

PTS/PTU 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 PTS/PTU series tube heaters, model number(s) PTS/PTU_____, rated at _____Btu/hr as manufactured by Gas-Fired Products, Inc., Charlotte, North Carolina. Heaters shall be equipped with a 24-volt, three try direct spark ignition with automatic 100% shutoff system, a redundant combination gas valve and a separate flame safety sensing system. The ignition system will provide pre-purge period prior to ignition and post purge period after the ignition. The series shall be available with a single stage input (N5 or L5 Controls) or two stage modulating inputs (N7 or L7 Controls). Power supplied to each heater shall be 120 VAC, 60 Hz. A three prong 36 inch long power cord shall be supplied as part of the burner box. 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 showing power "on" and gas valve "on".

The heater's burner shall consist of a heavy-duty cast iron burner. The manufacturer shall include 36" long, 5/8" OD heavy duty stainless steel (powder painted in yellow color) flexible gas connector and a locking turnbuckle to facilitate the burner box suspension.

The heater's emitter tube (first ten feet) shall utilize 16-gauge calorized aluminized steel or calorized titanium alloy Alumi-Therm steel (175M-200MBtuH Models) for long life and high radiant efficiency (4" O.D.). The remaining section(s) of the emitter tube shall be hot-rolled steel. The ALC option with all calorized aluminized steel emitter tubes is available for high humidity or harsh environments (car washes, swimming pools, and waste water treatment plants) . The heaters shall utilize a series of turbulator baffle(s) to maximize heat transfer and thermal efficiency.

The heaters shall operate under positive pressure at all times during operation. The heater's control compartment shall be totally separate from the combustion air stream. The burner box shall be equipped with two separate hinged access doors to access the controls. All burner compartments shall be sealed with high temperature silicone gaskets for long life and durability. The heater burner assembly shall include a 120-volt heavy-duty ball bearing and permanently lubricated blower motor. The motors impeller shall be statically and dynamically balanced. The motor shall not require maintenance or lubrication for the life of the unit.

The heaters shall be CSA design certified for vertical or horizontal venting, maximum 40 feet horizontal sidewall venting or 40 feet for 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 can be enclosed for maximum radiant heat output and minimum convection losses. The reflectors shall be rotatable from 0° to 45° as required.

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 direct venting, common venting and indirect venting applications. Heaters shall be designed to operate on natural or propane gas.

The heaters shall be equipped with Tube Integrity Safety System (TISS). TISS incorporates an electrically charged insulated aluminum wire in tension above the reflector and a low voltage circuit continuously monitors the clearance above the reflector for excessive overheat and tube integrity compromise. In the unlikely event of tube failure, the safety circuit will be broken and shut down the gas controls.

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.