SPECIFICATION FOR INSTANTANEOUS STEAM DOMESTIC WATER HEATER

PVI Model CSX _____ - _____ - _____

TEMP **GPM** **Steam P**

PVI Model CSX™ water heater(s) as manufactured by PVI INDUSTRIES shall provide _____**°F** water @ _____**gpm** when supplied with _____**psi** saturated steam. The water heating system shall include the following:

Steam Control:
Steam pressure shall be limited to the heat exchanger by the owner to the above-specified pressure. A shut off valve and strainer (not supplied) are recommended to be installed upstream of the heat exchanger.

_____**(v) Optional Steam Control Valve:**
For delivered steam pressure above 15 psi, a normally closed steam valve controlled by self-contained pilot shall reduce customer provided steam pressure to the heat exchanger to a maximum 15-psi. Valve is optional for steam pressure less than/equal to 15 psi delivered to the heat exchanger at additional cost.

Heat Exchanger:
The heat exchanger shall be constructed from 316L stainless steel with full passivation. The steam shall pass through spiral, helically corrugated tubes in a counterflow direction to the water, resulting in increased heat transfer efficiency. Promotion of turbulent flow in this manner shall also provide a means to reduce sediment build-up and scale formation on the heat transfer surfaces. The heat exchanger shall be of single wall construction; rated for 150 psig shell and tubes pressure and 366°F shell and tubes design temperature. The heat exchanger shall meet ASME section VIII code and be UM stamped. A Float and Thermostatic trap, sized for 1.5X steam volume output shall be used to collect condensate and discharge as required.
_____**(v)** Closed cell clam shell insulation of the heat exchanger included

Temperature Control:
A non-adjustable self-contained thermostatic control system shall be utilized to provide the specified outlet water temperature with +- 5° accuracy from a minimum 4 gpm to the specified maximum gpm. System pressure loss shall not exceed 9 psi. A dual thermostatic normally closed solenoid valve shall be included to stop water flow from the heat exchanger when over temperature flow in sensed. Cold-water flow shall be permitted through the system in shutdown conditions.

_____**(v)**A differential pressure monitoring and shutdown system, interrupting hot water flow when steam and water pressures near equalization, is available (optional).

Piping:
Water piping shall be constructed from copper piping with union connections. A 150-psi pressure relief valve shall be located on the outlet side of the heat exchanger piping. A safety temperature shutdown system shall close hot water flow to prevent over-temperature water from exiting the system.

_____**(v)**Temperature gauge-Pressure gauge package shall be provided.

Finishing:
The water heater will be factory packaged requiring only trap assembly connection and site hookup to utilities and domestic water piping. Start up instructions shall be provided with the unit. Customer shall perform start-up. Failure to follow installation instructions may negate all or part of the warranty. A copy of the start up report shall be completed by the installer and returned to PVI Industries to meet warranty requirements

Warranty Summary:
The CSX water heater system shall have a one-year warranty from start-up or eighteen months from date of purchase, whichever comes first. The warranty shall cover manufacturing or material defects, freight and labor to repair defective system components. This summary is not a warranty. Consult warranty and policies for full details.