

SECTION 15115

THERMOSTATIC WATER MIXING VALVES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Exposed thermostatic water mixing valve systems.
- B. Cabinet-mounted thermostatic water mixing valve systems.

1.2 RELATED SECTIONS

- A. Section 15145 - Plumbing.
- B. Section _____ - _____.
- C. Section _____ - _____.

1.3 REFERENCES

- A. American Society of Sanitary Engineering - Standard 1017

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data on systems, including dimensions, rough-in dimensions, pipe connection sizes, trim, and finishes.
- C. Selection Samples: For selection of finish.
- D. Manufacturer's printed installation instructions.
- E. Operation and maintenance data.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in the manufacture of products of this section, with minimum of three years experience.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Thermostatic Water Mixing Valves: Leonard Water Temperature Controls; 1360 Elmwood Avenue; Cranston, RI 02910; ASD. Tel: (401) 461-1200; Fax: (401) 941-5310.

- B. Substitutions will not be permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- D. Provide all products from a single manufacturer, unless otherwise indicated.

2.2 THERMOSTATIC WATER MIXING VALVES

- A. Fabrication: Factory preassembled and tested, including the following unless otherwise specified:
 - 1. Large and small Type TM thermostatic water mixing valves to function as a system meeting both high and low demand for tempered water.
 - 2. Thermostatic water mixing valves powered by DURAtrol(R) solid metal thermostat regulating water temperature.
 - 3. Integral checkstops, wall supports, and cast lever handles.
 - 4. Pressure regulating valve set to adjust to varying flow requirements, opening to allow flow from larger mixing valve as demand increases.
 - 5. Outlet dial thermometer, pressure gages, ball valve shutoff on each mixing valve, and pre-piped inlet manifold with unions.
- B. Unless otherwise indicated provide the following for each exposed thermostatic water mixing valve system as applicable:
 - 1. Large Type TM Thermostatic water mixing valve, adjustable high temperature limit stop, inlet checkstops, wall support, and outlet ball valve.
 - 2. Small Type M Thermostatic water mixing valve, adjustable high temperature limit stop, inlet checkstops, wall support, and outlet ball valve.
 - 3. Inlet manifold piping.
 - 4. Outlet pressure regulating valve and pressure gages.
 - 5. Color-coded dial thermometer (0 to 140 degrees F, minus 10 to 60 degrees C).
 - 6. ___ inch (___ mm) inlets, ___ inch (___ mm) outlet.
 - 7. 1.0 gallon per minute (3.7 L/min) minimum flow capacity.
- C. Unless otherwise indicated provide the following for each cabinet-mounted thermostatic water mixing valve system as applicable:

1. Large Type TM Thermostatic water mixing valve, adjustable high temperature limit stop, inlet checkstops, wall support, and outlet ball valve.
2. Small Type M Thermostatic water mixing valve, adjustable high temperature limit stop, inlet checkstops, wall support, and outlet ball valve.
3. Inlet manifold piping.
4. Outlet pressure regulating valve and pressure gages.
5. Color-coded dial thermometer (0 to 140 degrees F, minus 10 to 60 degrees C).
6. ___ inch (___ mm) inlets, ___ inch (___ mm) outlet.
7. 1.0 gallon per minute (3.7 L/min) minimum flow capacity.
8. Recessed cabinet, 16 gage body, 12 gage door; left hand hinge and flange, cylinder lock; bottom inlets, top outlet.

2.3 VALVE AND PIPING FINISH

- A. Rough bronze.
- B. Satin sprayed.
- C. Chrome plated.

2.4 CABINET FINISH

- A. Steel, white baked enamel.
- B. Stainless steel, No. 4 finish.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that piping is installed properly and in the correct locations.

3.2 PREPARATION

- A. Install thermostatic water mixing valve systems before wall surface is completed.

3.3 INSTALLATION

- A. Install thermostatic water mixing valve systems in accordance with the manufacturer's instructions.
- B. Install systems plumb and level.

- C. Install thermostatic water mixing valve systems at heights indicated on drawings.
- D. Install thermostatic water mixing valve systems at heights required by applicable plumbing code.
- E. Install piping connections as specified in Section 15145.

3.4 ADJUSTING AND CLEANING

- A. Adjust water flow rates to comply with manufacturer's rating of the system and with American Society of Sanitary Engineering Standard 1017 requirements for mixed water temperature.
- B. Clean systems of labels, dirt, and construction debris.

END OF SECTION