

WHICH ONE DO I NEED?

When sizing an Espar system for your boat several factors must be considered including:

- **Boat Size** - Advertised length is not the only factor.
- **Type (Sail or Power)** - Power boats tend to have more area to heat.
- **Volume** - The actual cubic foot volume of the area to be heated.
- **Use Of Boat** - Extending the seasons, winter cruising, or live aboard, full time.
- **Geographic Location** - This is normally the home base of the boat. CAUTION: do not size the heating system for Alaska if you are only going there in the summer.

Caution

Don't fall into the trap of thinking that bigger is better. That could be like buying a farm tractor to plow a flower bed. Just as under sizing your system would be like powering a 50' yacht with an outboard motor.

The following sizing guides will assist you in determining the proper size Espar heating system for your boat and application.

Heater Sizing

Hot Air Heaters sizing

MODEL	Airtronic 2		Airtronic 4		Airtronic 5		D8LC		Custom Multiple Heater Installation	
Vessel Size in FT.	20	28	29	34	35	41	42	49	50	55 +
LARGE VOLUME	[Red shaded area]		[Red shaded area]		[Red shaded area]		[Red shaded area]		[Red shaded area]	
SMALL VOLUME										

Hot Water Heaters sizing

MODEL	Hydronic 4*		Hydronic 5		Hydronic 10		Hydronic 12		Hydronic 16 - 24		Hydronic 30 - 35	
Vessel Size in FT.	18	28	29	34	35	41	42	49	50	59	60	75
LARGE VOLUME	[Red shaded area]		[Red shaded area]		[Red shaded area]		[Red shaded area]		[Red shaded area]		[Red shaded area]	
SMALL VOLUME												

*The Hydronic 4 is no longer available. Upgrading to the Hydronic 5 is recommended.

Size the heater by using a formula based on the BTU's required per cubic foot of heated space. Measure the boat interior and use the guide below to determine your multiplier. The table below lists the estimated BTU's per cubic foot for each geographic area.

Caution - when using this method of estimating the heat requirements, it is important to:

- Accurately measure the INTERIOR VOLUME to be heated
- Do not measure the box that the boat came in.
- Do not measure the space taken up by cabinets, bunks or other permanent structures.

Geographic Location	Limited Winter Use	Winter Cruising	Live Aboard All Year
	BTU's per cubic foot	BTU's per cubic foot	BTU's per cubic foot
Southern California	7	8	9
Northern California	9	10	11
Oregon & Washington	11	12	13
South East Alaska	14	15	16
Alaska	19	20	21

Cubic Foot Area X Multiplier = BTU needed

Example: cubic foot area to be heated = **1000**

Live aboard in Washington = **11**

Estimated BTU's: **1,000 x 11 = 11,000** - Heater size = [Airtronic D4](#) hot air or [Hydronic 5](#)

Heater Model	BTU's	Heater Model	BTU's
Airtronic D2	6,141	Hydronic 5	17,000
Airtronic D4	13,000	Hydronic M10	32,000
Airtronic D5	18,000	Hydronic M12	42,000
Airtronic D8LC	27,000	Hydronic 16	54,594
		Hydronic 24	81,891
		Hydronic 30	102,364
		Hydronic 35	119,424