

Mighty Stack Water Heater

Date:

Bid Date:

Project #:

Location:

Project Name:

Engineer:

Model TL80-199

Contractor:

Prepared By:

Specification

Contractor shall supply and install Qty: _____ Laars TL80-199 automatic circulating water heater(s).

The water heater shall be a Laars Mighty-Stack TL80-199 rated at 199,000 BTU/hr (58.3 kW) input and 164,000 BTU/hr (48.1 kW) output with a recovery rate of 197 USGPH (745.6 L/hr) for a 100°F (55.6°C) water temperature rise. The unit(s) shall have a thermal efficiency of 83%.

The unit(s) shall be design certified to comply with the current edition of the Harmonized ANSI Z21.10.3 / CSA 4.3 Standard for Gas Water Heaters.

The water heater shall come complete from factory as a packaged unit pre-piped and pre-wired including water tank, circulating pump, induced draft fan, and EM² (Energy Management Monitor) circulator time delay.

The water tube heat exchanger shall be a straight tube design with 5/8" (16mm) inner diameter integral finned copper tubes. The tubes shall be rolled directly into ASME bronze headers rated for 160 psi (1103 kPa) working pressure. The heat exchanger shall be a low water volume design.

The unit(s) shall be of an induced draft design and shall be vented using 4" (102mm) vent suitable for use with induced draft boilers. Induced draft fan shall allow for side-wall venting (when installed with appropriate side-wall vent termination hood) without the addition of external fans or blowers. The unit shall be designed for vertical venting with standard B vent.

Burners shall be of the atmospheric type and constructed of stainless steel.

The entire burner tray assembly shall be removable from the boiler as one unit for ease of maintenance.

Ignition safeguard system shall be proved hot surface pilot ignition with electronic flame supervision to respond to flame failure in less than 0.8 seconds. Unit shall be 120V, single phase, 12 Amps.

Water heater shall include as standard equipment the following controls and trim:

- 80 gallon (303 L) glass-lined storage tank c/w aluminum sacrificial anode and hand-hole clean-out
- On/off tank aquastat
- Manual reset high limit
- Circulating pump
- EM² (Energy Management Monitor) Circulator time delay relay
- 115/24 VAC power from class 2 transformer
- 125 psi (861 kPa) A.S.M.E. pressure relief valve