

## SECTION 15410 - PLUMBING FIXTURES

### PART 1 - GENERAL

#### 1.1 SECTION REQUIREMENTS

- A. Division 1 - General Requirements is made a part of this section.
- B. Submittals: Product Data for each type of plumbing fixture.
- C. Comply with requirements of Public Law 102-486, "Energy Policy Act," regarding water flow rate and water consumption of plumbing fixtures.
- D. Comply with applicable standards below:
  - 1. National Sanitation Foundation Construction: NSF 61.
  - 2. Public Law 90-480, "Architectural Barriers Act"; and Public Law 101-336, "Americans with Disabilities Act."
  - 3. Public Law 102-486, "Energy Policy Act."

### PART 2 - PRODUCTS

#### 2.1 Toilet

- A. Toilet Bowl: Comfort height two-piece elongated toilet or comparable wall mount.
  - 1. Products:
    - a. Kohler Wellworth
      - 1) 30" x 18" x 29-1/4"
      - 2) 2-1/8" fully glazed trapway
      - 3) Class Five® flushing technology
      - 4) DryLock™ attachment plate
      - 5) KOHLER Comfort Height™
      - 6) 1.28 gpf High-Efficiency Toilets
      - 7) Meet strict flushing performance guidelines established by the EPA's (Environmental Protection Agency) WaterSense program
      - 8) Model # K-3998 (hand appropriate for install)
      - 9) Elongated bowl
      - 10) Provide Kohler Stronghold commercial toilet seat KL-4731-C
    - b. Kohler Wellworth
      - 1) 28-1/4" x 14-7/8" x 15"
      - 2) 1-1/2" top spud
      - 3) 10" rough in
      - 4) 2-1/4" passageway
      - 5) 1.28 gpf High-Efficiency Toilets
      - 6) Model # K-4406
      - 7) Elongated bowl
      - 8) Provide Kohler Stronghold commercial toilet seat K-4731-C
    - c. Kohler Kingston - ADA
      - 1) 26-1/2"L x 16-1/2"W x 13-3/4"H

- 2) Wall mount
- 3) Siphon jet
- 4) 1-1/2" rear spud
- 5) 1.28 gpf High-Efficiency Toilets
- 6) Meet strict flushing performance guidelines established by the EPA's (Environmental Protection Agency) WaterSense program
- 7) Model # K-4323
- 8) Elongated bowl
- 9) Provide Kohler Stronghold commercial toilet seat K-4731-C
- d. Kohler Kingston
  - 1) 26-1/2"L x 16-1/2"W x 13-3/4"H
  - 2) Wall mount
  - 3) Siphon jet
  - 4) 1-1/2" top spud
  - 5) 1.28 gpf High-Efficiency Toilets
  - 6) Meet strict flushing performance guidelines established by the EPA's (Environmental Protection Agency) WaterSense program
  - 7) Model # K-4325
  - 8) Elongated bowl
  - 9) Provide Kohler Stronghold commercial toilet seat K-4731-C
- e. Crane Flormont Round Front Back Outlet Toilet
  - 1) 1.6 gal low-consumption
  - 2) Round front bowl
  - 3) Gravity fed siphon jet flush action
  - 4) Fully glazed 1-7/8" trapway
  - 5) Polished chrome trip lever
  - 6) 4 bolt caps included
  - 7) 3930N
  - 8) Provide toilet seat
- f. Kohler Bardon 1/8<sup>th</sup> GPF
  - 1) Vitreous china
  - 2) Washout
  - 3) 3/4" top spud
  - 4) 14" extended rim
  - 5) 0.125 gpf
  - 6) Model # K-4904-ET

B. Toilet Seat: Kohler Stronghold:

1. Commercial toilet seat.
  - a. Solid polypropylene plastic
  - b. Elongated open front with cover, bumpers and hardware,
  - c. Check hinge
  - d. ADA compliant
  - e. Model # K-4731-C

C. Flushometer: Valves & Float Valves:

1. Products:
  - a. Royal Model Flushometer: 111-1.28
  - b. Royal Model Flushometer: 186-0.25

- c. Kohler Float Valve Kit, Model #30672 (Verify compatibility with existing toilets) or approved equal.
  - D. Toilet flush balls / flappers
    - 1. Kohler flapper kit or approved equal.
- 2.2 Lavatory
  - A. Plastic Lavatory: Integral lavatory and countertop with backsplash - size as noted.
    - 1. Products:
      - a. Cultured marble or solid surface material by Nevamar, Vermax or approved equal.
      - b. Color: To be selected by the Owner from manufacturer's standard colors.
  - B. Wall Mounted Vitreous China:
    - 1. Products:
      - a. American Standard Comrade 0124.024
        - 1) 20" x 18-1/4"
        - 2) Centers: 4" faucet centers
        - 3) Bowl: 15" x 10-7/8" bowl
        - 4) Soap Dish: One integral self-draining soap dish
        - 5) Rear Overflow
        - 6) Fast aligning one-piece wall hanger
      - b. Gerber Model #12-314 PLYMOUTH 'Ledge Type'
        - 1) Size: 19" x 17" or size required to fit specific location.
        - 2) Centers: 4" faucet centers
        - 3) Bowl: 15" x 10 3/4" bowl
        - 4) Soap Dishes: Two integral self-draining soap dishes
        - 5) Back Overflow
        - 6) Fast aligning one-piece wall hanger
- 2.3 Faucets:
  - A. ASME A112.18.1M; Polished chrome finish, unless otherwise indicated. Maximum 2.5-gpm flow rate.
    - 1. Provide PCA Spray faucet attachment for all faucets installed:
      - a. Neoperl PCA Spray faucet attachment, vandal proof, B9.66F3.1-kitchens
      - b. Provide Neoperl PCA Spray faucet attachment, vandal proof, B9.65F3.1-bathrooms
    - 2. Products:
      - a. Kitchen Faucets: Delta 120 single handle with no spray, 10" long spout 1/2" I.P.S. shanks 2.2 gpm V.R aerator
        - 1) Type: Widespread with inlets on 6-inch centers.
        - 2) Handle(s): Dual lever.
        - 3) Drain: Grid strainer.
        - 4) Trap: Chrome-plated, with slip-joint inlet and wall flange.
      - b. Bathroom Faucets: Delta HDF series Model #515-WFHGMHDF: 4 1/2" long spout
        - 1) Type: 3-hole installation – 4" center set.

- 2) Handle(s): Vandal resistant elbow handle with red/blue handle indicators.
- 3) Drain: HDF series standard.
- 4) Trap: Chrome-plated, with slip-joint inlet and wall flange.
- c. Owner Identified Bathrooms (Fisk Hall): Moen T6420 – Eva two handle widespread bathroom faucet; chrome finish.
  - 1) Type: 3-hole installation – 4” center set.
  - 2) Handle(s): Lever style; tapered.
  - 3) Drain: Matching drain assembly.
  - 4) Trap: Chrome-plated, with slip-joint inlet.

2.4 Tub / Shower:

A. Plastic Shower Enclosure: ANSI Z124.2 and ANSI Z124.2a;

1. Product: Sterling or approved equal

- 1) Size: To be determined based on field conditions.
- 2) Style: Neo-angle corner shower unit (Field Measure to Verify)
- 3) Style: Square shower unit (Field Measure to Verify)
- 4) Color: White

B. Shower Doors:

1. Products:

- a. Door: Sterling or approved equal - Neo-Angle Deluxe Shower Doors (Pivot Hinge)
- b. Door: Basco pivot hinge shower door
- c. Door: Dreamline or approved equal bifold shower door
  - 1) Finish: Silver
  - 2) Glass: Tempered
  - 3) Glass Texture: Pebbled
  - 4) Size (Coordinate size with available space in bathroom and shower floor base)

C. Mixing-Valve Faucet and Miscellaneous Fittings: Single-lever antiscald-type faucet; maximum 1.5-gpm flow rate; and polished, chrome-plated finish; unless otherwise indicated.

1. Products for Woodframe houses:

- a. Symmons 96-2X Temptrol tub and shower system. (S962X)
  - 1) Drain: Compatible w/ Temptrol tub and shower system.
  - 2) Temptrol Pressure-Balancing mixing valve with combination integral diverter and volume control
  - 3) Adjustable stop screw to limit handle turn
  - 4) Tub spout
  - 5) Clear-Flo shower head, arm and flange
  - 6) Internal service stops
  - 7) Flow-Control Fitting: 1.5 gpm (5.7 L/min) flow restrictor
- b. Symmons 96-1X Temptrol valve shower w/stop (S961X)
  - 1) Pressure-Balancing mixing valve with integral volume control
  - 2) Integral service stops
  - 3) Adjustable stop screw to limit handle turn
  - 4) Clear-Flo shower head with arm and flange
  - 5) Flow-Control Fitting: 1.5 gpm (5.7 L/min) flow restrictor

2. Products for Dormitory use:
    - a. Symmons Safety Mix Model 1-100X with internal stops.
  - D. Shower Floor Base: Swanstone Veritek Retrofit Shower Floor (Size based on field measurements and available space in bathroom – coordinate with shower door size).
- 2.5 Kitchen Sinks:
- A. Stainless-Steel Sink: Counter-mounting, self-rimming type – 20 gauge stainless steel.
    1. Products:
      - a. Woodframe Houses: Elkay Pacemaker Model PSR3322 double bowl sink (No sprayer).
      - b. Drain(s): Stainless steel strainer bucket.
- 2.6 Accessories:
1. Products:
    - a. Apollo Valves
      - 1) Provide hot and cold water shut off valves on all supply piping
    - b. Provide wall eschutcheons at all penetrations through wall.

### PART 3 - EXECUTION

#### 3.1 INSTALLATIONS

- A. Install fitting insulation kits on fixtures for people with disabilities.
- B. Install fixtures with flanges and gasket seals.
- C. Install flushometer valves for accessible water closets with handle mounted on wide side of compartment. Install other actuators in locations that are easy for people with disabilities to reach.
- D. Install tanks for accessible, tank-type water closets with lever handle mounted on wide side of compartment.
- E. Fasten wall-hanging plumbing fixtures securely to supports attached to building substrate when supports are specified, and to building wall construction where no support is indicated.
- F. Fasten floor-mounted fixtures to substrate. Fasten fixtures having holes for securing fixture to wall construction, to reinforcement built into walls.
- G. Fasten wall-mounted fittings to reinforcement built into walls.
- H. Fasten counter-mounting plumbing fixtures to casework.
- I. Secure supplies to supports or substrate within pipe space behind fixture.
- J. Set shower receptors and mop basins in leveling bed of cement grout.
- K. Install individual supply inlets, supply stops, supply risers, and tubular brass traps with cleanouts at fixture.

- L. Install water-supply stop valves in accessible locations.
- M. Install traps on fixture outlets. Omit traps on fixtures having integral traps. Omit traps on indirect wastes, unless otherwise indicated.
- N. Install escutcheons at wall, floor, and ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons where required to conceal protruding pipe fittings.
- O. Seal joints between fixtures and walls, floors, and counters using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color.
- P. Install piping connections between plumbing fixtures and piping systems and plumbing equipment. Install insulation on supplies and drains of fixtures for people with disabilities.
- Q. Ground equipment. Tighten electrical connectors and terminals according to UL 486A and UL 486B.

END OF SECTION 15410