Water Temperature Control - Emergency Fixtures

Thermostatic

- Thermostatic water temperature control
- Dual thermostats provide redundancy
- Maximum temperature locking feature
- Continuous cold water flow to fixture upon hot water supply failure

- Thermal shutdown mode to protect user upon cold water supply failure
- Promotes compliance with ANSI Z358.1-2009

Above image courtesy of the Haws Corporation, Sparks, Nevada (775) 359-4712

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Rada Z358 series has been designed specifically to provide temperature controlled water to emergency fixtures as detailed in ANSI Z358.1-2009.

Tepid Water (Sections 4.5.6, 5.4.6, 6.4.6, 7.4.5, 8.1.1.2, 8.2.3.4)

Tepid flushing fluid is considered necessary in all types of emergency equipment applications. Tepid is defined in the standard, as “A flushing fluid temperature conducive to promoting a minimum 15-minute irrigation period. A suitable range is 60-100°F (16-38°C)” (Definitions p. 8). Generally, temperatures higher than 100°F may cause chemical interactions with the skin and result in further damage. At 60°F and below hypothermia becomes a concern. Consulting a safety/health advisor will be a helpful aid in the determination of the best temperature parameters. Not two hazards are exactly the same and each should be evaluated on a case-by-case basis.

Point of Use

Rada Z358-20 and Z358-40 Thermostatic Mixing Valves are suitable for installation at or near a point of use for direct tepid water supply to an emergency fixture or grouping of fixtures. Groups of fixtures must meet the valve’s flow capacity requirements if there is a potential for simultaneous operation.

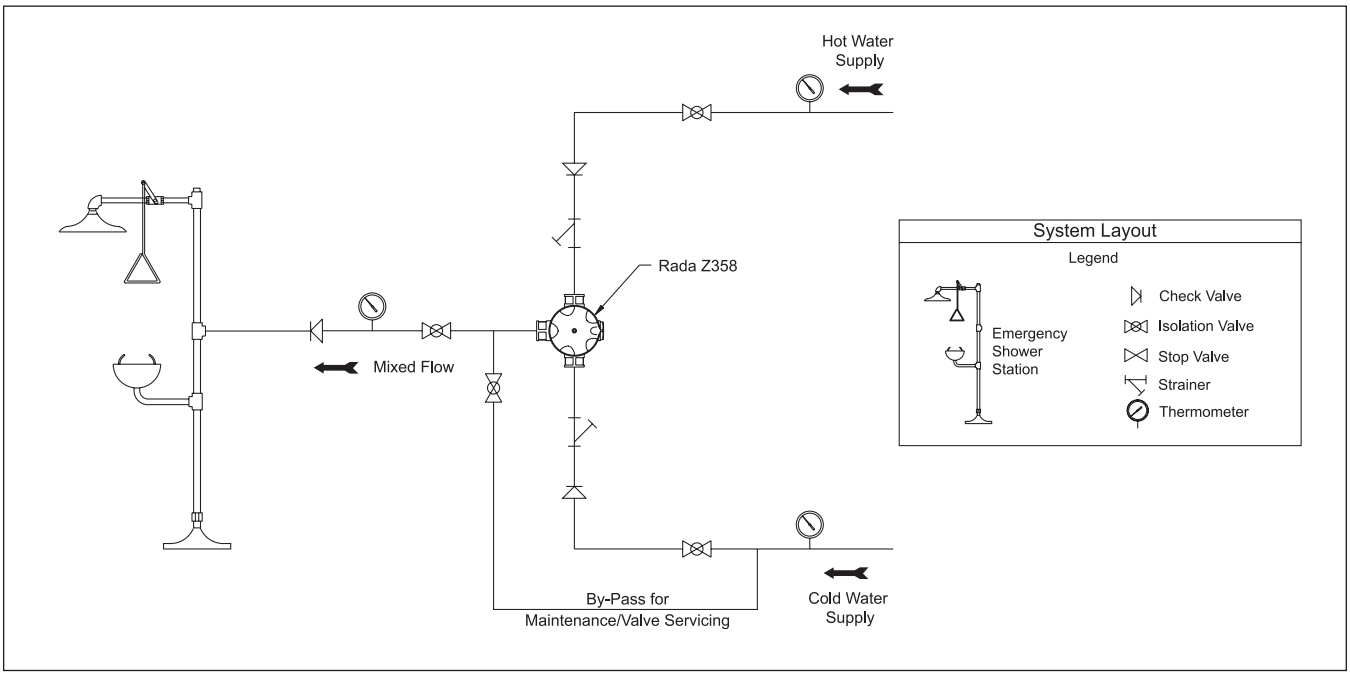
Central Recirculation System Control

Recirculated, tepid loops serving emergency fixtures are fundamentally different in application from standard institutional hot water recirculating systems. The limited system draw-off requirement of the emergency fixture circuit portends limited system audit capability and a subsequent underlying system management concern.

In other words, institutional loops with frequent draw-offs at diverse flow rates for hand washing, showering and bathing communicate with building management on a regular basis (the lavatory is too hot, the shower is too cold, etc.). The capacity exists to make adjustments and corrections.

Closed loops for emergency fixtures, on the other hand, require infrequent but often a large and sudden volume of water that must be in the correct temperature range every time. Without some level of manual or automated system monitoring and correction, along with an aggressive system maintenance protocol, tepid loops present a challenge.

For recirculated tepid loops serving emergency fixtures, Armstrong suggests that ONLY Digital Recirculating Valves should be considered. Please consult your Armstrong representative or Armstrong directly.



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

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