

## SECTION 22 40 00 - PLUMBING FIXTURES

### PART 1 - GENERAL

#### 1.1 DESCRIPTION

- A. The requirements of this section apply to the plumbing fixtures and trim.
- B. Provide fixtures as shown on the Drawings and specified herein. Provide all required fixture trim and accessories for a complete, finished installation.
- C. Related Work: The requirements of Section 22 05 00, Common Plumbing Materials and Methods, also apply to this section.

#### 1.2 QUALITY ASSURANCE

- A. Code: Comply with requirements of the Oregon State Plumbing Specialty Code.
- B. Fixture color: White unless indicated otherwise.
- C. Potable Water Valves: Potable water valves not limited to faucets, mixing valves, or pressure reducing valves. Valves shall meet NSF Standard 61, Section 9, for drinking water faucets and shall be brass construction. Brass components which contact water within the faucet shall be from brass which contains no more than 0.25 percent lead by dry weight.

### PART 2 - PRODUCTS

#### 2.1 PIPING

- A. Piping, fittings, and related items as specified in related Sections 22 10 00.

#### 2.2 INTERIOR PLUMBING MATERIALS

- A. Single Fixture Tempering Valve: Thermostatic mixing valve. Watts MMV. ASSE 1016 listed. Bronze/brass construction with stainless steel disc and springs, copper thermostat.

#### 2.3 PLUMBING FIXTURES AND TRIM

- A. Stops: Furnish stop valves for all fixtures. Loose key style, in wall, angle or straight through pattern to fit installation. Stops to be all brass with full turn brass stem and replaceable washer, no plastic. Compression nuts to be high copper content brass. Finish to be copper nickel chrome plate. Product to carry manufacturer's name. Risers to be chrome plated copper. Provide chrome plated shallow escutcheons. McGuire, Chicago, Brasskraft, Keeney, Zurn, or approved substitute.

- B. Fixture Traps: Exposed fixture tailpieces, traps, and wastes shall be chrome plated 17 gauge seamless brass tube with cast brass nuts and deep or box style escutcheons as required to conceal rough piping. Products to be stamped with manufacturer's name and material gauge. McGuire, Keeney, Zurn, or approved.
- C. Provide compliant fixture piping protector kit on all exposed accessible fixture traps and water supplies. White anti-microbial molded PVC. IPS Truebro "Lav Guard 2", McGuire "ProWrap", Plumberex "Pro-extreme", or approved substitute.
- D. Water Closet: Dual Flush 1.1/1.6 Gallon per Flush Water Closet, Flush Valve, Vitreous China: Elongated water closet bowl shall be designed for dual flush gallon siphon jet flushing action.
1. Install each listed water closet with the following:
    - a. Flush Valve: Quiet acting, exposed chrome plated brass with ADA non-hold open handle, screwdriver check/control stop with vandal resistant cap, cast wall flange, synthetic rubber diaphragm, and vacuum breaker, as recommended by closet manufacturer. Valve shall be designed to provide dual flush operation. American Standard, Moen, or approved equal.
    - b. Seat: Solid white heavy weight molded plastic seat, with molded in bumpers; open front less cover for elongated bowl with check and self-sustaining hinge. Hinge and hardware to be 300 series stainless steel. Church 295-SSC, Beneke 523-SS/CH-B, or Bemis 1955 SS/C, Zurn Z5956SS-EL-STs.
    - c. Provide with wall carrier that includes anchor lug at the back for a 750 lb. rated device. Jay R. Smith, Zurn, or approved.
  2. Wall Mount: Top Spud without bed pan lugs. Kohler K-4325 series. Mount "WC-1" at 15" AFF. Mount "WC-2" at 17" AFF. Provide with 750 lb. rated carrier, Zurn Z1203-N-X series or equal Jay R. Smith. Provide with neoprene gasket at connection from fixture to carrier inlet.
- E. Lavatory, Vitreous China:
1. Faucet: Chrome plated brass body with ADA Dual Handle operation, unless otherwise noted, vandal resistant 0.5 gpm aerator with grid strainer waste. Chicago 895-369-GNRGD2-E2805-5 JKCP.
  2. "LV-1": Wall Hung, 20" x 18" Size: Provide with concealed arm hangers and wall backing plate (J.R. Smith, Josam, Wade, Watts, or Zurn). American Standard 0355.012 or Kohler K-2005.
- F. Drinking Fountain "DF-1": Wall mounted, 14 gauge, stainless steel, dual height with push button operator and vandal resistant bottom cover plate. Provide with stainless steel wall plate and upper basin extension for ADA compliance. Filtered and Non-refrigerated. Provide with bottle filler. Unit shall be 60HZ. Elkay LZSTLDDWSVRSK.
- G. Stainless Steel Sinks: Type 302 or 304, 18 gauge, self-rimming stainless steel sink (unless noted otherwise), fully undercoated, drawn bowl with satin finish. Elkay numbers are listed; Just is approved. Install with stainless steel crumb cup strainer outlet or grid strainer (as noted), flange tail piece, and 1-1/2" trap. For faucets, Chicago numbers are listed, and only allowed. Sinks shall be punched for faucet specified. Coordinate number of holes required. Cock hole covers are not allowed. Provide with tail piece as required for dishwasher or AC condensate drain per drawings.

Location	Tag	Basin (Elkay)	Faucet (Chicago)	ADA	Strainer, Disposal, etc.
Band/Choir Room	S-4	Single Compartment ELUHAD211555 with 5-3/8" depth.	786 Series, 8" projection spout (L8) <u>set rigid</u> with 1.5 GPM vandal resistant aerator, ADA 369	Yes	Grid strainer. Provide with flexible guard style bubbler Chicago 748-665 FHCP. See

			handles.		note # 1.
Break Room	S-2	Single Compartment ELHAD211555 with 5-3/8" depth.	2300	Yes	3/4" HP In-Sink-Earator Evolution series disposal. See note # 1.
Nurse	S-3	Single Compartment ELUHAD211555 with 5-3/8 " depth.	786 Series, 8" projection gooseneck set rigid with 1.5 GPM vandal resistant aerator, ADA 317 wrist blade handles.	Yes	Grid strainer. See note # 1.
Science	S-1	Epoxy Sink. See Architect division.	786 Series, 8" projection spout (L8) <u>set rigid</u> with 1.5 GPM vandal resistant aerator, ADA 369 handles.	No	CPVC grid strainer & trap.

Note # 1: Provide 16 GA S.S. re-enforcement plate below sink and faucet securing nuts. See detail on drawings.

- H. LAB Gas Outlet "GO-1": Indexed for gas, vandal resistant anti-rotation pin, 2-outlets at 180°. Chicago 981-VR909CAGCP.
- I. Drains: Zurn, Jay R. Smith, Wade and Mifab. Numbers scheduled on drawings represent minimum acceptable standard for locations involved.
- J. Combination Shower/Eyewash, "ESH-1":
  - 1. ANSI Z358.1-2009 Compliant. Horizontal supply emergency shower with stainless steel shower head, galvanized steel pipe, rigid stainless steel operating rod and chrome plated ball valve. Provide with concealed service line. Eyewash with stainless steel bowl, chrome plated ball valve with paddle handle, plastic eyewash heads with dust cover, pressure compensating stream controller, and emergency fixture sign. Provide eye-wash with trapped drain connection and wall bracket. Guardian G1643 with G1814 or equal Encon, Haws.
  - 2. Thermostatic mixing valve (factory set to 85 degrees) for single emergency eye wash. Unit shall include a built-in cold water by-pass, rough bronze finish, solid bimetal thermostat, locking temperature regulator with limit stop factory set for 90 degrees, integral check stops, and dial thermometer and recessed stainless steel cabinet with door and lock.
    - a. Performance: Unit shall have a flow range of 3-GPM to 44-GPM with a maximum pressure loss of 20-PSI and come with a full 1-year warranty.
    - b. Quality Assurance: Unit shall be certified to ASSE 1071. Unit shall be certified to meet Low Lead requirements of wetted surface area containing less than 0.25% lead by weight.
    - c. Guardian G3807LF, or equal Haws or Encon.
  - 3. Provide with 120 volt powered flow switch with audible (100dB at 10') alarm and visual (1000 min. Lumen LED) alarm. Provide with silence switch. Guardian AP275-100 or equal Haws or Encon.

- K. Eyewash "EW-1": Provide new unit with stop / shut-off valve. Deck mounted, swing-down eye wash, less bowl with 1/2" valve with PTFE coated O-ring seals. Supplied with in-line strainer to protect valve and spray heads from debris in water line. Unit shall comply with ANSI Z358.1 – 2014 and shall include ANSI compliant sign. Dual side by side spray heads with flip to dust cover and internal flow control. Activate valve by rotating 90 degrees from stored position. Provide with under-counter mount tempering valve. Valve shall be certified to ASSE 1071 and be certified to meet low lead requirements of wetted surface area less than 0.25% lead by weight. Guardian G1849 Series with G3600LF valve or equal Haws or Encon.
- K. Fixtures Furnished by Owner (and/or Under Another Section): Some fixtures will be furnished by the Owner (and/or under another specification section). Include under this section the required rough-ins, 3/8" chrome plated supplies with stops, 1-1/2" chrome plated cast brass "P" trap (or, on kitchen sinks, 2" cast iron "P" traps) for each sink compartment, and make final connection. For science tables provide rough-in with service valves and CPVC trap. Verify all rough-ins and connection requirements before commencing work.

### PART 3 - EXECUTION

#### 3.1 PIPING

- A. Install in accordance with Section 22 10 00.

#### 3.2 FIXTURE INSTALLATION AND CONNECTION

- A. All exposed fixture hardware and piping shall be plated with polished chrome unless otherwise directed in these specifications. Where chair carriers or special carrier design are not indicated, provide 3/16" thick by 6" wide steel to waste or vent piping and to available building construction.
- B. All fixtures in contact with finished walls and floors shall be caulked with waterproof, white, non-hardening sealant which will not crack, shrink or change color with age.
- C. All fixtures and component parts shall conform to governing codes.
- D. All fixtures shall be securely mounted level and plumb or as recommended by the manufacturer. Mount fixtures intended to be accessible to the handicapped at the dimensions required by code.

#### 3.3 STARTUP

- A. Adjust flush valves, pressure reducing valves, mixing valves, water heater thermostats, and similar equipment.
- B. Remove construction protection, tags and labels and thoroughly clean all plumbing equipment and trim. Scour all fixtures just prior to building acceptance.
- C. Provide start-up documentation to Commissioning agent per section 22 08 00.

END OF SECTION 22 40 00