

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 3 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 handicap piping protector kit on all exposed accessible fixture traps and supplies (I&S Insulation Co. Inc., Brocar Products Inc. kit 500R, McGuire "Prowrap," Plumberex "Pro-2000" or approved substitute.
- D. 1.6 Gallon Flush Water Closet, Flush Valve, Vitreous China, "WC-1" and "WC-2": Elongated water closet bowl shall be designed for 1.6 gallon siphon jet flushing action.
 - 1. Install each listed water closet with the following:
 - a. Flush Valve: Quiet acting, exposed chrome plated brass with line voltage powered infra-red flush operation, screwdriver check/control stop with vandal resistant cap, cast wall flange, synthetic rubber diaphragm, and vacuum breaker, as recommended by closet manufacturer. Provide with transformers sized to operate up to 6 flush valves or faucets. Sloan, Zurn.
 - 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-ST5.
 - 2. Floor Mounted, Top Spud "WC-1": American Standard 2234.015, Kohler K-4350, or Eljer 111-2125. Toto CT 705.
 - 3. Floor Mounted, Top Spud 18" High "WC-2": American Standard 3043.102, Kohler K-4368, Eljer 111-2145. Toto CT 705L.

- E. Lavatory, Vitreous China
 - 1. "LV-1" Faucet: Chrome plated brass body with vandal resistant 0.5 gpm aerator, below counter mixing valve, with grid strainer waste. Infra-red operated faucet with line voltage power. Sloan ETF-80 or approved.
 - 2. Wall Hung, 20" x 18" Size "LV-1": Provide with concealed arm hangers and wall backing plate (J.R. Smith, Josam, Wade, Watts, or Zurn). American Standard 0355.012, Kohler K-2005, or Eljer 051-2104.
- F. Drinking Fountain, "DF-1": Wall mounted, 14 gauge stainless steel, dual fountain with one fountain equipped for the handicapped with dual side lever or push bar/button operator. Provide with vandal resistant bottom cover plates, wall mounting plate, stainless steel wall plate, extension skirt on upper fountain. Haws 1119.14 or equal Halsey Taylor, Elkay, Sunroc.
- G. Stainless Steel Sinks: Type 302 or 304 (unless noted otherwise), 18 gauge, self-rimming stainless steel sink, 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, flange tail piece, and 1-1/2" trap. For faucets, Chicago numbers are listed, T&S Brass approved only. 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.
STEM	S-4	Single Compartment LRAD 2522	786-GN8AE3CP	Yes	Grid strainer.

- H. Epoxy Sinks: Drop-in style. Numbers listed are Durcon. Provide with grid strainer outlet to match sink construction. Include acid resistant P-trap/tail piece to match approved acid resistant piping. For faucets, Chicago numbers are listed, T & S Brass approved.

Location	Tag	Basin (Elkay)	Faucet (Chicago)	ADA	Strainer, Disposal, etc.
Science Student	S-1	D24C A25	930-369CP 930-369CP	No Yes	Rigid spout, acid waste, acid resistant grid strainer.
Science Prep	S-3	D24C	930-369CP	No	Rigid spout, acid waste, acid resistant grid strainer.
Science Instructor	S-2	D24C	903-369-CP	No	Rigid spout, acid waste, acid resistant grid strainer. Provide with swing arm eye wash Haws 7610.

- I. Drains: Zurn, Jay R. Smith, Wade and Mifab. Numbers scheduled on drawings represent minimum acceptable standard for locations involved.
- J. Hose Bibs:
 - 1. Outside "HB-1": Non-freeze type with vacuum breaker, bronze wall casing and wall clamp. Zurn Z-1310-6, Wade W-8620, Woodford 67 series, Smith 5609-PB, or Watts HY420.
- K. Fixtures Furnished by (Another Section) (Fume Hood): Some fixtures will be furnished by the (under another specification section). Include under this section the required rough-ins, 3/8" chrome plated supplies with stops, 1-1/2" acid waste "P" trap for each sink compartment, 1/2 " gas stub-out with valve and AGA flex connection, and make final connection. Verify all rough-ins and connection requirements before commencing work.

2.4 EMERGENCY FIXTURES

- A. Combination Shower/Eyewash, "ES-1": Horizontal supply emergency shower with stainless steel shower head, galvanized steel pipe, rigid stainless steel operating rod and chrome plated ball valve, and 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. Haws 8123H and 7360 BT or equal Encon, Guardian approved.

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.

END OF SECTION