

**SECTION 22 4010
PLUMBING FIXTURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Sinks (SK)
- B. Emergency Showers and Eyewashes (ES/EW)
- C. Plumbing Fixtures' Fittings, Accessories, and Supplies

1.02 RELATED SECTIONS

- A. Section 07 9200 - Joint Sealants: Seal fixtures to walls and floors.
- B. Section 22 0510 - General Plumbing Requirements
- C. Section 22 1005 - Plumbing Piping.

1.03 REFERENCES

- A. NSF/ANSI 372 - American National Standard for procedures in evaluating product compliance with the 0.25% maximum weighted average lead content requirement.
- B. ASME A112.18.1 - Plumbing Fixture Fittings; The American Society of Mechanical Engineers; 2000.
- C. ASME A112.19.2M - Vitreous China Plumbing Fixtures; The American Society of Mechanical Engineers; 1998.

1.04 SUBMITTALS

- A. Refer to Section 22 0510 - General Plumbing Requirements for submittal procedures.
- B. Product Data: Provide catalog illustrations of fixtures, sizes, rough-in dimensions, utility sizes, trim, and finishes.
- C. Manufacturer's Instructions: Indicate installation methods and procedures.
- D. Maintenance Data: Include fixture trim exploded view and replacement parts lists.
- E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

- A. Products specified this section to be installed in a potable water system anticipated for human consumption shall be in compliance with the amended Safe Drinking Water Act S.3874, to reduce lead in drinking water. "Reduction of Lead in Drinking Water Act". 0.25% allowable lead content.
- B. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND PROTECTION

- A. Accept fixtures on site in factory packaging. Inspect for damage.
- B. Protect installed fixtures from damage by securing areas and by leaving factory packaging in place to protect fixtures and prevent use.

PART 2 PRODUCTS

2.01 COUNTER MOUNTED SINKS

- A. FIXTURE 'SK1'; LAB SINK
 - 1. Sink: Provided in lab furnishings.
 - 2. Accessories:
 - a. Faucet: Provided in lab furnishings, installed by plumbing contractor.
 - b. Drain: Provided in lab furnishings, installed by plumbing contractor.

- c. Eyewash/Facwash: ANZI Z358.1-2014. Dual purpose drench hose for deck mounting pull out eyewash with backflow preventer. 2 spray heads with flip top dust cover. 8" reinforced PVC hose at 275psi working pressure. ANSI compliant identification sign to be mounted on wall. Provide optional thermostatic mixing valve with eyewash.
 - 1) Manufacturers:
 - (a) Guardian; Model G5022-BP-G6020
 - (b) WaterSaver; Model EW1022BP-AP3600
 - d. Supplies: Type SS1. See SUPPLIES.
 - e. Trap: Type 3T; See Traps.
- B. FIXTURE 'SK2'; LAB SINK (ADA Accessible)
- 1. Sink: Provided in lab furnishings.
 - 2. Accessories:
 - a. Faucet: Provided in lab furnishings, installed by plumbing contractor.
 - b. Drain: Provided in lab furnishings, installed by plumbing contractor.
 - c. Eyewash/Facwash: ANZI Z358.1-2014. Dual purpose drench hose for deck mounting pull out eyewash with backflow preventer. 2 spray heads with flip top dust cover. 8" reinforced PVC hose at 275psi working pressure. ANSI compliant identification sign to be mounted on wall. Provide optional thermostatic mixing valve with eyewash.
 - 1) Manufacturers:
 - (a) Guardian; Model G5022-BP-G6020
 - (b) WaterSaver; Model EW1022BP-AP3600
 - d. Supplies: Type SS1. See SUPPLIES.
 - e. Trap: Type 3T; See Traps.
 - f. Provide fixture insulation over drain and supplies. Install neutralization drain to maintain minimum ADA knee clearance.
- C. FIXTURE 'SK3'; EXISTING SINK
- 1. Sink: Existing to Remain
 - 2. Accessories:
 - a. Faucet: Existing to Remain.
 - b. Drain: Type 8D; SEE DRAINS.
 - c. Supplies: Existing to Remain.
 - d. Trap: Type 3T; See Traps.

2.02 FIXTURE ACCESSORIES

- A. DRAINS
- 1. Type 9D (Scullery Drain)
 - a. Manufacturers:
 - 1) Advance Tabco; Model K-5
 - 2) Elkay; Model 25RT
 - 3) Just; Model J-35-BLA-2"
 - 4) Zurn; Model Z89600
 - b. ASME A112.18.1M; 3 1/2" inch diameter stainless steel grid rotary operated lever 2" O.D. 4" tail piece.
- B. SUPPLY STOPS
- 1. Type SS1 (3/8"-inch, 1/4 turn; Loose Key; Lavatories/Sinks/Electric Water Coolers)
 - a. Manufacturers:
 - 1) Brasscraft; Model KTSR17XC
 - 2) Chicago; Model 1006-MMABCP
 - 3) McGuire; Model LFHST02LK
 - 4) Zurn; Model ZH8822-XL-LR-LK-PC
 - b. ASME A112.18.1M; Chrome plated brass angle heavy duty stop or ball stop, removable actuator key; supply tubing and escutcheon plate.

C. TRAPS

1. Type 3T (1 1/2"-inch Acid Neutralization Type)
 - a. Manufacturers:
 - 1) Zurn; PHIX Chemical Acid Neutralization System
 - b. Polypropylene Housing with 1 1/2" Drain connection. Housing contains sediment bucket and acid neutralization trap with 1 1/2" no hub outlet. Install trap above floor to allow for removal of trap bucket to re-fill neutralization media.

D. FIXTURE INSULATION

1. Manufacturers:
 - a. EBC; Model IK Series
 - b. McGuire; Model 'Pro-Wrap' Series
 - c. Plumberex; Model Pro Extreme Series
 - d. Proflo; Model PF200 Series
 - e. True-Bro; Model 'Lav Guard' Series
 - f. Zurn; Model 'Trap Wrap' Series
2. Insulation assembly shall be for supply stops & tubing; drains (including off-sets) and P-traps under all ADA lavatories and counter sinks.
3. ANSI A117.1, ADA4.19.4; Fully molded, anti-bacterial flexible vinyl insulation assembly, minimum 1/8"-inch wall thickness, white in color, self-extinguishing meeting ASTM D635, and have a K-value of 1.17.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that walls and floor finishes are prepared and ready for installation of fixtures.
- B. Confirm that millwork is constructed with adequate provision for the installation of counter top lavatories and sinks.

3.02 PREPARATION

- A. Rough-in fixture piping connections in accordance with minimum sizes indicated in fixture rough-in schedule for particular fixtures.

3.03 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, as specified in Fixture Accessories.
- C. Install components level and plumb.
- D. Install and secure fixtures in place with wall supports and bolts.
- E. Seal wall and floor mounted fixtures to wall and floor surfaces with silicon latex tile grout. Joints shall be finished smooth and flush, not depressed. Color to match fixture.
- F. Pipe runout from urinal to waste stack shall be Brass or Schedule 40 PVC piping. Copper piping shall not be used.

3.04 INTERFACE WITH WORK OF OTHER SECTIONS

- A. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.

3.05 ADJUSTING

- A. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

3.06 CLEANING AND PROTECTION

- A. Clean plumbing fixtures and equipment.
- B. Do not permit use of fixtures.

3.07 SCHEDULES

- A. Refer to Fixture Schedule on plans for mounting heights and piping connections.

END OF SECTION