FINNED TUBULAR HEATERS

OVERVIEW

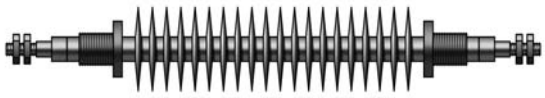
Versatile, durable, and reliable, WATTCO™ finned tubular heaters are used for forced convection heating or air and gas heating systems. They are customized to meet your specific application needs.

FEATURES

- Various sizes of diameters
- Main sheath material: steel or stainless steel
- Standard fin material: steel or stainless steel

BENEFITS

- Increase heat transfer surface area
- Safe to operate (minimal risk of fire or electrical shock)
- Durable
- Built solid
- Easy to maintain



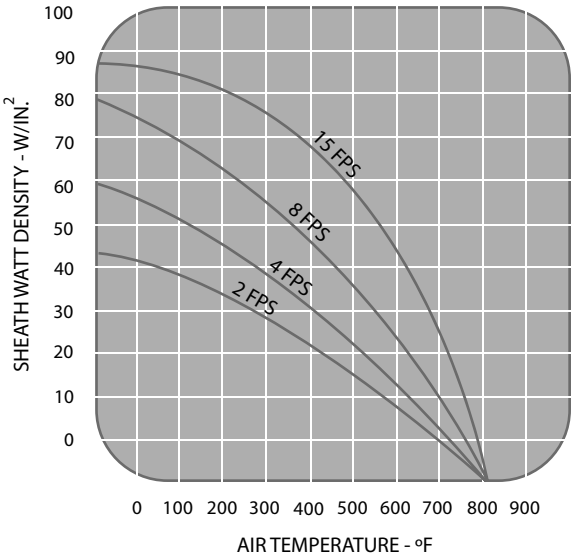
FACTORS

AFFECTING TEMPERATURE

Operating temperatures of finned element change according to the following factors:

- Air velocity
- Air temperature
- Watts per square inch of finned element

FIG. 1 - Watt Density vs. Air Temperature for 797ºF (425ºC) Fin Temperature



As shown in Figure 1, the combination of these factors results in a sheath temperature of 425°C (797°F).

Note: These factors are approximate as fin efficiency and element spacing may bring about variations in temperature. Please consult factory for further information.

APPLICATIONS	SHEATH MATERIAL	FIN MATERIAL
Forced circulation	Steel	Steel or Stainless
Ducts	Steel	Steel or Stainless
Fan forced electric heaters	Steel	Steel or Stainless
Recirculating ovens	Steel	Steel or Stainless
Loading resistors	Steel	Steel or Stainless

COATINGS
Bare steel
Nickel-plated
Aluminum painted
Black enamel

Finned Tubular Heater

SELECTING

WATTCO™ FINNED TUBULAR HEATER

• Select the proper element by first specifying if the element has a minimum diameter of 0.430" if the power supply voltage is more than 300V.

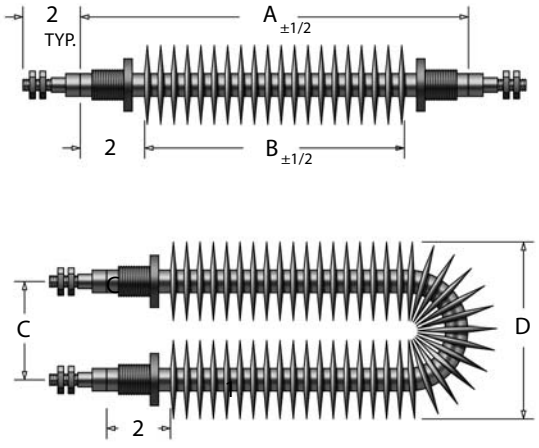
Depending on your requirements, special terminals can be installed on the 0.315" diameter elements so they can be used up to 600V.

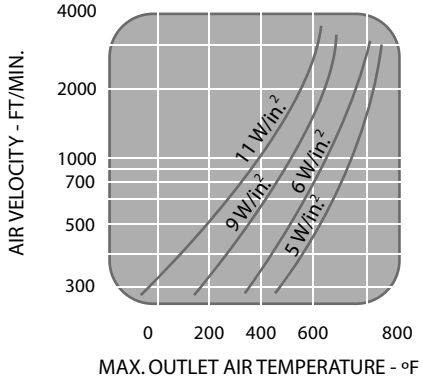
• Standard fin sizes and pitches supplied by WATTCO™ are listed in Table 1 above. Other sizes are available on special order.

Watt Density = Sheath watt density X Element surface area per lineal inch.

• Determine the number of heated length of element required for a specific wattage output. You will need more than one element for larger wattage or three-phase installations.

FIG. 2 - Velocity vs. Air Temperature for a Fin Temperature of 800ºF (425ºC)





NEED ASSISTANCE?

Please call us at 1.800.4WATTCO (1.800.492.8826) or send a fax at 514.488.9126 for assistance when selecting your elements, as other factors that are not mentioned above should be taken into consideration.