Date: Bid Date:

Project #: Location:

Project Name: Engineer:

Contractor: Prepared By:

LAARS -U.H.E.
Commercial Gas High Efficiency Water Heater

Specification

LAARS Heating Systems Company

Contractor shall supply and install Qty.: _____ Laars Model No. LUHE _____ high efficiency water heater(s).

The heater shall be Laars UHE Model LUHE _____, rated at the input and volume shown on the schedule. The heater(s) shall be design certified to comply with the current edition of the Harmonized ANSI / CSA standard Z21.10.3 for up to 180°F (82°C) as an Automatic Storage Heater, and an Automatic Circulating Tank Heater.

The heater shall have an AHRI listed thermal efficiency rating of _____ %, and a minimum recovery of _____ GPH/LPH at 100°F (56°C) temperature rise. The unit shall comply with the latest ultra-low NOx requirement (14 ng/J NOx limit.)

The heater shall be certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. ASME construction shall be available. The unit shall be factory assembled and tested.

The tank shall be lined with vitreous enamel, and shall have multiple extruded magnesium anodes installed in separate head couplings. 119 gallon models shall have two powered anode rods. It shall be equipped with an ASME T&P relief valve and a low restrictive brass drain valve. The unit shall have a stainless steel cold water inlet, a sediment reduction system to help prevent buildup in the tank, and a bolted hand-hole cleanout. It shall be available with NSF construction. In addition to the water heater connections, the heater shall have 1"NPT side connections for space heating.

The heater shall have a submerged combustion chamber to minimize radiant heat loss, and a three pass heat exchanger to provide maximum heat transfer surface area. The tank shall be insulated with non-CFC foam, covering the sides, to reduce heat loss and improve efficiency and jacket rigidity.

The unit shall have an intelligent electronic module that combines temperature control, system ignition functions, diagnostic codes and a digital LCD display on the front of the heater. The temperature control shall be adjustable up to 180°F (82°C), shall have the ability to display in °F or °C, and shall allow the user to lock the maximum temperature setting that can be adjusted in operation mode. The controller shall be able to display the temperature sensor reading, the flame current, and all diagnostic codes. The unit shall have a single 115VAC power connection, and shall be direct spark ignition. The heater shall have a recycling Energy Cut Off (ECO) that shuts off all gas in the event of an overheat condition.

The heater shall have a self-compensating negative regulation gas-air system that automatically increases or decreases fuel flow when a change in combustion air is detected, providing optimum combustion, efficiency, and high altitude compatibility. The premix closed combustion system shall allow for direct venting using _____" diameter PVC, CPVC or ABS (not approved for Canada) vent pipe. The system shall allow for inside combustion air and an unbalanced vent/air system. The heater shall be approved for zero-inch clearance to combustible material.

LAARS Heating Systems Company
A subsidiary of BRADFORD WHITE Corporation

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