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**Crossover Wall Mounted Hybrid Tankless Water Heater Specification Sheet**

***Model: RGH-150 / 199***

The RGH- Crossover Wall Mounted Hybrid Tankless Water Heater manufactured by HTP, Inc., offers a modulating input from to Btu/Hr. The water heater shall operate on either Natural or LP Gas.

The water heater shall have a working pressure rating of a maximum of 150 psi, and shall be ETL listed. The unit shall also be listed to NSF 372 for low lead content.

The water heater heat exchanger shall be constructed of 316L stainless with multiple stainless steel tubes welded in a vertical tube sheet. The stainless steel tubes have a high fin aluminum extrusion insert which provides superior heat transfer. Heat exchanger capacity on 150 model water heaters is up to 2.3 gallons of water; for 199 model water heaters heat exchanger capacity is up to 3.5 gallons of water. The water heater shall be built and tested in accordance with the harmonized ANSI standards for US and Canada. The heat exchanger assembly shall carry a twelve (12) year residential and five (5) year commercial warranty against leaks.

The premix combustion system shall be equipped with a venturi valve to regulate air flow and ensure accurate and precise combustion. The negative pressure gas valve operates at very low and high pressures with a range of 3.5” to 14” water column. The water heater will be equipped with an observation port to view combustion off the burner head. The burner shall down fire and be constructed of ceramic metal fiber to allow the unit to achieve 10 to 1 turndown.

The water heater shall have an integrated control system that utilizes an algorithm to fully adjust the firing rate. The water heater will control water temperature and flow rate with an electronic flow meter and mixing valve. The water heater can be programmed to supply water temperature up to 140oF. The integrated control offers built-in freeze protection, water leak detection, three recirculation modes, and an anti-scaling function to eliminate elevated temperatures after a heat up cycle by activating the internal recirculation pump. The pump stabilizes the top and bottom temperatures of the heat exchanger until the temperature is normalized.

The water heater shall be equipped with an LCD display which allows the installer to set the water outlet temperature. This display also monitors many functions of the heater (Fan Speed - Supply and Return Temperature - High Limit Temperature – Flue Temperature – Recirculation Modes, etc.)

Each water heater is equipped with a built-in condensate trap and discharge line for condensate disposal. The water heater has a sealed combustion system and can be vented with ULC S636 PP, PVC, CPVC, or Stainless Steel vent materials. The water heater’s total combined equivalent length, including fittings allowance for both intake and exhaust, shall not exceed 100 feet in 3 inch pipe. The vent connections shall be located on the top of the heater. All units ship with a 6 inch length of CPVC pipe which must be used before transitioning to PVC pipe.

**Direct Vent Horizontal Venting** shall be done as a balanced system only, thus requiring both intake and exhaust to terminate on the same side of the building.

**Vertical Venting** shall be done either as a balanced or unbalanced system. An unbalanced system shall ONLY be allowed when the exhaust is installed vertically and the intake horizontally. Both exhaust and intake must remain within the water heater’s combined equivalent length. (Refer to water heater’s installation manual venting section for additional venting requirements.)

**CAUTION: Foam core pipe is NOT an approved material for either intake or exhaust piping.** Refer to water heater installation manual venting section for additional venting requirements.

The water heater shall be in compliance with the NOx emissions limit set forth in SCAQMD Rule 1146.2. The manufacturer shall verify proper operation of the burner, the combustion and control systems, and all related safety functions to ensure the water heater will operate based on its designed parameters before shipping. Complete operating and installation instructions shall be furnished with every heater as packaged by the manufacturer for shipping.

The appliance shall operate at high elevations without additional parts. However, adjustments to the combustion system may be required at any elevation. See installation manual for combustion system setting details.

Maximum unit dimensions shall be: Depth inches, Width inches and Height inches. Maximum unit Weight shall be pounds.

**NOTE:** HTP reserves the right to make product changes or updates without notice and will not be held liable for typographical errors in literature.