

SECTION 22 42 23
COMMERCIAL SHOWERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Individual showers.
 2. Shower heads and shower valves.
 3. Grout.

1.2 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. PMMA: Polymethyl methacrylate; also known as "acrylic."

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for showers.
 2. Include rated capacities, operating characteristics, and furnished specialties and accessories.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Shower Valve Washers and O-Rings: Equal to 10 percent of amount of each type and size installed.
 2. Shower Valve Cartridges and O-Rings: Equal to 5 percent of amount of each type and size installed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Shower valves intended to convey or dispense water for human consumption are to comply with the U.S. Safe Drinking Water Act (SDWA), with requirements of the Authority Having Jurisdiction (AHJ), and with NSF 61 and NSF 372, or be certified in compliance with NSF 61 and NSF 372 by an ANSI-accredited third-party certification body, in that the weighted average lead content at wetted surfaces is less than or equal to 0.25 percent.

2.2 INDIVIDUAL SHOWERS

- A. Individual Cabinet Showers: .

1. Source Limitations: Obtain cabinet showers from single source from single manufacturer.
2. General: Factory-fabricated , accessible cabinet shower, with valve and receptor.
3. Nominal Size: 36 by 36 inches .
4. Material: Composite .
5. Access: front access.
6. Color: White .
7. Accessibility Options: Grab bar and bench.
8. Shower Head and Shower Valve: Shower Head with Single-Handle, Thermostatic/Pressure-Balancing Mixing Valve .
9. Supplies: NPS 1/2 copper tubing.
10. Drain: Grid, NPS 2.

2.3 SHOWER HEADS AND SHOWER VALVES

- A. Shower Head with Single-Handle, Thermostatic/Pressure-Balancing Mixing Valve: .

1. Source Limitations: Obtain shower heads and shower valves from single source from single manufacturer.
2. Description: Single-handle, accessible, thermostatic/pressure-balancing mixing valve with hot- and cold-water indicators; check stops; and hose with handheld shower head on sliding rodshower head.
3. Shower Valve:
 - a. Standards: ASME A112.18.1/CSA B125.1 and ASSE 1016/ASME A112.1016/CSA B125.16.
 - b. Body Material: Solid brass.
 - c. Finish: Polished chrome plate .
 - d. Mounting: Concealed .
 - e. Operation: Single-handle, twist or rotate control.
 - f. Antiscald Device: Integral with mixing valve .
 - g. Check Stops: Check-valve type, integral with or attached to body; on hot- and cold-water supply connections.
4. Supply Connections: NPS 1/2.
5. Shower Head:
 - a. Standard: ASME A112.18.1/CSA B125.1.

- b. Type: Ball joint and head integral with mounting flange .
- c. EPA WaterSense: Required.
- d. Shower Head Maximum Flow Rate: 2.5 gpm.
- e. Shower Head Material: Metallic with chrome-plated finish.
- f. Spray Pattern: Fixed.
- g. Integral Volume Control: Required.
- h. Temperature Indicator: Integral with valve .

2.4 SHOWER BASINS

A. FRP Shower Basins: .

- 1. Source Limitations: Obtain shower basins from single source from single manufacturer.
- 2. Description: FRP base for built-up-type shower fixture.
- 3. Standard: CSA B45.5/IAPMO Z124.
- 4. Type: Handicapped/accessible.
- 5. Nominal Size and Shape: 36 by 36 inches square .
- 6. Color: White .
- 7. Outlet: Drain with NPS 2 outlet ; lip drain outside shower in accordance with the ADA.

2.5 GROUT

- A. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- B. Characteristics: Nonshrink; recommended for interior and exterior applications.
- C. Design Mix: 5000 psi, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine rough-in of water-supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before shower installation.
- B. Examine walls and floors for suitable conditions where showers will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Assemble shower components according to manufacturers' written instructions.

- B. Install showers level and plumb.
- C. Install ball valves in water-supply piping to the shower if supply stops are specified with the shower valve. Comply with valve requirements specified in Section 22 05 23.12 "Ball Valves for Plumbing Piping" Install valves in locations that are accessible for ease of operation.
- D. Install shower flow-control fittings with specified maximum flow rates in shower arms.
- E. Set shower receptors and shower basins in leveling bed of cement grout.
- F. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings. Comply with escutcheons requirements specified in Section 22 05 00 "Common Work Results for Plumbing."
- G. Seal joints between showers and floors and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 07 92 00 "Joint Sealants."

3.3 PIPING CONNECTIONS

- A. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- B. Comply with water piping requirements specified in Section 22 11 16 "Domestic Water Piping."
- C. Comply with traps and soil and waste piping requirements specified in Section 22 13 16 "Sanitary Waste and Vent Piping."

3.4 ADJUSTING

- A. Operate and adjust showers and controls. Replace damaged and malfunctioning showers, fittings, and controls.
- B. Adjust water pressure at shower valves to produce proper flow.

END OF SECTION 22 42 23