

5.10.3 Minimum Efficiency Standards for Appliances and Equipment

	Adjusted Volume (2) (Cu. Ft.)	Rated Maximum Electricity Use (kWh)				
		1990	1993	2001		
Refrigerator-Freezers (Auto Defrost) (1)						
Top freezer w/o through-the-door ice service and all-refrigerators—auto defrost	20.6	955	685	478		
Side freezer w/o through-the-door ice service	25.1	1183	797	631		
Bottom freezer w/o through-the-door ice service	25.1	1183	781	574		
Top freezer w/ through-the-door ice service	18.2	1015	711	542		
Side freezer w/ through-the-door ice service	28.5	1428	992	694		
Freezers (1)						
Upright Freezers w/ Manual Defrost						
Upright Freezers w/ Automatic Defrost	30.0	1103	838	699		
Chest Freezers and all other Freezers except Compact Freezers	24.8	590	433	389		
Room Air-Conditioners (3)						
	Minimum EER	Typical Maximum Electricity Use (kWh) (4)				
Less than 6,000 Btu/h	9.7	464				
6,000 to 7,999 Btu/h	9.7	541				
8,000 to 13,999 Btu/h	9.8	842				
14,000 to 19,999 Btu/h	9.7	1314				
20,000 Btu/h or more	8.5	1765				
Clothes Dryers (3)						
	Minimum EF (lbs./kWh)	Typical Maximum Energy Use				
Electric, Standard	3.01	835 kWh				
Gas	2.67	32 therms				
Clothes Washers (3)						
	Minimum EF (cu. Ft./kWh per cycle)	Minimum Modified EF (cu. Ft./kWh per cycle)		Typical Maximum Electricity Use (kWh) (5)		
	1994	2004	2007			
Top Loading, Standard	1.18	1.04	1.26	1265		
Horizontal-Axis	N.A.	1.04	1.26	731		
Dishwashers (3)						
	Minimum EF (cycles/kWh)	Typical Maximum Electricity Use (kWh)				
Standard Dishwasher	0.46	498				
Water Heaters (6)						
	Minimum EF (7)			Typical Maximum Energy Use		
	1990	1991	2004	1990	1991	2004
Gas-Fired	0.54	0.54	0.59	208 therms	208 therms	191 therms
Oil-Fired	0.51	0.51	0.51	155 gallons	155 gallons	155 gallons
Electric Resistance	0.90	0.88	0.92	3456 kWh	3534 kWh	3380 kWh

Note(s): 1) DOE regulations mandate maximum electrical consumption for appliance based on its size. 2) AV = Adjusted Volume = Refrigerator Compartment + 1.63 * Freezer Compartment. 3) DOE regulations mandate minimum efficiency for appliance. 4) Electric use based on 750 hours of operation. 5) Assumed electric water heating. 6) DOE regulations mandate minimum efficiency appliance based on its size. 7) Based on 40 gallon tank.

Source(s): DOC/GPO, 2001 CFR, Title 10, Chapter 2, Part 430, Section 430.32, Jan. 1, 2001, p. 258-264 for minimum efficiencies; AHAM, 2000 Major Home Appliance Industry Factbook, Nov. 2000, Table 21, p. 28, for refrigerator and freezer sizes; DOE/EE, Final Rule Technical Support Document: Energy Efficient Standards for Consumer Products: Clothes Washers, Dec. 2000, p. 10-8; LBNL, Energy Data Sourcebook for U.S. Residential Sector, May 1997, p. 102-103 for clothes dryers, p. 94 for dishwashers; DOE/EE, Technical Support Document: Energy Efficiency Standards for Consumer Products: Water Heaters, Apr. 2000, p. 9-14.