# SECTION 224000 - 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 220500, 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. Fixture Samples: Provide actual samples of plumbing fixtures and faucets prior to or included with the submittal package. Approved samples may be incorporated into the project.

D. 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 221000.

2.2 PLUMBING FIXTURES and trim

A. Stops: Furnish stop valves for all fixtures. Wheel handle 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 where concealed. Finish on exposed stops as noted. Product to carry manufacturer’s name. 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 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. Concealed fixture traps may be rigid plastic.

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. 1.28 Gallon, Water Closet, Elongated Type, Vitreous China: Floor mounted two piece close coupled, gravity tank type water closet shall be specifically designed for 1.28 gallon siphon jet flush. Minimum MaP score of 1000. Provide satin nickel finish stop, escutcheon, and flush lever.

1. Seat: White molded wood seat, with bumpers; closed front with cover to match bowl. Bemis 400.00. Church, Olsonite approved.

2. Residential units “WC-1”: Floor mounted, standard height. Toto CST744EN or approved American Standard, Kohler, or approved alternate

3. Residential ADA units “WC-2”: Same as above except ADA height fixture. Toto CST744ELN, or approved American Standard, Kohler, or approved alternate.

E. 1.28 Gallon, Water Closet, Tank Type, Vitreous China: Water closet shall be specifically designed for 1.28 gallon siphon jet flush.

1. 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, Bemis 1955 SS/C, or Zurn Z5956SS-EL-STS.

2. Floor Mounted "WC-3": Toto CST 704, or approved American Standard ,Kohler K-3432, or approved alternate.

F. Residential Units Lavatory :

1. Faucet: Chrome single handle washerless cartridge 4” centerset body with matching pop-up drain. 0.50 gpm flow rate. Symmons S-9610-0.5.

2. “LV-1” & “LV-2” Counter Mounted, Self-rimming, 19” round china with front overflow. Toto LT512.4 or approved American Standard, Kohler, or approved alternate.

F. Public Lavatory LV-3:

1. Faucet: Chrome single handle washerless cartridge 4” centerset body with matching pop-up drain. 0.50 gpm flow rate. Symmons S-9610-0.5.

2. Wall Hung, 20" x 18" : 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 equal Toto.

G. Stainless Steel Kitchen Sink:

1. 18 gauge, self-rimming stainless steel sink, bowl fully undercoated, with satin finish. Install with crumb cup strainer outlet, flange tail piece, and 1-1/2” trap.

2. Residential Kitchen Double Sink “S-1”: Elkay LRQ3319. Install with Delta 2400 with sprayer and lever handles (H28).

3. Residential Kitchen Double Sink, ADA “S-2”. Elkay LRADQ331955. Install with Delta 2400 with sprayer and lever handles (H28.)

H. Recessed Clothes Washer Fitting: Hot and cold water valve washing machine waste outlet with quarter turn ball valves and water hammer arresters. Sioux Chief Ox Box. Fire rated where required. With secondary drainage funnel for HVAC unit drainage where required.

J. Tub Shower”TS-1” : Install with chrome finish water saving shower head, arm, and flange, tub spout with diverter, and drain and overflow fitting. Lever handle, pressure equalizing mixing valve with temperature limit stop, and chrome finish. Delta T17TH155, or approved Chicago, Moen or alternate equal. Shower flow rate to be 2.0 gpm. 32” x 60” one-piece tub and shower with chrome drain and overflow, fully backed and reinforced for future grab bars. DCS-PNW XS100LSHAC.

K. Tub Shower, ADA “TS-2”: Same as “TS-1”, except with grab bars & removable seat.

L. Service Sump (Mop Basin)”SS-1”:

1. Faucet exposed, brass body, rough plated, long spout, top brace, hose end spout with bucket hook, vacuum breaker and integral stops in shanks. Chicago 897, T & S B-0665-BSTP, or equal Zurn, Delta Commercial, mounted 24" above rim. Install with 18 gauge type 302, No. 4 finish stainless steel splash on the two walls.

2. Molded stone 24" x 36" x 10" deep with vinyl bumper guard and 3" brass body strainer outlet. Fiat, Mustee, Swan or approved substitute.

N. Hose Bibs:

1. “HB-2”: Exterior non-freeze hot and cold mixing self-draining type with vacuum breaker, removable handle, brass wall casing and wall clamp. Woodford HC67.

2. “HB-1”: Exterior non-freeze self-draining type with vacuum breaker, removable wheel handle, brass wall casing and wall clamp. Woodford 65.

O. Rood rains:

1. “RD-1&OD-1”: Combination Roof Drain/Overflow Drains. Zurn 164, or equal JR Smith, Sioux Chief. See plan for size.

## PART 3 - EXECUTION

3.1 PIPING

1. Install in accordance with Section 221000.
2. Hot and cold water stubouts to fixtures shall be copper. Secure stubouts with manufactured bracket system. Hubbard “Holdrite”, Sioux chief, or approved.

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 wall blocking for anchorage of manufacturers standard mounting bracket.

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 224000