

Specifier notes are shown in italics and should be deleted from the final document. Generally, all of the manufacturer's products in this category are listed and the specifier must take care to delete those products not included in the project.

Depending on the relative complexity of the project, the specifier may choose to combine two or more Plumbing Specialties sections into one. The Section number and title should be adjusted to correspond to the CSI MasterFormat™

Edit each Article in this Section to suit project requirements.

SECTION 15430

PLUMBING SPECIALTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Thermostatic mixing valves.
- B. Mixing valve cabinets, pipe assemblies, thermometers

1.02 RELATED SECTIONS

- A. Section 15140 - Domestic Water Piping: Water piping
- B. Section 15410 - Plumbing Fixtures: Plumbing fixtures
(If used in the Specifications, narrow scope Section number(s) and title(s) should be used in place of the medium scope number and title).

1.03 REFERENCES

- A. A.S.S.E. 1016 or 1017
- B. ANSI Z358.1 - 1998

1.04 SUBMITTALS

- A. Provide product data information on specified units in accordance with requirements of Section 01300.

1.05 QUALITY ASSURANCE

- A. Conform to requirements of [ASSE USA], [CSA Canada].

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Bradley Corporation, P.O. Box 309, Menomonee Falls, WI 53052-0309. Phone: 800-BRADLEY (262-272-3539); Fax: 262-251-5817. <http://www.bradleycorp.com>.
(Specified products are the manufacturer's thermostatic mixing valves listed below.)
- B. Substitutions: [Section 01600 - Product Requirements] [Not permitted].

2.02 THERMOSTATIC WATER MIXING VALVES

- A. Provide factory assembled and tested thermostatic high-low valves Model No. [S59-3045], [S59-3080], [S59-3130], [S59-3200], constructed of bronze body and cap with replaceable corrosion resistant components, including stainless steel piston and liner, universal mounting capability, equipped with integral checkstops, removable strainers and liquid-filled thermostat.
- B. Provide factory assembled and tested emergency fixture thermostatic mixing valves Model No. [S19-2000], [S19-2100], [S19-2200], constructed of bronze body and cap with replaceable corrosion resistant components, including stainless steel piston and liner, universal mounting capability, liquid-filled thermostat.
- C. Provide factory assembled and tested [sink faucet] [individual shower] thermostatic mixing valves Model No. [S59-2007], [S59-2006] constructed of bronze body and cap with replaceable corrosion resistant components, including stainless steel piston and liner, equipped with [elbow check stops] [straight stop].
- D. Provide factory assembled and tested standard thermostatic mixing valves Model No. [S59-2025], [S59-2045], [S59-2080], [S59-2130], [S59-2200] constructed of bronze body and cap with replaceable resistant components, including stainless steel piston and liner, universal mounting capability, equipped with integral check stops, removable strainers and liquid-filled thermostat.

From the following temperature range combinations, select those appropriate to the specified product.



- E. Valve temperature range:

- 50°F (10°C) to 100°F (38°C) with a set point of 80°F (27°C)
- 65°F (18°C) to 95°F (35°C) with a set point of 85°F (29°C)
- 70°F (21°C) to 100°F (38°C) with a set point of 80°F (27°C)
- 85°F (29°C) to 135°F (57°C) with a set point of 110°F (43°C)
- 90°F (32°C) to 110°F (43°C) with a set point of 105°F (41°C)
- 90°F (32°C) to 120°F (49°C) with a set point of 110°F (43°C)
- 100°F (38°C) to 150°F (66°C) with a set point of 130°F (54°C)
- 110°F (43°C) to 140°F (60°C) with a set point of 130°F (54°C)

- F. Valve finish: [Standard rough bronze] [Chrome plated].
- G. Provide [dial thermometer], [low range thermostat], [high range thermostat].

Select the appropriate pipe assembly method:



- H. Provide piped assembly with inlet and outlet shutoff.

If applicable, select desired cabinet:



- I. Cabinets: [Surface mount stainless steel] or [recessed stainless steel] or [surface mount white enamel] or [recessed white enamel] or [Plexiglas window in door].

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine area intended to receive thermostatic mixing valves to determine that Work is ready for installation.

3.02 INSTALLATION

- A. Install valves, piped assemblies and cabinets in locations indicated.

- B. Follow manufacturer's written instructions for installation of valves, piped assemblies and cabinets.

3.03 SEQUENCE OF OPERATIONS

The following sequences of operations vary in accordance with the specified product:

*Use for **High-Low Mixing Valves and Standard Mixing Valves:***

- A. Liquid-filled thermal motor and piston control mechanism for positive shut-off of hot water if cold water supply is lost.
- B. Restricted cold-water flow is allowed in the event of loss or interruption of the hot water supply.
- C. All water flow is shut off in the event of thermostat failure.

*Use for **Emergency Fixture Mixing Valves***

- A. Liquid-filled thermal motor and piston control mechanism for positive shut-off of hot water if cold water supply is lost to prevent scalding.
- B. Cold-water flow allowed in event of loss or interruption of hot water supply or thermostat failure.
- C. Control outlet temperature so that flow will be suitable for eyewash or eye/face wash application.
- D. Vandal resistant temperature adjustment.

*Use for **Sink Faucet and Individual Shower Mixing Valves:***

- A. Wax-filled thermal motor and piston control mechanism with positive shut off of hot water when cold water supply is lost.
- B. Restricted cold water flow is allowed in the event of loss or interruption of the hot water supply.

3.04 ADJUSTING

- A. Test and adjust entire installation for proper operation.
- B. Adjust set point within the allowable temperature range.

3.05 SCHEDULE *(Where multiple valves/combinations are specified, it might be best to give them a "mark" and create a schedule).*

END OF SECTION