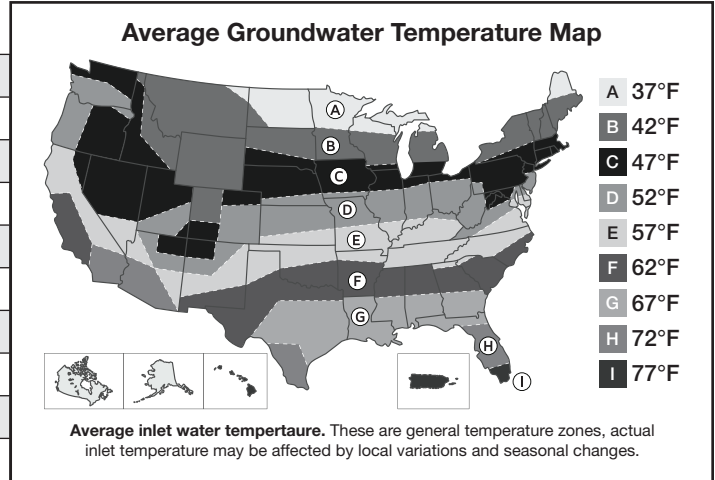# Eemax Sizing Guide

Ensure Proper Size of Tankless Electric Water Heaters

A tankless water heater creates hot water on demand. You need a proportional amount of energy (kW) to heat the flow (GPM) required for your applications. The chart below will help you determine the correct tankless electric water heater, based on flow rate (GPM) and temperature rise.

Flow Chart Power Required – kW

Total Gallons Per Minute (GPM) Demand	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F
30	88 kW	132 kW								
25	74 kW	110 kW								
24	71 kW	106 kW								
23	68 kW	102 kW	135 kW							
22	65 kW	97 kW	129 kW							
21	62 kW	93 kW	123 kW							
20	59 kW	88 kW	118 kW							
19	56 kW	84 kW	112 kW	140 kW						
18	53 kW	80 kW	106 kW	132 kW						
17	50 kW	75 kW	100 kW	125 kW						
16	47 kW	71 kW	94 kW	118 kW	141 kW					
15	44 kW	66 kW	88 kW	110 kW	132 kW					
14	41 kW	62 kW	82 kW	103 kW	123 kW	144 kW				
13	39 kW	58 kW	77 kW	96 kW	115 kW	134 kW				
12	36 kW	53 kW	71 kW	88 kW	106 kW	123 kW	141 kW			
11	33 kW	49 kW	65 kW	81 kW	97 kW	113 kW	129 kW			
10	30 kW	44 kW	59 kW	74 kW	88 kW	103 kW	118 kW	132 kW		
9	27 kW	40 kW	53 kW	66 kW	80 kW	93 kW	106 kW	119 kW	132 kW	
8	24 kW	36 kW	47 kW	59 kW	71 kW	82 kW	94 kW	106 kW	118 kW	129 kW
7	21 kW	31 kW	41 kW	52 kW	62 kW	72 kW	82 kW	93 kW	103 kW	113 kW
6	18 kW	27 kW	36 kW	44 kW	53 kW	62 kW	71 kW	80 kW	88 kW	97 kW
5	15 kW	22 kW	30 kW	37 kW	44 kW	52 kW	59 kW	66 kW	74 kW	81 kW
4	12 kW	18 kW	24 kW	30 kW	36 kW	41 kW	47 kW	53 kW	59 kW	65 kW
3	9 kW	14 kW	18 kW	22 kW	27 kW	31 kW	36 kW	40 kW	44 kW	49 kW
2	6 kW	9 kW	12 kW	15 kW	18 kW	21 kW	24 kW	27 kW	30 kW	33 kW
1	3 kW	5 kW	6 kW	8 kW	9 kW	11 kW	12 kW	14 kW	15 kW	17 kW
0.5	2 kW	3 kW	3 kW	4 kW	5 kW	6 kW	6 kW	7 kW	8 kW	9 kW

Rise In Temperature °F

Average Groundwater Temperature Map

A	37°F
B	42°F
C	47°F
D	52°F
E	57°F
F	62°F
G	67°F
H	72°F
I	77°F

Average inlet water tempertaure. These are general temperature zones, actual inlet temperature may be affected by local variations and seasonal changes.

NOTE: For simple calculation, kW reference is based on a 100% heater efficiency.

kW Required = GPM x (temp rise/6.83)
Temperature Rise = kW x (6.83/GPM)
GPM Demand = kW x (6.83/temp rise)