

SECTION 220500 - PLUMBING PRODUCTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Specification Sections, apply to this Section.

1.2 GENERAL CONDITIONS:

- A. Complete installation of each fixture shall include trap and accessories with accessible stop or control valve in each hot and cold water branch supply line. Caulk between fixture and countertop with white silicone non-absorbent caulking compound. Point all edges.
- B. Install fixtures and fittings per local codes and manufacturer's instructions. Do not use plastic flexible water piping.

PART 2 - PRODUCTS

2.1 P-1 WATER CLOSET

- A. Kohler "Highcrest" K-4302-C, elongated bowl, white, floor mount, top spud with heavy duty open front seat. Siphon jet action requires 1.6 GPM flush valve. Flush valve to be battery powered sensor type: Sloan or approved equal by Zurn or Delaney.
- B. Approved alternate by American Standard, Crane, or Eljer.

2.2 P-2 ACCESSIBLE WATER CLOSET

- A. Kohler "Highcrest" K-4302-C, elongated bowl, white, floor mount, top spud with heavy duty open front seat. Siphon jet action requires 1.6 GPM flush valve. Flush valve to be battery powered sensor type: Sloan or approved equal by Zurn or Delaney.
- B. Approved alternate by American Standard, Crane, or Eljer.

2.3 P-3 URINAL

- A. Kohler white K-5016-T "Dexter Lite" urinal, top spud, vitreous china, siphon jet, and wall hangers. Flush valve to be battery powered sensor type 1.0 gpf by Sloan, Zurn, or Delaney. Carriers by Smith or Josam.
- B. Approved alternate by Kohler, or Eljer.

2.4 P-4 COUNTER MOUNT SINK

- A. Solid surface integral lavatory bowl, Kohler K-10950-4 battery powered electronic faucet, or Sloan ERF Optima Plus, or equal by Zurn, and 0.5 GPM flow restrictor, Chicago 327 open grid drain; chrome plated flexible supplies with loose key stops, cast brass P-trap

with cleanout plug, concealed arm chair carrier with foot support. Insulate all piping underneath.

- B. Approved alternate by Elkay or American Standard.

2.5 P-5 ACCESSIBLE WALL HUNG LAVATORY

- A. Kohler K-2030, "Greenwich", 20" x 18" wall hung, vitreous china, dual front overflow, D-shaped bowl, 8" centers, Kohler K-10950-4 battery powered electronic faucet, or equal by Zurn, and 0.5 GPM flow restrictor, Chicago 327 open grid drain; chrome plated flexible supplies with loose key stops, cast brass P-trap with cleanout plug, concealed arm chair carrier with foot support. Insulate all piping underneath. Fixture must comply with all ADA requirements.

- B. Approved alternate by American Standard, or Eljer.

2.6 P-6 MEDIUM DUTY FLOOR DRAIN

- A. Deep seal trap and bronze strainer, Zurn 415 with Z1000 trap. Use Zurn 415C with clamping collar where floor membrane is used. Trap primer fitting.

- B. Approved alternate by Wade, or Smith.

2.7 P-7 SERVICE SINK

- A. Kohler "Whitby" K-6710-0, corner model, with rim guard; 3" grid drain with strainer and socket, "Kinlock" K-8907-RP faucet with top brace, stops, and vacuum breaker, 5-foot rubber hose and wall hook.

- B. Approved alternate by Kohler, or Eljer.

2.8 P-8 MEDIUM DUTY FLOOR DRAIN

- A. Deep seal trap and bronze strainer, Zurn 415 with Z1000 trap. Use Zurn 415C with clamping collar where floor membrane is used. Trap primer fitting.

- B. Approved alternate by Wade, or Smith.

2.9 P-9 NON-FREEZE WALL HYDRANT

- A. All brass non-freeze hydrant with 12" long stem, complete with vacuum breaker.

- B. Smith #5609 or approved alternate by Woodford or Zurn.

2.10 P-10 PRIMARY ROOF DRAIN

- A. Smith #1010 with sump receiver, underdeck clamp, extension, and cast iron dome.
 - B. Approved alternate by Wade or Zurn.
- 2.11 P-11 SECONDARY ROOF DRAIN
- A. Smith #1010 with sump receiver, underdeck clamp, extension, and cast iron dome.
 - B. Approved alternate by Wade or Zurn.
- 2.12 P-12 DOWNSPOUT NOZZLE
- A. Rough bronze body with threaded inlet and flange to secure nozzle to wall.
 - B. Smith # 1770 or approved alternate by Wade or Zurn.
- 2.13 P-13 WATER COOLER
- A. Cabinet shall be heavy ga. steel painted with baked on enamel. Top shall be stainless steel. Unit shall deliver 7.5 GPH of 50-degree water at 80-degree ambient and 80-degree inlet water temperature. Pushdown bars to be on front and sides of cooler. Cooler shall built to meet ARI Standard 1010-84, and shall be barrier-free in accordance with ADA. Mount one cooler at standard height and one at wheel chair level.
 - B. Sunroc model NWC-8A or approved alternate by Halsey Taylor, Haws, Elkay, or Oasis.
- 2.14 P-14 FLOOR SINK
- A. Smith cast iron 8-1/2" square 6" deep receptor with acid resisting enameled interior and nickel bronze rim. 3/4 grate. Dome sump receiver with strainer. Flashing collar.
 - B. Approved alternate by Josam, Wade, or Zurn.
- 2.15 P-15 INDOOR HOSE BIBB
- A. Chicago No. 15 chrome plated 3/4" hose bibb with E27 vacuum breaker.
- 2.16 CLEANOUTS
- A. Floor type - Zurn Z-1420-2.
 - B. Wall Type - Zurn Z-1445-1.
 - C. Resilient Flooring - Zurn Z-1400-6.
 - D. Exposed drain lines - Zurn Z-1440-A.

- E. General purpose - Zurn Z-1440-A.
- F. Approved alternates by Smith, Wade, or Josam.

2.17 WH-1 GAS WATER HEATER WITH FLUE DAMPER

- A. Water heater(s) shall be of the seamless glass lined steel tank construction in which the glass coating is applied to the water side surfaces of the tank after the tank has been assembled and welded. The condensing flue coil shall be coated on the flue gas side with acid resistant glass lining designed for use in condensing heaters.
- B. The heater(s) shall be suitable for venting with B-vent materials. The heater shall be factory assembled and tested.
- C. The burner shall be of a design that requires no special calibrations on start up.
- D. The heater(s) shall be approved for 0" clearances to combustibles.
- E. The tanks shall be foam insulated and equipped with a ASME rated temperature pressure relief valve.
- F. The water heater shall be UL listed and exceed the minimum efficiency requirements of ASHRAE/IES 90.1-1999.
- G. Operation of the heater in a closed system where thermal expansion has not been compensated for with a properly sized thermal expansion tank will void the warranty.
- C. Install floor mounted mechanical channel seismic restraint on water heaters.
- D. Approved Manufacturers: Bradford White, A.O. Smith, or American.
- L. Install "Quakemaster" (or equal) floor mounted seismic restraint on water heater.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Install accordance with all codes and manufacturer's instructions.
- B. Install floor mounted heavy duty seismic restraint on water as described above.

END OF SECTION 220500