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SECTION 224216.16 - COMMERCIAL SINKS

1. GENERAL
   * + 1. SUMMARY
          1. Section Includes:

Handwash sinks.

Supply fittings.

Waste fittings.

Grout.

* + - * 1. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Retain first subparagraph below for projects that include Section 114000 "Foodservice Equipment" and revise "Kitchen/Utility Sinks" and "Handwash Sinks" articles in this Section correspondingly.

Section 114000 "Foodservice Equipment" for NSF-compliant foodservice and handwash sinks.

Section 224100 "Residential Plumbing Fixtures" for residential sinks.

* + - 1. ACTION SUBMITTALS
         1. Product Data: For each type of product.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for sinks.

Include rated capacities, operating characteristics[**, electrical characteristics,**] and furnished specialties and accessories.

* + - 1. INFORMATIONAL SUBMITTALS

Retain "Coordination Drawings" Paragraph below if coordination is required for installation of products and materials by separate installers.

* + - * 1. Coordination Drawings: Counter cutout templates for mounting of counter-mounted sinks.
      1. CLOSEOUT SUBMITTALS
         1. Operation and Maintenance Data: For sinks and faucets to include in operation and maintenance manuals.

Retain subparagraph below if automatic, electronic-sensor faucets are required for Project.

In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

Servicing and adjustments for automatic faucets.

* + - 1. MAINTENANCE MATERIAL SUBMITTALS
         1. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

Faucet Washers and O-Rings: Equal to [**10**] <**Insert number**> percent of amount of each type and size installed.

Faucet Cartridges and O-Rings: Equal to [**5**] <**Insert number**> percent of amount of each type and size installed.

1. PRODUCTS
   * + 1. HANDWASH SINKS

Retain this article only if "Handwash/Hand Sinks" are not specified in Section 114000 "Foodservice Equipment."

Copy "Handwash Sinks - Stainless Steel" Paragraph below and re-edit for each type of stainless steel handwash sink required.

Insert drawing designation. Use these designations on Drawings to identify each handwash sink.

* + - * 1. Handwash Sinks - Stainless Steel: <**Insert drawing designation**>.

Retain "Basis-of-Design Product" Subparagraph and list of manufacturers below to identify a specific product or a comparable product from manufacturers listed.

Basis-of-Design Product: Subject to compliance with requirements, provide **Elkay; CHS1716C Elkay Stainless Steel 16-3/4" x 15-1/2" x 13", Single Bowl Wall Hung Handwash Sink Kit** or comparable product by one of the following:

<**Insert manufacturer's name**>

Source Limitations: Obtain sinks from single source from single manufacturer.

Fixture:

Standards:

ASME A112.19.3/CSA B45.4.

NSF 61.

Type: [**Wall-mounted**] [**Pedestal-base**] stainless steel basin with radius corners, back for faucet, and support brackets.

Overall Dimensions: [**17 by 16 by 5 inches**] <**Insert dimensions**>.

Caution: Other gauges may be available from manufacturers. Confirm availability prior to selection.

Material: [**18 gauge**] [**20 gauge**] <**Insert gauge**>, Type 304 stainless steel.

Faucet: <**Insert sink faucet designation from "Manually Operated Sink Faucets" or "Automatically Operated Sink Faucets" Article**>.

Supply Fittings: Comply with requirements in "Supply Fittings" Article.

Waste Fittings: Comply with requirements in "Waste Fittings" Article.

Retain "Support" Subparagraph below for wall-mounted sinks and coordinate with "Sink Supports" Article.

Support: [**Type II sink carrier**] <**Insert carrier**>.

Mounting Height: [**Standard**] [**Child**] [**Accessible in accordance with ICC A117.1**].

* + - 1. SUPPLY FITTINGS
         1. NSF Standard: Comply with NSF 61 and NSF 372 for supply-fitting materials that will be in contact with potable water.
         2. Standard: ASME A112.18.1/CSA B125.1.
         3. Supply Piping: Chrome-plated brass pipe or chrome-plated copper tube matching water-supply piping size. Include chrome-plated brass or stainless steel wall flange.
         4. Supply Stops: Chrome-plated brass, one-quarter-turn, ball-type or compression valve with inlet connection matching supply piping.

Retain "Wheel handle" option in "Operation" Paragraph below for one-quarter-turn, ball-type stops.

* + - * 1. Operation: [**Loose key**] [**Wheel handle**] <**Insert type**>.
        2. Risers:

[**NPS 3/8**] [**NPS 1/2**].

[**Chrome-plated, rigid-copper pipe**] [**Chrome-plated, soft-copper flexible tube**] [**ASME A112.18.6/CSA B125.6, braided or corrugated stainless steel flexible hose**].

* + - 1. WASTE FITTINGS
         1. Standard: ASME A112.18.2/CSA B125.2.
         2. Drain: Grid type with NPS 1-1/2 offset and straight tailpiece.
         3. Trap:

Size: NPS 1-1/2.

Material:

Chrome-plated, [**two-piece, cast-brass trap and swivel elbow with 17-gauge brass tube to wall**] [**two-piece, cast-brass trap and ground-joint swivel elbow with 17-gauge brass tube to wall**] [**one-piece, cast-brass trap with swivel 17-gauge tubular brass wall bend**] <**Insert trap type**>; and chrome-plated brass or steel wall flange.

* + - 1. GROUT

Retain this article if floor-mounted service sinks are included.

* + - * 1. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
        2. Characteristics: Nonshrink; recommended for interior and exterior applications.
        3. Design Mix: 5000 psi, 28-day compressive strength.
        4. Packaging: Premixed and factory packaged.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine roughing-in for water-supply piping and sanitary drainage and vent piping systems to verify actual locations of piping connections before sink installation.
          2. Examine walls, floors, and counters for suitable conditions where sinks will be installed.
          3. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. INSTALLATION
          1. Install sinks level and plumb in accordance with rough-in drawings.
          2. Install supports, affixed to building substrate, for wall-hung sinks.

Indicate on Drawings those sinks that are required to be accessible.

* + - * 1. Install wall-mounted sinks at accessible mounting height in accordance with ICC A117.1.
        2. Set floor-mounted sinks in leveling bed of cement grout.
        3. Install water-supply piping with stop on each supply to each sink faucet.

Exception: Use ball or gate valves if supply stops are not specified with sink. Comply with valve requirements specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."

Install stops in locations where they can be easily reached for operation.

* + - * 1. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings. Comply with escutcheon requirements specified in Section 220500 "Common Work Results for Plumbing."
        2. Seal joints between sinks and counters, floors, and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 079200 "Joint Sealants."

Indicate on Drawings those sinks that are required to be accessible.

* + - * 1. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible sinks. Comply with requirements in Section 220719 "Plumbing Piping Insulation."
      1. PIPING CONNECTIONS

Coordinate piping installations and specialty arrangements with Drawings and with requirements specified in piping systems. If Drawings are explicit enough, these requirements may be reduced or omitted.

* + - * 1. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
        2. Comply with water piping requirements specified in Section 221116 "Domestic Water Piping."
        3. Comply with soil and waste piping requirements specified in Section 221316 "Sanitary Waste and Vent Piping."
      1. ELECTRICAL CONNECTIONS
         1. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
         2. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."
         3. Install electrical devices furnished by manufacturer, but not factory mounted in accordance with NFPA 70 and NECA 1.
         4. Install nameplate for each electrical connection, indicating electrical equipment designation and circuit number feeding connection.

Retain one of two subparagraphs below. First subparagraph cross-references Section 260553 "Identification for Electrical Systems" and should be retained for consistent electrical identification. Second subparagraph is an abbreviated version of the product specified in Section 260553 "Identification for Electrical Systems."

Nameplate shall be laminated acrylic or melamine plastic signs, as specified in Section 260553 "Identification for Electrical Systems."

Nameplate shall be laminated acrylic or melamine plastic signs with a black background and engraved white letters at least [**1/2 inch**] <**Insert dimension**> high.

* + - 1. ADJUSTING
         1. Operate and adjust sinks and controls. Replace damaged and malfunctioning sinks, fittings, and controls.
         2. Install new batteries in battery-powered, electronic-sensor mechanisms.
      2. CLEANING AND PROTECTION
         1. After completing installation of sinks, inspect and repair damaged finishes.
         2. Clean sinks, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
         3. Provide protective covering for installed sinks and fittings.
         4. Do not allow use of sinks for temporary facilities unless approved in writing by Owner.

END OF SECTION 224216.16