	1.4	29.2
None Replaced	72.9	76.6	75.2	74.8	73.7	73.2	70.5	71.0	73.7	74.0	74.0	2.1

Table 3.30a. Conservation by Family Income, Million U.S. Households, 1993 (Continued)

				1993	Family In	come				Poverty ine	Eli- gible for	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.4	2.2	1.3	1.2	1.0	1.0	1.0	0.9	1.1	1.0	0.8	Row Factors
Conservation Measures												
(Single-Family Units and Mobile Homes Only)	72.4	2.0	6.2	7.1	13.3	11.0	14.0	18.7	8.3	11.8	19.2	4.1
Types of Insulation in/around Home Roof/Ceiling												
Yes	58.6	1.2	4.1	5.1	10.0	9.1	12.4	16.6	5.2	7.8	13.2	5.0
No Don't Know	6.4 7.4	0.4 0.4	1.2 0.9	0.9 1.1	1.5 1.9	0.9 1.0	0.6 0.9	1.0 1.1	1.6 1.5	2.0 2.0	2.9 3.1	11.9 11.4
Outside Walls												
Yes No	50.7 11.4	1.1 0.5	3.4 1.6	4.3 1.6	9.1 2.1	7.9 1.6	10.7 1.6	14.2 2.5	4.4 2.1	6.7 2.7	11.3 4.3	5.6 10.0
Don't Know	10.3	0.3	1.2	1.3	2.1	1.5	1.7	2.0	1.9	2.4	3.6	9.6
Floor Insulation												
No Basement/CrawlspaceBasement/Crawlspace	17.8 49.0	0.5 1.2	1.4 3.9	1.4 4.8	2.8 8.9	2.7 7.2	3.7 9.5	5.1 13.3	2.2 5.0	2.8 7.4	4.3 12.6	10.4
Heated	20.8	0.2	0.9	1.6	3.2	3.2	4.5	7.0	1.1	1.8	3.7	10.0
None or Part Heated	28.2	1.0	3.0	3.2	5.7	4.0	5.0	6.3	3.9	5.5	8.9	6.5
Floor Not Insulated Floor Insulated	15.7 12.5	0.6 0.4	1.8 1.2	2.0 1.2	3.3 2.4	2.1 1.9	2.4 2.5	3.4 2.9	2.4 1.6	3.2 2.3	5.2 3.7	9.0
All Parts Insulated	5.9	0.1	0.4	0.4	1.1	0.9	1.4	1.5	0.5	0.8	1.5	14.8
Some Parts Insulated	1.6	Q	0.1	Q	0.3	0.3	0.4	0.4	0.1	0.2	0.4	27.6
Don't Know	5.0	0.2	0.7	0.6	1.0	0.7	0.7	1.0	0.9	1.3	1.8	14.3
Water Heater Yes	17.4	0.4	1.2	1.5	3.5	2.6	3.5	4.8	1.8	2.6	4.0	8.7
No	51.5	1.4	4.3	5.3	9.1	8.1	10.0	13.3	5.7	8.1	13.6	5.0
Don't Know	3.5	0.2	0.7	0.4	0.7	0.4	0.5	0.6	0.9	1.1	1.6	15.9
Hot Water Pipes Yes	21.9	0.6	1.5	1.8	4.0	3.6	4.6	5.8	2.2	3.3	5.3	7.9
No	42.6	1.0	3.5	4.7	7.7	6.3	8.2	11.2	4.5	6.5	11.2	5.8
Don't Know	7.8	0.4	1.2	0.7	1.6	1.1	1.2	1.7	1.6	2.1	2.7	11.3
Heating/Cooling Ducts	04.4	0.0	4.0	4.0	0.4	0.4	4.0	0.0	4.0	0.0	0.7	40.0
Yes No	21.4 42.6	0.3 1.2	1.3 3.8	1.2 5.0	3.4 8.3	3.4 6.5	4.9 7.6	6.9 10.1	1.6 5.1	2.3 7.5	3.7 12.6	10.6 5.3
Don't Know	8.4	0.5	1.0	0.9	1.7	1.1	1.5	1.7	1.6	2.0	2.8	11.6
Weather Stripping	45.7	4.0	2.2	2.2	2.2	7.0	2.2	40.0	2.2		o <del>-</del>	
Yes No	45.7 23.3	1.0 0.9	2.9 2.7	3.6 3.1	8.2 4.4	7.2 3.3	9.9 3.6	12.9 5.1	3.8 3.7	5.7 5.1	9.7 8.1	5.6 7.2
Don't Know	3.4	0.9	0.6	0.4	0.7	0.4	0.4	0.7	0.8	1.1	1.4	17.6
Caulking	E4.0	4.0	2.0	4.4	0.0	0.0	10.0	445	4.0	0.5	44.4	
Yes No	51.2 17.1	1.0 0.8	3.2 2.4	4.4 2.0	8.8 3.6	8.2 2.3	10.9 2.4	14.5 3.6	4.2 3.2	6.5 4.1	11.1 6.4	5.4 8.2
Don't Know	4.1	0.8	0.6	0.7	0.8	0.5	0.6	0.6	0.9	1.2	1.7	15.7

Below 150 percent of poverty line or 60 percent of median State income.
NF = No applicable RSE row factor.
Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.
Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

Table 3.30b. Conservation by Family Income, Percent of U.S. Households, 1993 (Continued)

				1993	Family In	come				Poverty ine	Eli- gible for	
Conservation-Related Items	Total	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent	Fed- eral Assist- ance <sup>1</sup>	RSE
RSE Column Factor:	0.5	2.0	1.3	1.2	1.0	1.1	0.9	0.8	1.1	0.9	0.8	Row Factors
Conservation Measures												
(Single-Family Units and Mobile Homes Only)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Types of Insulation in/around Home Roof/Ceiling												
Yes	81.0	61.9	66.3	71.0	75.1	82.7	89.0	88.8	62.5	65.8	69.0	2.5
No Don't Know	8.8 10.2	19.2 18.9	18.6 15.1	13.0 16.0	11.0 14.0	8.0 9.3	4.2 6.8	5.2 5.9	19.0 18.5	16.9 17.3	15.0 16.0	11.5 10.7
Outside Walls												
Yes No	70.0 15.8	52.4 25.7	55.3 25.3	60.2 21.8	68.2 16.1	71.9 14.1	76.3 11.6	76.0 13.2	52.9 24.8	56.6 22.7	58.8 22.3	3.4 9.4
Don't Know	14.2	21.9	19.4	18.0	15.7	13.9	12.1	10.8	22.3	20.7	18.9	8.9
Floor Insulation												
No Basement/CrawlspaceBasement/Crawlspace	24.6 67.7	26.4 61.2	22.6 63.6	20.0 67.7	21.4 67.2	24.9 65.3	26.8 68.2	27.2 71.2	26.0 60.3	23.6 62.1	22.4 65.8	9.1 3.5
Heated	28.8	11.4	15.0	23.1	24.4	29.5	32.5	37.3	13.0	15.4	19.3	9.3
None or Part Heated	38.9	49.8	48.6	44.6	42.8	35.8	35.7	33.9	47.3	46.7	46.6	5.4
Floor Not Insulated	21.6	30.5	28.5 20.1	28.4	24.9	18.8	17.5	18.3	28.4	27.4	27.3	8.2 9.9
Floor Insulated All Parts Insulated	17.3 8.2	19.3 7.3	20.1 7.1	16.2 5.9	17.9 8.4	17.0 7.9	18.2 10.0	15.6 8.1	18.9 6.1	19.3 6.8	19.3 7.7	14.5
Some Parts Insulated	2.2	Q.	2.1	Q.	2.1	2.7	3.0	2.0	1.6	1.6	2.1	27.3
Don't Know	6.9	11.4	10.9	8.8	7.5	6.4	5.2	5.5	11.2	10.9	9.5	14.0
Water Heater Yes	24.0	19.9	19.9	20.7	26.0	23.2	24.8	25.7	21.3	22.3	21.0	7.7
No	71.1	69.8	69.5	73.8	68.6	73.2	71.5	70.9	68.3	68.3	70.9	2.8
Don't Know	4.9	10.4	10.6	5.4	5.4	3.6	3.7	3.4	10.4	9.4	8.1	15.5
Hot Water Pipes Yes	30.3	29.6	24.8	25.4	30.0	32.6	32.7	31.1	26.1	27.5	27.4	6.8
No	58.9	51.9	56.5	65.4	58.2	57.0	58.8	59.7	54.8	55.2	58.4	4.0
Don't Know	10.8	18.5	18.7	9.3	11.8	10.3	8.5	9.2	19.1	17.3	14.2	10.7
Heating/Cooling Ducts	00.5	45.4	04.4	47.0	05.5	20.0	05.0	00.0	40.0	40.0	40.5	
Yes No	29.5 58.8	15.1 59.0	21.4 62.1	17.3 70.7	25.5 62.0	30.6 59.1	35.0 54.3	36.6 54.1	18.8 61.9	19.2 63.7	19.5 65.7	9.0
Don't Know	11.7	25.9	16.6	12.0	12.5	10.3	10.6	9.3	19.3	17.1	14.8	11.0
Weather Stripping	60.0	40.4	40.0	E0.0	64.7	65.7	70.0	60.0	45.4	40.0	E0.4	2.0
Yes No	63.2 32.2	49.4 43.3	46.6 44.0	50.0 43.8	61.7 33.3	65.7 30.3	70.9 26.1	68.9 27.4	45.4 44.8	48.3 42.7	50.4 42.4	3.8 5.6
Don't Know	4.7	7.3	9.5	6.2	5.0	4.1	3.0	3.6	9.8	8.9	7.1	17.5
Caulking	70.7	E0.0	E4 4	60.0	60.4	747	70.0	77.0	F0 F	E40	E 7 7	
Yes No	70.7 23.6	50.8 40.9	51.4 38.4	62.2 28.1	66.4 27.3	74.7 20.5	78.3 17.2	77.6 19.1	50.5 39.2	54.9 35.0	57.7 33.3	3.3 7.0
Don't Know	5.7	8.3	10.2	9.7	6.3	4.8	4.5	3.3	10.3	10.0	9.0	15.3

Below 150 percent of poverty line or 60 percent of median State income.
NF = No applicable RSE row factor.
Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.
Notes: \*To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. \*Because of rounding, data may not sum to totals. \*See "Glossary" for definition of terms used in this report.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)