

## TEMPERING VALVE SPECIFICATION

**AS MANUFACTURED BY HEAT-TIMER CORPORATION  
20 NEW DUTCH LANE, FAIRFIELD, NJ 07004**

**Contractor shall furnish and install, according to manufacturer's recommended methods of installation, a 3-Way Thermostatic Tempering Valve with the following features:**

- 1) All Tempering Valves and component parts, sizes 1/2" - 4", shall be constructed of bronze and non-ferrous materials. The Tempering Valve shall be hydrostatically tested to 300 pounds per square inch.
- 2) The Tempering Valve shall be capable of being installed in any position.
- 3) The Tempering Valve shall have a removable internal bore (insert) that is machined separately from the valve body and is field replaceable.
- 4) The Tempering Valve shall have a mixer, which is machined separately from the valve body, and turbulates the water around the thermostatic element causing a thorough blending of hot and cold water for accurate control.
- 5) The thermostatic element shall be a liquid filled bellows type that is manufactured of non-ferrous material. It shall be located in the main Tempering Valve body and be field replaceable. The longer length of the thermostatic element gives greater heat transfer surface than the usual shorter thermostats. This longer length distributes the expansion of the bellows over a much larger area, thereby increasing the overall thermostat life. The thermostatic element's length shall be as indicated on chart below:

<u>TEMPERING VALVE SIZE</u>	<u>THERMOSTAT LENGTH</u>
1/2", 3/4"	7 1/4"
1"	11"
1 1/4"	18"
1 1/2", 2"	23"
2 1/2", 3", 4"	27"

- 6) The Tempering Valve shall have a field adjustable temperature range between 100°F & 180°F (other temperature ranges are available).
- 7) If another specified temperature range is required, only the thermostatic element needs to be replaced.
- 8) The Tempering Valve shall be capable of being sized with a 1 P.S.I. pressure drop through the valve without a noticeable change in outlet temperature, provided that the manufacturer's recommended methods of installation are followed.
- 9) The Tempering Valve shall have a bonnet design that utilizes a teflon base gasket which is installed in such a fashion as to keep the bonnet threads out of the water.