

Sizing Guide COMBOMAX ULTRA

COMBOMAX ULTRA: Electric boiler with instantaneous water heater integrated



Peak-performance heating systems

Residential Sizing Guide: Count your heating surface, number of bathrooms, bedrooms, family size and whirlpools you have
Select the right model (KW) based on heating surface and DHW demand

COMBOMAX ULTRA																									
Surface (ft2) - buildings built after 1990 (see notes)																									
Number of bathroom(s)	Number of bedroom(s)	Family size	Bathtub capacity Capacity in Gallons US	250		500		1000		1500		2000		2500		3000		3500		4000		4500		4900	
				50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX	50-XX	70-XX
1 to 1-1/2	1	2	30	4,5	4,5	4,5	4,5	7,5	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29		
		2	50	9	4,5	9	4,5	9	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29		
		2	70	s-d	7,5	s-d	7,5	s-d	7,5	s-d	9	s-d	12	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
	2	4	30	4,5	4,5	4,5	7,5	7,5	9	9	12	12	15	15	18	18	24	24	24	24	24	27	29		
		4	50	9	4,5	9	4,5	9	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29		
		4	70	s-d	7,5	s-d	7,5	s-d	7,5	s-d	9	s-d	12	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
	3	6	30	7,5	4,5	7,5	4,5	7,5	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29		
		6	50	9	4,5	9	4,5	9	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29		
		6	70	s-d	7,5	s-d	7,5	s-d	7,5	s-d	9	s-d	12	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
2 to 2-1/2	2	4	30	4,5	4,5	4,5	7,5	7,5	9	9	12	12	15	15	18	18	24	24	24	24	27	29			
		4	50	18	4,5	18	4,5	18	7,5	18	9	18	12	18	15	18	18	24	24	24	24	27	29		
		4	70	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
	3	6	30	15	4,5	15	4,5	15	7,5	15	9	15	12	15	15	18	18	24	24	24	24	27	29		
		6	50	18	4,5	18	4,5	18	7,5	18	9	18	12	18	15	18	18	24	24	24	24	27	29		
		6	70	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
	4	8	30	18	12	18	12	18	12	18	12	18	12	18	15	18	18	24	24	24	24	27	29		
		8	50	18	12	18	12	18	12	18	12	18	12	18	15	18	18	24	24	24	24	27	29		
		8	70	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
3 to 3-1/2	3	6	30	20	7,5	20	7,5	20	7,5	20	9	20	12	20	15	20	18	24	24	24	24	27	29		
		6	50	s-d	9	s-d	9	s-d	9	s-d	9	s-d	12	s-d	15	s-d	18	s-d	24	s-d	24	27	29		
		6	70	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	27	29		
	4	8	30	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	24	s-d	24	27	29		
		8	50	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	18	s-d	24	s-d	24	27	29		
		8	70	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	27	29		
	5	10	30	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	27	29		
		10	50	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	s-d	24	27	29		
		10	70	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	s-d	27	27	29		



Example:

House built in 1975

Surface of 1000 ft2 to heat
2 bathrooms

Family of 4 people
Bathtub capacity of 30 galUS

Equivalent surface = 2000 ft2 X 1,25 = 2500 ft2

Selection **COMBOMAX ULTRA 50-18** (gray chart color)

Selection **COMBOMAX ULTRA 70-15** (gray chart color)

Legend : u-s = "under-sized" model, look for the COMBOMAX serie instead of COMBOMAX ULTRA 12 serie

Domestic hot water evaluation based on:

- 15 minutes peak period
- Based on 2.5 gpm shower head and shower duration of 5 minutes
- Filling bathtub of the first bathroom
- When 2 or 3 bathrooms are used, the second and third bathroom is a shower load.
- Dishwasher load not simultaneous with the bathroom(s) load
- Based on domestic cold water temperature at 40F
- Based on water boiler temperature at 180F
- Domestic hot water priority in function, included with the equipment
- Based on use of mixing valve included with the equipment

Building heating load based on:

- Table surface heating values refer to the total surface heated by the COMBOMAX ULTRA 12
- The heating is based on an outside temperature of about -22°F (-30°C).
- These values are for buildings built after 1990
- If year of construction is between 1970 and 1990, **multiply the heating surface by 1.25**
- If year of construction is before 1970, **multiply the heating surface by 1.5**