



Commercial Tank Temperature & Pressure Relief Valve Openings

All Rheem-Ruud commercial water heaters are shipped with factory installed Temperature & Pressure relief valves that are sized to match the BTU firing rate of the water heater. Rheem-Ruud builds similar capacity tanks that fire at rates ranging from 98,000 BTU to 600,000 BTU. As required, the size (outlet diameter) of the T&P valve is based on the firing rate of the water heater only. Therefore Rheem-Ruud has chosen to manufacture tanks of similar capacity with a standard T&P opening of 1" diameter; and reduce the opening to $\frac{3}{4}$ " when a $\frac{3}{4}$ " T&P valve is required for the firing rate.

The following example shows two water heaters constructed from the same basic tank with a standard 1" T&P coupling:

Example: G91-200 (199,900 Btu) = $\frac{3}{4}$ " T&P
 G91-300 (300,000 Btu) = 1" T&P

An often-misquoted code requires that the T&P opening not be reduced. This code refers to the outlet side opening of the T&P valve itself, not to the opening diameter on the tank shell. A T&P valve with a $\frac{3}{4}$ " discharge cannot have the discharge pipe reduced to less than $\frac{3}{4}$ " in diameter. Similarly, a T&P valve with a 1" discharge cannot have the discharge pipe reduced to less than 1" in diameter. The manufacturer can size the opening of the tank shell to any diameter they so choose and reduce as needed. As long as the T&P is inserted to the proper depth in the tank, is in the top 6 inches of the tank, and is sized to match the water heater's BTU firing rate, then the tank has been manufactured in accordance with proper specifications.