



2022 Water Heater Efficiency Guide

These tables list the minimum uniform energy factors required by federal regulations for some of the most common types and sizes of water heaters.

Consumer Gas-Fired Instantaneous (> 50,000 Btu/h, ≤ 200,000 Btu/h) - Minimum UEF*				
Volume (gallons)	Max Rating 0 ≤ GPM < 1.7	Max Rating 1.7 ≤ GPM < 2.8	Max Rating 2.8 ≤ GPM < 4.0	Max Rating GPM ≥ 4.0
≤ 2	0.80	0.81	0.81	0.81

Consumer Gas-Fired Storage (≤ 75,000 Btu/h) - Minimum UEF*				
Volume (gallons)	0 ≤ FHR < 18	18 ≤ FHR < 51	51 ≤ FHR < 75	FHR ≥ 75
30	0.29	0.54	0.60	0.65
40	0.27	0.52	0.58	0.64
50	0.25	0.50	0.56	0.63
55	0.24	0.49	0.55	0.62
60	0.61	0.74	0.77	0.79
75	0.60	0.73	0.76	0.78
80	0.60	0.73	0.76	0.78

Residential-Duty Commercial Gas-Fired Storage (> 75,000 Btu/h, ≤ 105,000 Btu/h) - Minimum UEF†				
Volume (gallons)	0 ≤ FHR < 18	18 ≤ FHR < 51	51 ≤ FHR < 75	FHR ≥ 75
50	0.22	0.48	0.55	0.61
60	0.21	0.46	0.53	0.61
75	0.2	0.45	0.52	0.59
80	0.2	0.44	0.51	0.59

Consumer Electric Instantaneous (≤ 12 kW) - Minimum UEF*				
Volume (gallons)	Max Rating 0 ≤ GPM < 1.7	Max Rating 1.7 ≤ GPM < 2.8	Max Rating 2.8 ≤ GPM < 4.0	Max Rating GPM ≥ 4.0
≤ 2	0.91	0.91	0.91	0.92

Residential-Duty Commercial Electric Instantaneous (> 12 kW, ≤ 58.6 kW) - Minimum UEF†				
Volume (gallons)	Max Rating 0 ≤ GPM < 1.7	Max Rating 1.7 ≤ GPM < 2.8	Max Rating 2.8 ≤ GPM < 4.0	Max Rating GPM ≥ 4.0
≤ 2	0.80	0.80	0.80	0.80

Btu/h
British thermal units per hour

kW
kilowatt

GPM
gallons per minute

FHR
first hour rating

UEF
Uniform Energy

Consumer Electric Storage - Minimum UEF*

Volume (gallons)	$0 \leq \text{FHR} < 18$	$18 \leq \text{FHR} < 51$	$51 \leq \text{FHR} < 75$	$\text{FHR} \geq 75$
30	0.86	0.92	0.92	0.93
40	0.85	0.91	0.92	0.93
50	0.84	0.91	0.92	0.93
55	0.84	0.91	0.92	0.93
60	1.86	1.98	2.05	2.18
75	1.84	1.96	2.03	2.16
80	1.84	1.96	2.03	2.15

Tabletop - Minimum UEF*

Volume (gallons)	Max Rating $0 \leq \text{GPM} < 1.7$	Max Rating $1.7 \leq \text{GPM} < 2.8$	Max Rating $2.8 \leq \text{GPM} < 4.0$	Max Rating $\text{GPM} \geq 4.0$
30	0.46	0.83	0.89	0.94
40	0.40	0.79	0.87	0.92

*Values from Title 20, §1605.1 Table F-2

†Values from Title 20, §1605.1 Table F-5

Can't find your water heater type or volume?

Contact the Energy Standards Hotline at:

(800) 772-3300 (inside California)

(916) 654-5106 (outside California)

title24@energy.ca.gov