

SECTION 15450 - PLUMBING FIXTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Water closets.
 - 2. Urinals.
 - 3. Lavatory.
 - 4. Shower.

1.3 REFERENCES

- A. ANSI A112.6.1 - Supports for Off-the-Floor Plumbing Fixtures for Public Use.
- B. ANSI A112.18.1 - Finished and Rough Brass Plumbing Fixture Fittings.
- C. ANSI A112.19.1 - Enameled Cast Iron Plumbing Fixtures.
- D. ANSI A112.19.2 - Vitreous China Plumbing Fixtures.
- E. ANSI A112.19.3 - Stainless Steel Plumbing Fixtures (Designed for Residential Use).
- F. ANSI A112.19.5 - Trim for Water-Closet Bowls, Tanks, and Urinals.
- G. ARI 1010 - Drinking Fountains and Self-Contained Mechanically Refrigerated Drinking Water Coolers.

1.4 QUALITY ASSURANCE

- A. Fixtures shall be by the same manufacturer for each product specified throughout.
- B. Trim shall be by the manufacturer for each product specified throughout.
- C. Fixtures shall conform to Connecticut Sanitary District requirements.

1.5 SUBMITTALS

- A. Submit product data under provisions of Section 01300. Submittals shall include fixtures, sizes, rough-in dimensions, utility sizes, trim, and finishes.

- B. Submit operation and maintenance data under provisions of Section 01700. Submittal shall include fixture trim exploded view and replacement parts lists.

1.6 WARRANTY

- A. Provide five-year manufacturer's warranty under provisions of Section 01700.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Fixtures: Elger, Crane or Kohler, American Standard.
- B. Fixture Trim: Chicago Faucet, Symmons, or Kohler.
- C. Flush Valves: Coyne & Delany, Sloan or Zurn.
- D. Water Closet Seats: Bemis, Church, Crane or Kohler.
- E. Fixture Carriers: Josam, J.R. Smith, or Zurn.
- F. Items of the same function and performance are acceptable if submitted and approved in conformance with Section 01300.

2.2 WATER CLOSET

- A. P-1:
 - 1. Bowl: ANSI A112.19.2; wall-hung, siphon jet vitreous china closet bowl, with elongated rim, 1-1/2 inch top spud, china bolt caps, equal to Kohler K-4330-ET, Kingston, Water-Guard Lite Toilet, 1 ½ gallon flush.
 - 2. Flush Valve: ANSI A112.18.1; exposed chrome plated, vandalproof, diaphragm type with oscillating handle, escutcheon, seat bumper, integral screwdriver stop and vacuum breaker, equal to Sloan Royal Model 111, 1 1/2 gallon flush.
 - 3. Seat: Solid black plastic, open front, extended back, self-sustaining hinge, brass bolts, without cover, equal to Kohler K-4671-C, Lustra.
 - 4. Wall-Mounted Carrier: ANSI A112.6.1; adjustable, concealed arms, cast iron frame, integral drain hub and vent, adjustable spud, lugs for floor and wall attachment, threaded fixture studs, nuts and washer, equal to Zurn ZR-1231/1204.
- B. P-1A (Handicapped):
 - 1. Same as P-1 above, except mounting height shall be 17 inches floor to rim.

2.3 URINAL

A. P-2:

1. Urinal: ANSI A112.19.2; vitreous china, slope front, wall-hung washout urinal with integral flushing rim, removable beehive strainer, 3/4-inch top spud, equal to Kohler K-4980-T, Bardon Water Saver, 1 gallon flush.
2. Flush Valve: ANSI A112.18.1; exposed chrome plated, diaphragm type with oscillating handle, escutcheon, integral screwdriver stop and vacuum breaker, equal to Zurn 4003-1, 1 gallon flush.
3. Carrier: ANSI A112.6.1, plate type system with bearing wall plate, tubular legs, floor and wall attachment lugs, equal to Zurn ZR-1222.

B. P-2A (Handicapped):

1. Same as P-2 above, except mounting height shall be 17 inches floor to rim.

2.4 LAVATORY

A. P-3:

1. Lavatory: The lavatory shall be 20" in width, and 18" in length. Lavatory shall be made of vitreous china. Lavatory shall have 4" centers. Lavatory shall have overflow. Lavatory shall be drilled for concealed arm carrier. Lavatory shall be equal to Kohler K-2054.
2. Trim: Sink faucet shall be of a single lever mixing type of brass construction set for 4" centers. Faucet shall have vandal-resistant aerator, extended lever handle and stainless steel ball equal to Delta Model 511-WFHGMHDF. Pair of 3/8-inch angle supply stops equal to Kohler K-7606 and 1 2-inch offset drain and perforated strainer equal to Kohler K-13885.

B. P-3A (Handicapped):

1. Lavatory: The wheelchair lavatory shall be 20" in width, and 18" in length. Lavatory shall be made of vitreous china. Lavatory shall have 4" centers. Lavatory shall have overflow. Lavatory shall be ADA compliant when installed with offset drain. Lavatory shall be drilled for concealed arm carrier. Lavatory shall be equal to Kohler K-2054.
2. Trim: Sink faucet shall be of a single lever mixing type of brass construction set for 4" centers. Faucet shall have vandal-resistant aerator, extended lever handle and stainless steel ball equal to Delta Model 511-WFHGMHDF. Pair of 3/8-inch angle supply stops equal to Kohler K-7606 and 1 2-inch offset drain and perforated strainer equal to Kohler K-13885. Insulate all trim and waste under the lavatory and mount trap parallel to the wall.

2.5 SHOWER VALVES

A. P-4:

1. Thru-wall single supply piping, slow closing valve system with surface-mounted cover. Slow closing single supply valve with cycle time adjustment and screwdriver service stop. Fre-Flo, all brass, vandal-resistant head with ball joint mounted to institutional type head bracket. Attached soap dish and sloped metal top cap. Stainless steel covering to be 18 gauge with No. 4 brush finish. Unit to be equal to Symmons Hydapipe Model 1-9015-60.

B. P-4A (Handicapped):

1. Thru-wall single supply piping, single outlet ADA system with surface mounted cover. Single supply tempered water on-off valve with blade type handle. Wall/hand shower with flexible 5' hose and in-line vacuum breaker mounted to institutional type head bracket, wall hooks. Attached soap dish and sloped metal top cap. Stainless steel covering to be 18 gauge with No. 4 brush finish. Unit to be equal to Symmons Hydapipe Model 1-9015-22-FSB.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.
- B. Verify adjacent construction is ready to receive rough-in work of this Section.

3.2 INSTALLATION

- A. Install each fixture with trap, easily removable for servicing and cleaning.
- B. Provide chrome plated rigid or flexible supplies to fixtures with loose key stops, reducers, and escutcheons.
- C. Install components level and plumb.
- D. Install and secure fixtures in place with wall supports, wall carriers and bolts.
- E. Seal fixtures to wall and floor surfaces with sealant as specified in Section 07900, color shall match fixture.
- F. Mount fixtures to the following heights above finished floor:

Water Closet:

Standard 16 inches to top of seat

<u>Water Closet:</u>			
Handicapped	18	inches to top of seat	
<u>Urinal:</u>			
Handicapped	17	inches to rim	
<u>Lavatory:</u>			
Handicapped	34	inches to top of basin rim	
<u>Water Closet Flush Valves:</u>			
Standard	11	inches minimum above bowl rim	

3.3 ADJUSTING AND CLEANING

- A. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.
- B. At completion, clean plumbing fixtures and equipment.
- C. Solidly attach water closets to floor with lag screws. Lead flashing is not intended to hold fixture in place.

END OF SECTION 15450