

# **ETS/ETU 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 ETS/ETU series tube heaters, model number(s) ETS/ETU\_\_\_\_\_, 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 with automatic 100% shutoff system. Power supplied to each heater shall be 120 VAC, 60 Hz. The heater controls shall include a pressure switch designed to provide complete unit shutoff in the event of combustion air or flue blockage. The heaters shall be equipped with an on-line diagnosis monitoring light system.

The heater's burner shall consist of a heavy-duty cast iron atmospheric burner. The flame characteristics shall be highly luminous for maximum radiant heat transfer through the emitter tube wall.

The heater's emitter tube (first ten feet) shall utilize 16-gauge calorized aluminized steel or calorized titanium alloy Alumi-Therm steel for long life and high radiant efficiency (4" O.D.). The remaining section(s) of the emitter tube shall be hot-rolled steel.

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 draft inducer assembly shall be capable of rotating 90° for vertical or horizontal venting.

The heaters will be CSA design certified for vertical or horizontal venting, maximum 75 feet horizontal sidewall venting, and for 50 feet outside combustion air inlet duct. There shall be no draft hoods. The combustion chamber shall be totally enclosed.

The heaters shall utilize highly efficient aluminum reflectors with a reflectivity of 97.5%. As an option, the reflector ends shall be enclosed for maximum radiant heat output and minimum convection losses.

The heater controls shall be factory assembled and tested. The heaters shall not require field adjustments to assure maximum performance and safety.

Heaters shall operate satisfactorily in any position from horizontal to forty-five degrees (45°) from horizontal, and shall be suitable for vented/indirect vented 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 heavy one-piece cast iron burner for a period of ten (10) years, the emitter tube for a period of three (3) years and all components utilized in the heater's control assembly for a period of one (1) year.