

SECTION 224000

PLUMBING FIXTURES

PART 1 GENERAL

1.1 STIPULATIONS

- A. The General Conditions, drawings and all other attached documents form a part of this Section and all other Sections by reference thereto and have the same force and effect as if printed herewith in full. The Contractor shall be strictly accountable for the cognizance of carrying out the provisions thereof.

1.2 SECTION INCLUDES

- A. Work in this Section includes the following:
 - 1. Water Closets
 - 2. Urinals
 - 3. Lavatories
 - 4. Sinks
 - 5. Electric Water Cooler

PART 2 PRODUCTS

2.1 GENERAL

- A. All fixtures shall be furnished complete with traps, faucets, wastes, supplies with stops, etc., as required. All exposed metal parts shall be chromium plated.
- B. Fixtures and equipment shall be those of reputable manufacturers and shall be new and the best of their respective kinds.
- C. All fixtures and equipment of similar types shall be of the same manufacturer unless indicated otherwise on the drawings or specified herein.
- D. Fixtures shall be mounted at mounting heights as indicated in PART 3, EXECUTION, Paragraph "MOUNTING HEIGHTS."
- E. If fixtures and equipment indicated in the Contract Documents are not currently manufactured, the manufacturer's current equivalent to the indicated fixtures and equipment shall be provided at no additional cost, subject to review and acceptance by the Professional.

2.2 PLUMBING FIXTURES

- A. Water Closets
 - 1. Water Closet

- a. White vitreous china, floor mounted, bottom outlet, siphon jet, with elongated bowl and close-coupled tank. Water closet shall be provided with a elongated-type white plastic seat with an open front, chrome plated angle supply with loose-key stop, float valve with vacuum breaker, trip lever and bolt caps. Water closet shall use a maximum of 1.6 gallons per flush.
- b. Provide with tank type locking kit 4188A174.020 OR APPROVED EQUAL.

FIXTURE

American Standard "Cadet PRO"	Model No. 215AA.104.020
Eljer "Preserver II"	Model No. 091-4855
Kohler "Wellworth-Lite"	Model No. K-3420-EB

SEAT

Beneke	523
Church	295C

2. Urinal (Side Shields)

- a. White vitreous china, wall hung, washout-type urinal with extended shields, integral trap with cleanout, wall hangers, 3/4-inch top spud and 2-inch threaded outlet connection. Urinal shall be mounted using a hanger plate carrier. Flush valve shall be vandal-proof, water-saver type and shall use a maximum of 1.0 gallons per flush.

FIXTURE

American Standard "Washbrook"	Model No. 6590.001
Eljer "Correcto"	Model No. 161-1030
Kohler "Bardon Lite"	Model No. K-4960-T

FLUSH VALVE

Delaney	Flushboy 451-1
Sloan	Royal 186
Zurn	Z-6001-WS-VP-1

3. Lavatory

- a. Ledge back, vitreous china, wall mounted.

FIXTURE

American Standard "Decorum" 21x20-1/4-inch Wall-Hung EverClean Sink with 4-inch Centerset	Model No. 9024904EC.020
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Eljer
Kohler

FAUCET
Chicago
Powers
Speakman

420-E74ABCP 1.0GPM

INSULATION KIT
Buckaroos, Inc.
Skal-Gard
Truebro

B. Sinks

1. Kitchen Sink

- a. 25"x 22", self-rimmed single compartment sink. Sink shall be eighteen (18) gauge, type 302 and 304 stainless steel. Faucet shall be Chicago 200 (with hose spray), McGuire 8912 P-trap, appropriate drain, tailpiece and crumb strainer 1/2-inch McGuire 2158 wheel stop supplies. The Contractor shall provide a template to allow preparation of casework opening.

Just	Model No.	SL-2225A-GR
Elkay	Model No.	LR-2522
Or approved equal		

2. Mop Receptor

- a. 24-inch x 24-inch x 10-inch-high one-piece molded stone. Mop receptor shall be furnished complete with 2-inch drain with removable chrome plated strainer, vinyl bumper guard, and faucet with vacuum breaker, Stainless Steel Wall Guard, Mop Hanger, and Hose Bracket.

FIXTURE
Fiat

MSB-2424

FAUCET
Fiat

830-AA

C. Bottle Filling Station

1. Bottle Filling Station

- a. Unit shall include non-refrigerated water dispenser, stainless steel filter box, remote filter cable, and 3000-gallon filter model efw3000 with 71300C PFAS (PFOA/PFOS) replacement filter. ELKAY model LBWDC00WHC or approved equal shall deliver 1.5 GPH of drinking water. Bottle filling unit shall include an electronic sensor for touchless activation with auto 20-second shut-off timer. Bottle filler shall provide 1.5 gpm flow rate with laminar flow to minimize splashing. Shall include filter, certified to NSF/ANSI 42 and 53, with visual monitor to indicate when replacement is necessary. Shall include integrated silver ion anti-microbial protection in key areas. Unit shall meet ADA guidelines. Unit shall be lead-free design which is certified to NSF/ANSI 61 and 372 and meets Federal and State low-lead requirements. Unit shall be certified to UL399 and CAN/CSA 22.2 No. 120.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Fixtures and equipment shall be installed in a neat and workmanlike manner and in accordance with the manufacturer's recommendations. The quality of installation shall be subject to the approval of the Professional.
- B. All wall mounted lavatories, chair carriers and supports shall be suitable to the type of construction wherein they are located. Urinals and water closets shall be supported by chair carriers.
- C. All fixtures and equipment must be protected against damage during the progress of construction. Upon completion of construction, all fixtures and equipment must be thoroughly cleaned and left in perfect working order. All piping and accessories having polished, plated or finished surfaces shall be protected to prevent scarring or other damage and protect the finish against damage.
- D. Provide isolation valves for all fixtures, equipment, and accessories.
- E. All fixture supplies and waste lines shall be run to wall unless construction requires they be run to floor. All supplies through walls shall be provided with angle stops. All supplies through floors shall be provided with straight stops. Unions shall be provided adjacent to all equipment or wherever necessary to facilitate the removal of equipment for repair or replacement. Unions for copper tubing up to and including 2-inch diameter shall be brass ground joint with socket ends for solder. Unions for copper tubing 2-1/2 inches in diameter and over shall be standard brass flanges with socket ends for solder. Flanges to be drilled for ASA Standard 125 pounds flanges and so stamped. No lip type unions or long screws will be permitted. The Contractor shall furnish and install all structural steel angles, channels, etc. necessary to properly support all fixtures and equipment to the satisfaction of the Professional.
- F. Drain piping from all backflow preventers, relief valves and vents, drain down connections, kitchen equipment, etc. shall be extended to within 4 inches of a floor sink or floor drain. Minimum piping size shall be 1-1/4-inch diameter.
- G. Shower outlets and mop receptors drains shall be sized for the outlet pipe size shown on drawings and shall be equipped with P-traps. The Contractor shall be responsible for proper height setting and leveling of drains.
- H. Water closet floor flanges shall be cast iron, screwed or caulked, not less than 1/4 inch thick; not less than 2 inches caulking depth. Bolted with approved gasket between closet bowl and flange. Closet screws shall be of brass. The use of commercial putty or plaster for setting closet bowls is prohibited.
- I. Apply a bead of waterproof caulking around the edge of surface mounted plumbing fixture to mask any irregularities between the fixture and wall finish. Color of caulk shall match the fixture color.

3.2 MOUNTING HEIGHTS

- A. Plumbing fixture mounting heights shall conform to the following unless directed otherwise by the Professional. The Contractor shall coordinate the mounting height of all fixtures with the mounting heights indicated on the drawings. Mounting heights for barrier free fixtures shall meet the requirements of the ADA Accessibility Guidelines and shall apply unless superseded by more stringent State or local code.

1. Water Closet -
 - 15" to top of rim from finished floor
 - 17" to 19" to top of seat (barrier free)
2. Urinal -
 - 24" to lip of urinal up from finished floor.
 - 19" to lip of urinal (Kindergarten)
 - 17" to lip of urinal (barrier free)
3. Lavatory -
 - 31" to top of rim from finished floor
 - 34" to top of rim - 29" to bottom of apron (barrier free)
 - 26" to top of rim A.F.F. (Kindergarten)
4. Drinking Fountains/Electric Water Coolers -
 - Adult: 42" max to top of spout from finished floor
 - Barrier Free: 36" max to top of spout from finished floor to underside of fountain
 - a. Drinking fountains and water coolers are to be installed as mounting heights as selected by the Owner. Prior to commencing work, the Contractor shall meet with the Owner to coordinate mounting heights of these fixtures.
5. Flush Valve Controls -
 - Maximum 44" above floor (barrier free)

END OF SECTION