

22 40 00 – Plumbing Fixtures

DIVISION 22 - Plumbing



Saint Paul
PUBLIC SCHOOLS

STATEMENT OF PURPOSE & BACKGROUND

- Scope:
 - Selection, preparing and installation of plumbing fixtures.
- Statement of goals:
 - Provide consistent, high quality products that are:
 - Durable;
 - Easily maintainable;
 - Code compliant.
- Revision history of section:
 - 04/15/19
 - 04/07/21

SELECTION AND APPLICATION CRITERIA

- Single Occupancy Toilet Room, Accessible (except for PK-K and ECSE):
 - Wall mounted toilet, mount rim at 17" A.F.F.
 - Wall mounted lavatory, mount rim at 34" maximum A.F.F.
- Inclusive Toilet Rooms - Individual Toilet Rooms with Common Wash Area:
 - Non-accessible stalls: Wall mounted toilet, mount rim at 15" A.F.F.
 - Accessible and Ambulatory stalls: Wall mounted toilet, rim at 17" A.F.F.
 - Wall mounted lavatory where occurs (Accessible per code), rim at 34" A.F.F.
 - Communal Use Lavatories in Solid Surface Countertops (Accessible).
- PK-K and ECSE Single Occupancy Toilet Rooms, Accessible:
 - Wall mounted toilet, mount rim at 15" maximum A.F.F.
 - Wall mounted lavatory, rim to be 31" maximum A.F.F. Mount outside of and adjacent to toilet room; verify locations and clearances with Owner.
 - Floor mounted toilets shall not be used except to replace existing units where wall mount is not feasible. Child-size toilets shall not be used.
- Standard Drinking Fountain:
 - Single Station with or without Bottle Filler. Mount at ADA height typical.
 - 2 Station, 2 Level with Bottle Filler. Quantities and Locations per MN Building Code. Mount lower unit at ADA height typical. Bottle filler at lower unit.
- Locker Rooms:
 - Shower mixing valves and heads
 - Wall mounted lavatories
 - Wall mounted water closets (Accessible per Code)
- Laboratories:
 - Single or Dual Gas Turret (where provided)
 - Deck Mounted Gooseneck Faucet for Laboratory Sinks
 - Emergency Shut-off Valves in a Secure Access Panel
 - Emergency Eye Wash and Wash Shower (where required)
 - Acid Resistant Piping to Acid Neutralization Tank (See section 22 10 00)
 - Refer to Section 12 35 53 Laboratory Casework for further information.
- Art Room:
 - Counter Mounted stainless steel sink with Solid Polymer countertop; provide open space below with pipe shield per ADA requirements.
 - Sink Type S-2 as noted below.
 - A Wall Mounted stainless steel utility sink may be used in addition to counter mounted sinks per Owner direction.
 - Include Solids Interceptor for Clay/Waste at all art room sinks and where required.

- Music/Band Room:
 - Counter Mounted stainless steel sink with Solid Polymer countertop; provide open space below with pipe shield per ADA requirements.
 - Sink Type S-2 as noted below.
 - In addition, a Wall Mounted stainless steel utility sink shall be used at secondary music suites for cleaning brass and wind musical instruments.
- PK-K Classrooms, Staff Lounge:
 - Counter Mounted stainless steel sink with Solid Polymer countertop
 - Deck Mounted Faucets without drinking fountain bubbler
 - Sink Type S-1 as noted below
- Support Spaces, Workrooms, Health Office:
 - Counter Mounted stainless steel sink with Solid Polymer countertop
 - Deck Mounted Faucets without drinking fountain bubbler
 - Sink Type S-2 as noted below, u.n.o.
- Custodial Rooms:
 - Molded Stone Floor Mounted Service Basin
 - Mechanical Wall Mounted Faucets with mop bucket hook
 - Molded Stone Floor Mounted Laundry Tub where provided with Mechanical Deck Mounted Faucet; location per Owner.
- Laundry Equipment:
 - Washer / Waste Unit Outlet Box where provided; verify location with Owner.

OUTLINE SPECIFICATION

- Part 1 General
- Part 2 Products
 - Listed products and manufacturers are for design intent. Equivalent manufacturers, **approved, in writing, in advance, by the Architect**, may be substituted in accordance with the provisions of the Contract.
 - Prior to final documents, review all plumbing fixtures and faucets with SPSS Project Manager and Plumbing Shop to ensure compatibility with maintenance requirements.
 - Water Closets:
 - Wall Mounted:
 - Manufacturer: American Standard
 - Model: AFWALL
 - Rim Height AFF: 15" or 17" as noted above
 - Material: Vitreous China
 - Color: White
 - Seat: Church 295 SSCT Elongated Rim, Self Sustaining Hinges and Sta-Tite fastening system
 - Flow: 1.6 GPF
 - Brass: Sloan Valve, Model #111-1.6 Royal Flush Valve
 - Retrofit / Wall Mounted / ADA Compliant:
 - Manufacturer: American Standard
 - Model: AFWALL, EverClean (where required)
 - Rim Height AFF: 17"
 - Material: Vitreous China
 - Color: White
 - Trim: Church 295 SSCT Elongated Rim, Self Sustaining Hinges with Sta-Tite fastening system
 - Flow: 1.6 GPF
 - Brass: Sloan Valve, Model #111-1.6 Royal Flush Valve

- Floor Mounted (For replacement of existing only where wall mount is not feasible):
 - Manufacturer: American Standard
 - Model: Madera
 - Height AFF: 15" or 17" to meet ADA requirements
 - Material: Vitreous China
 - Color: White
 - Trim: Church 295 SSCT Elongated Rim, Self Sustaining Hinges and Sta-Tite fastening system
 - Flow: 1.6 GPF
 - Brass: Sloan Valve, Model #111-1.6 Royal Flush Valve
 - Child-size toilets shall not be used.
- Urinals:
 - Standard Height:
 - Manufacturer: Sloan
 - Model: Efficiency Series
 - Height AFF: 24" To Rim
 - Material: Vitreous China w/ Integral Flushing Rim
 - Color: White
 - Trim: Ultra Low Flush Fixture
 - Flow: .25 GPF
 - Brass: Sloan Valve specifically designed for china, No-hold open handle
 - Accessible Height:
 - Manufacturer: Sloan
 - Model: Efficiency Series
 - Height AFF: 17" To Rim
 - Material: Vitreous China w/ Integral Flushing Rim
 - Color: White
 - Trim: Ultra Low Flush Fixture
 - Flow: .25 GPF
 - Brass: Sloan Valve specifically designed for china, No-hold open handle
- Lavatories and Sinks:
 - Standard Wall Hung Lavatory:
 - Manufacturer: American Standard
 - Model: Lucerne, 20"x18"
 - Height AFF: 31"-34" Rim (31" max. at PK-K; 34" typical ADA)
 - Material: Vitreous China
 - Color: White
 - Protect/insulate piping below per ADA requirements
 - Communal Use Lavatories in solid-surface countertop at wash areas:
 - Manufacturer: American Standard
 - Model: Ovalyn Universal Access undercounter sink, #9482.000.020; Mount at height to meet ADA Compliance.
 - May also use bowls integrated into solid-surface counters; meet ADA compliance.
 - Verify quantities required and verify mounting height with Owner's Project Manager.
 - See below for standard lavatory faucet type.

- Stainless Steel / Top Mount Sink S-1 (Classrooms and where noted):
 - Manufacturer: Elkay
 - Model: Lustertone LRAD 312255; 31" x 22" x 5.5" deep, single bowl; Provide accessibility where required by Code.
 - Height AFF: Counter height 34" typical u.n.o.
 - Material: 18 GA 304 Stainless Steel
 - Finish: Satin
 - Trim: 3 Hole, 8" Centers with Elkay Model #LK-35 Strainer & Tail Piece
 - Flow: "Softflo" aerator, 1.5 gpm.
 - Brass: Chicago Model #786-GN1AE3 ABCP with Gooseneck Spout, wrist blade handles, E-34 vandal resistant aerator, XTAB cartridge; no drinking fountain bubbler
 - Stainless Steel / Top Mount Sink S-2 (Support Spaces, Workrooms, etc.):
 - Manufacturer: Elkay
 - Model: Lustertone LRAD252155; 25" x 21" x 5.5" deep, single bowl, ADA compliant. Sink size may differ depending on specific locations/conditions; verify with SPPS Project Manager.
 - Height AFF: Counter
 - Material: 18 GA 304 Stainless Steel
 - Finish: Satin
 - Trim: 3 Hole, 8" Centers with Elkay Model #LK-35 Strainer & Tail Piece
 - Flow: "Softflo" aerator, 1.5 gpm.
 - Brass: Chicago Model #786-GN1AE3 ABCP with Gooseneck Spout, wrist blade handles, E-34 vandal resistant aerator, XTAB cartridge; no drinking fountain bubbler
 - Stainless Steel Wall Mount Sink (Art, Band Room, Industrial Arts, etc.)
 - Manufacturer: Elkay
 - Model: ESS2319; 23" x 19" x 12" deep
 - Provide Solids Interceptor / Clay Trap at Art Room and technical labs, graphics labs, industrial arts labs, etc.
- Utility Service Sinks:
 - Precast Terrazzo / Floor Mounted
 - Manufacturer: Fiat
 - Model: TSB 3000 24"x24" or TSB 3001 32"x32" (preferred where space allows). Material: Precast Terrazzo
 - Color: Off White
 - Trim: Stainless Steel Caps, hose and bracket, wall guard
 - Brass: Chicago 897-CP, Polished Chrome, vacuum breaker, pail hook, hose end spout and adjustable wall brace. Mount at 48" AFF.
 - Laundry Tubs / Molded Stone / Floor Mounted (where provided):
 - Manufacturer: Fiat
 - Model: FL1
 - Material: Molded Stone
 - Color: White

- Legs: White baked enamel angle legs, with Easy Leveling Devices. Tub is capable of handling 600 lbs.
 - Brass: Chicago Faucet 895-317FC ABCP deck mounted faucet, 4" centers, 317 wristblade handles, Flow Control.
 - Solids Interceptor (Clay Trap) – Verify locations with Owner:
 - Manufacturer: Zurn
 - Model: ZA1180
 - Material: Acid resistant coated steel with top access gasketed cover, for on-floor installation.
- Drinking Fountains:
 - Single / Accessible Height with or without Bottle Filler:
 - Manufacturer: Elkay
 - EZH20 Bottle Filling Station and Single Cooler
 - Model: LVRC8WSK with filter, 8 GPH
 - Height AFF: 27" clear to bottom of front apron (ADA requirement)
 - Material: Stainless Steel
 - Vandal-resistant Pushbutton activation
 - Bubbler: One piece polished chrome plated brass, Vandal Resistant
 - Dual Station / Dual Height, with Bottle Filler at lower unit:
 - Manufacturer: Elkay
 - Model: LVRCTL8WSK with filter, 8 GPH
 - Height AFF: 27" clear to bottom of lower unit front apron (ADA requirement)
 - Material: Stainless Steel
 - Vandal-resistant Pushbutton activation
 - Bubbler: One piece polished chrome plated brass, Vandal Resistant
- Lavatory Faucets and Valves:
 - 4" Centers w/ cast brass spout and metering handles (Typical at lavatories and wash basins)
 - Manufacturer: Chicago
 - Model: 802-V335 ABCP or 802-V336 ABCP
 - Height AFF: Lavatory Rim
 - Material: Brass
 - Finish: Polished Chrome
 - Flow: Chicago E37JKABCP, 1.5 gpm laminar flow.
 - Brass: 4" Centers, MVP metering push handles with adjustable cycle time closure cartridge.
 - 4" Centers w/ Gooseneck Spout (Classrooms, Work Rooms, Health Office, etc.)
 - Manufacturer: Chicago
 - Height AFF: Counter
 - Material: Brass
 - Finish: Polished Chrome
 - Flow: Chicago E37JKABCP, 1.5 gpm laminar flow.
 - Brass: 4" Centers, with Gooseneck Spout, wristblade handles to meet accessibility requirements.

- Service Sink Faucet
 - Manufacturer: Chicago
 - Model: Service Sink
 - Height AFF: 48"
 - Material: Brass
 - Finish: Chrome
 - Brass: Faucet with integral stops, vacuum breaker, pail hook and adjustable wall brace
 - For faucets and trim at Kitchen and Food Service areas, refer to Section 11 40 00 Food Service Equipment.
 - Showers
 - Wall Mounted Shower System, ADA Accessible:
 - Manufacturer: Leonard Surfashower
 - Model: SS-7600-100/3ISA-D2L/501P(G)-44
 - Copper encapsulated thermostat assembly with brass shuttle, compensates for temperature fluctuations induced by water temperature and pressure changes; Built-in shutoff for single handle operation; Integral checkstops; Cast wall flange and lever handle, polished chrome plated. Maximum operating pressure: 125 PSI (860 KPA) Adjustable high temperature limit stop set for 110°F (43°C). Color-coded dial ½" flexible stainless steel hose on inlets. Capacity of 4 GPM (15L/min). Institutional shower head, 2.5 GPM (95 l/min.) max. Exposed parts chrome plated, vandal resistant. Maximum supply pressure: 125 PSI (860 KPA). 18 Ga. Stainless steel soap dish.
 - Wall Mounted Shower System
 - Manufacturer: Leonard Surfashower
 - Model: SS-7600-100/3ISA
 - Emergency Eyewash (where required):
 - Wall Mounted Emergency Eyewash
 - Manufacturer: Bradley
 - Model: S19-220
 - Plastic eyewash bowl
 - Complies with ANSI/ISEA Standard Z358.1
 - Emergency Shower (where required):
 - Emergency Drench Shower, Barrier Free
 - Manufacturer: Bradley
 - Model: S19-120BF (Horizontal Supply)
 - Model: S19-110BF (Free Standing)
 - Impact resistant shower head
 - Complies with ANSI/ISEA Standard Z358.1
 - Verify with Building Official if floor drain is required.
- Part 3 Execution
 - Per Consultant and / or manufacturer specification.

End of Section