

**Modify Section 22 40 00 and 22 47 00 per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.**

## 22 40 00 PLUMBING FIXTURES

### .01 Plumbing Fixtures

#### A. Floor Drains

1. Floor drains in mechanical rooms, laundries, promenades, terraces, and similar locations shall have perforated sediment bucket with integral auxiliary drainage rim so designed that grate cannot be set in place until bucket is in position.
2. Sterilizers and autoclaves shall have a fixed air gap between the equipment and the sewer.
3. Every floor drains located in areas where air is introduced into air handling equipment shall have their traps equipped with a trap seal primer valve with automatic vacuum breaker shall be equipped with a ProSet trap guard to prevent the trap from drying out and to prevent sewer gas from entering the occupied space.
4. Floor drains located above the ground floor shall be equipped with clamping collars and shall be flashed with 24" x 24", 6-lb. sheet lead.
5. A floor drain shall be provided to serve each emergency shower. Drain shall be located directly below shower head. Floor shall slope toward drain.

#### B. Water Closets

1. Toilets shall be wall hung, vitreous china, elongated bowl, siphon jet action, 1 1/2 inches top spud similar to American Standard AFWall.
2. Toilet seats shall be open front, no cover, white with stainless steel check hinge similar to Church.
3. Closet fittings and carrier shall be similar to Josam's Unitron series.
4. Flush valves shall be Sloan or Zurn water saver type. Shall not exceed 1.6 gal./flush.
5. Water closets in women's restrooms shall be equipped with dual-flush flushometers.

#### C. Urinals

1. Urinals shall be high efficiency wall hung, vitreous china, washout with 3.4-inch top spud and 2-inch outlet. Urinals shall be similar to Zurn #Z5798 "The Pint".
2. Carriers shall be complete with fixture bolts, bearing plate, adjustable extension, steel pipe uprights, cantilever foot bases and chrome plated trim. Carriers shall be similar to Josam Unitron series.
3. Flush valves shall be sensor operated, hard wired, and consume no more than 1/8 gallon per flush. Acceptable manufacturers: Sloan, Zurn, or Toto.

4. The use of waterless urinals is ~~required~~ prohibited in stadiums and arenas. The use of waterless urinals is prohibited elsewhere.

#### D. Lavatories

1. Lavatory carriers shall be of the institutional type with support plate, bearing plate steel uprights and block bases for supporting lavatory fixture with concealed hangers. Carriers shall be similar to Josam C-356.
2. Lavatory supply and waste lines should enter the wall to allow for easier cleaning and better sanitation.
3. Provide at least one hose bibb on the hot and cold water supply under one lavatory in each restroom.
4. Lavatory faucets shall be of the self closing type with the closing time of operation adjustable up to fifteen (15) seconds. They shall contain interchangeable operating units and shall be of one (1) manufacturer. Units shall close with the pressure of the water. All units shall be vandal-proof and all operating parts in contact with water shall be Monel metal, including a stamped Monel metal seat.
5. Faucet shall be Chicago faucet No. 406 (or No. 747 if a pop-up waste is specified with faucet), center-set lavatory fitting. Equivalent units, as manufactured by Moehn Faucet Division, Cole Valve Company, or American Standard, are acceptable.

#### E. Showers

1. Single Showers
  - a. Shower heads shall be self-cleaning and of the vandal-proof type solidly attached to shower stall. Use water saver type.
  - b. Shower controls shall be Powers Series 420, thermostatically controlled, with chrome plated metal levers.
  - c. Showers shall have Dole flow controls, limiting water flow to two (2) gallons per minute, installed between the mixing valve and the shower head.
2. Gang Showers
  - a. Shower heads and controls shall be the same as for single showers.
  - b. Piping supplies shall be from below the floor.
  - c. Units shall be manufactured by Bradley or equal.

#### F. Antifreeze Hose Bibs

1. Antifreeze hose bibs are needed adjacent to all building entrances for the purpose of washing down walks and entrances.
2. Hose bibbs shall be key type.

#### G. Service Sinks

1. Service sinks shall be similar to Stonite Precast Terrazzo Mop Service Basins as manufactured by Stonite Products Company. Service basins shall be 24 inches square with three (3) inch wide and twelve (12) inch high shoulders and shall be

cast as a single unit of terrazzo. The sides of the service basin installed against any wall shall be provided with stainless steel tiling flanges cast integral with the basin and extending two (2) inches above the shoulders. On exposed side the service basin shall be provided with integral cast stainless steel caps extending over the top of the shoulder and extending at least 1 1/2 inches down the sides. Provide three (3) inch drain connection with stainless steel strainer plates and traps. Install counter-flashing as required.

2. Service sink fitting shall be equal to Chicago faucet No. 897 with bucket hook, wall brace, 3/4 inch threaded hose connection, vacuum breaker, and integral stops.

#### H. Roof Drains

1. Roof drains shall be Josam or equal.
2. Insulate drain body and all horizontal rain leaders.

### 22 47 00 DRINKING FOUNTAINS AND WATER COOLERS

#### .01 Drinking Water Cooling Systems

##### A. Electric Water Coolers

1. Electric water coolers shall be wall mounted, semi-recessed and shall be supported by carriers similar to Josam No. C-352.
2. The coolers shall be equipped with a basin of 18-8 stainless steel, bubbler, water valve and pressure regulator, a sealed refrigeration system with air-cooled condenser.
3. Front panel of unit shall be removable and unit shall be so constructed that the refrigeration unit can be removed without moving the cooler from the wall.
4. No "hot water for coffee" type dispensers are permitted.
5. In public areas the water cooler shall be accessible to the handicapped.
6. Coolers containing lead solder joints, storage tanks, or other elements constructed of lead that can be in contact with the drinking water are not acceptable.

#### **END of revision**

#### **Update Commentary:**

Section was updated primarily for the following reasons:

- 1) *Add dual flush requirements at some water closets.*
- 2) *Require the use of waterless urinals at some locations.*