

## **RSTP SERIES**

### **ARCHITECTURAL/ENGINEERING SHORT FORM SPECIFICATIONS**

Gas-fired infrared space heaters shall be furnished and installed in accordance with governing codes and as shown per building drawing(s) as described below:

Heaters shall be SPACE-RAY RSTP series tube heaters, model number(s) RSTP\_\_\_\_\_, rated at \_\_\_\_\_ Btu/hr as manufactured by Gas-Fired Products, Inc., Charlotte, North Carolina. Heaters shall be equipped with a 24-volt direct spark ignition system with automatic 100% gas shutoff, redundant combination gas valve, and a diaphragm switch designed to complete unit shutoff in the event of combustion air or flue blockage. The heaters shall be equipped with three on-line diagnosis monitoring lights to monitor the power to the heater, insufficient air flow, and the spark ignition and combination gas valve operation. Power supplied to each heater shall be 120 VAC, 60 Hz.

The heater's burner shall consist of a cast iron atmospheric burner with stainless steel flame retainer and shall utilize an aluminized steel entrance cone and support assembly, which will maintain a uniform air annulus around the flame pattern. The flame characteristics shall be highly luminous for maximum radiant heat transfer through the emitter tube wall.

The heater's emitter tube shall operate at an average surface temperature of 900°F and shall be made of 16-gauge, 4" O.D. aluminized steel for long life. The emitter tube shall be calorized for longevity, corrosion resistance and high radiant efficiency. The minimum input firing rate shall be 7,000 Btu/hr per square foot of emitter tube surface. The measured surface emissivity shall be 0.83 - 0.86 at operating temperatures. The calorization process shall produce an emitter tube that is highly radiant absorptive (0.95) on the interior and highly radiant emissive (0.83-0.86) on the exterior.

To assure a high degree of safety and increased radiant efficiency, the heaters shall operate under negative pressure at all times during operation to preclude the escape of combustion gases inside the building. The heater exhaust assembly shall include a 120-volt draft inducer. The draft inducer shall be equipped with a permanently lubricated, totally enclosed and shielded, fan cooled, and heavy-duty ball bearing motor. The motor shall not require maintenance or lubrication for the life of the unit.

The heaters shall utilize factory assembled, highly efficient aluminum reflectors with a reflectivity of 97.5%. The reflector ends shall be enclosed for maximum radiant heat output and minimum convection losses. The heaters shall be completely factory assembled and tested. The heaters shall not require any field wiring, adjustments or assembly to assure maximum performance and safety. Heaters shall operate satisfactorily in any position from horizontal to ninety degrees (90°) from horizontal, and shall be suitable for vented/indirect vented and inside/outside applications. Heaters shall be designed to operate on natural or propane gas.

Heaters shall be design certified by the Canadian Standards Association (CSA) to American National Standard Z83.20/CSA 2.34. The manufacturer shall provide a written limited warranty covering the cast iron burner for ten (10) years, the emitter tube for five (5) years, and all other components for one (1) year.