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## SECTION 224216.16 - COMMERCIAL SINKS

### **TIPS:**

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## PART 1 - GENERAL

### 1.1 SUMMARY

#### A. Section Includes:

1. Service basins.
2. Service sinks.
3. Utility sinks.
4. Handwash sinks.
5. Sacristy sinks.
6. Sink faucets.
7. Laminar-flow, faucet-spout outlets.
8. Supports.

9. Supply fittings.
10. Waste fittings.

B. Related Requirements:

1. Section 224100 "Residential Plumbing Fixtures" for residential sinks.

## 1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for sinks.
2. Include rated capacities, operating characteristics[, **electrical characteristics,**] and furnished specialties and accessories.

B. Sustainable Design Submittals:

1. Product Data: For water consumption.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Counter cutout templates for mounting of counter-mounted lavatories.

## 1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For sinks to include in maintenance manuals.

## 1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Faucet Washers and O-Rings: Equal to [10] <Insert number> percent of amount of each type and size installed.
2. Faucet Cartridges and O-Rings: Equal to [5] <Insert number> percent of amount of each type and size installed.

## PART 2 - PRODUCTS

### 2.1 SERVICE BASINS

- A. Service Basins <Insert drawing designation>: Terrazzo, floor mounted.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Acorn Engineering; Morris Group International, Terrazzo-Ware Mop Sink model [TCR-28] [TDF-24] [TDF-32] [TDF-36] [TDF-3624] [TNC-24] [TNC-32] [TNC-36] [TRH-242406] [TRH-242410] [TRH-362410] [TRH-363206] [TRH-303006] [TRH-323206] [TRH-362406] [TRH-363606] [TRH-363606-NC] [TSH-24] [TSH-32] [TSH-36] [TSH-3624]; <Insert product name or designation> or comparable product by one of the following:
  - a. Crane Plumbing, L.L.C.
  - b. Florestone Products Co., Inc.
  - c. Stern-Williams Co., Inc.
  - d. <Insert manufacturer's name>.
  
2. Fixture:
  - a. Standard:
    - 1) IAPMO PS 99.
    - 2) CSA B45.8/IAPMO Z403
  
  - b. Shape: [Square] [Rectangular] [Corner, with angled front] [Corner, with rounded, front] [Dropped front] <Insert shape>.
  - c. Nominal Size:
    - 1) Square: [24 by 24 inches (610 by 610 mm)] [30 by 30 inches (762 by 762 mm)] [32 by 32 inches (813 by 813 mm)] [36 by 36 inches (915 by 915 mm)] <Insert dimensions>.
    - 2) Rectangular: [36 by 24 inches (915 by 610 mm)] [36 by 32 inches (915 by 813 mm)] <Insert dimensions>.
    - 3) Corner, with Angled Front: [24 by 24 inches (610 by 610 mm)] [32 by 32 inches (813 by 813 mm)] [36 by 36 inches (915 by 915 mm)] <Insert dimensions>.
    - 4) Corner, with Rounded Front: [28 by 28 inches (711 by 711 mm)] <Insert dimensions>.
    - 5) Dropped Front: [24 by 24 inches (610 by 610 mm)] [32 by 32 inches (813 by 813 mm)] [36 by 24 inches (915 by 610 mm)] [36 by 36 inches (915 by 915 mm)] <Insert dimensions>.
  
  - d. Height: [6 inches (150 mm)] [10 inches (255 mm)] [12 inches (305 mm)] [12 inches (305 mm) with dropped front] <Insert dimensions>.
  - e. Tiling Flange, Integral, Stainless Steel:
    - 1) Square or Rectangular Fixture: [Rear] [Left and rear] [Right and rear] [Three sides].
    - 2) Corner Fixture: [Left] [Right] [Left and right].
  
  - f. Rim Guard, Integral Stainless Steel: Top surface, each side.
  - g. Color: From manufacturer's standard color selection.
  - h. Drain: [Grid with NPS 3 (DN 80)] [Beehive dome strainer with NPS 3 (DN 80)] [Lint basket strainer with NPS 3 (DN 80)] outlet.

3. Accessories:
  - a. Rubber drain gasket for **NPS 3 (DN 80)** waste pipe.
  - b. Rubber drain gasket reducer for **NPS 2 (DN 50)** waste pipe.
  - c. Wall Bumper Guard: [**Stainless steel**] [**Vinyl**] wall bumper guard for <insert fixture size> fixture, [**left**] [**right**] [**and**] [**rear**] walls. Ship loose for field installation.
  - d. Tiling Flange: Provide factory-installed for <insert fixture size> fixture, [**left**] [**right**] [**and**] [**rear**] walls.
  - e. Mop hanger.
  - f. Hose: **36-inches (915-mm)** long, with wall hanger.
4. Faucet: [**Furnished separately**] [**Chrome-plated utility faucet with manual hot water and cold water handles. Ship loose for field installation**].
5. Mounting: On floor and flush to wall.

B. Service Basins <Insert drawing designation>: Plastic, floor mounted.

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
  - a. Zurn Industries, LLC.
  - b. <Insert manufacturer's name>.
2. Fixture:
  - a. Standard: IAPMO/ANSI Z124.6.
  - b. Material: [**Cast polymer**] <Insert material>.
  - c. Nominal Size: [**24 by 36 by 10 inches (610 by 915 mm by 255 mm)**] [**36 by 36 by 10 inches (915 by 915 by 255 mm)**] <Insert dimensions>.
  - d. Tiling Flange: [**Not required**] [**On one side**] [**On two sides**] [**On three sides**].
  - e. Rim Guard: On [**front**] [**all**] top surfaces.
  - f. Color: [**Not applicable**] <Insert color>.
  - g. Drain: Grid with [**NPS 2 (DN 50)**] [**NPS 3 (DN 80)**] outlet.
3. Mounting: On floor and flush to wall.
4. Faucet: <Insert sink-faucet designation from "Sink Faucets" Article>.

## 2.2 SERVICE SINKS

A. Service Sinks <Insert drawing designation>: Enameled, cast iron, trap standard mounted.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. American Standard.
  - b. Commercial Enameling Company.
  - c. Gerber Plumbing Fixtures LLC.
  - d. Kohler Co.

- e. Zurn Industries, LLC.
  - f. **<Insert manufacturer's name>**.
2. Fixture:
    - a. Standard: ASME A112.19.1/CSA B45.2.
    - b. Type: Service sink with back.
    - c. Back: **[Two faucet holes] [Plain]**.
    - d. Nominal Size: **[22 by 18 inches (560 by 457 mm)] [24 by 20 inches (610 by 508 mm)]**.
    - e. Color: White.
    - f. Mounting: **[NPS 2 (DN 50)] [NPS 3 (DN 80)]** P-trap standard with grid strainer inlet, cleanout, and floor flange.
    - g. Rim Guard: On front and sides.
  3. Faucet: **<Insert sink-faucet designation from "Sink Faucets" Article>**.
  4. Support: **[Type II sink carrier.] <Insert carrier>**.
  5. Lavatory Mounting Height: **[Standard] [Child] [Handicapped/elderly in accordance with ICC A117.1]**.
- B. Service Sinks **<Insert drawing designation>**: Vitreous china, trap standard mounted.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Crane Plumbing, L.L.C.
    - b. Kohler Co.
    - c. Zurn Industries, LLC.
    - d. **<Insert manufacturer's name>**.
  2. Fixture:
    - a. Standard: ASME A112.19.2/CSA B45.1.
    - b. Type: Service sink with back.
    - c. Back: **[Two faucet holes] [Plain]**.
    - d. Nominal Size: **[22 by 20 inches (560 by 508 mm)] <Insert dimensions>**.
    - e. Color: White.
    - f. Mounting: **[NPS 2 (DN 50)] [NPS 3 (DN 80)]** P-trap standard with grid strainer inlet, cleanout, and floor flange.
    - g. Rim Guard: On front and sides.
  3. Faucet: **<Insert sink-faucet designation from "Sink Faucets" Article>**.
  4. Support: **[Type II sink carrier.] <Insert carrier>**.
  5. Lavatory Mounting Height: **[Standard] [Child] [Handicapped/elderly in accordance with ICC A117.1]**.
- C. Service Sinks **<Insert drawing designation>**: Enameled, cast iron, floor mounted.
1. Manufacturers: Subject to compliance with requirements, provide products by the following:

- a. Zurn Industries, LLC.
  - b. <Insert manufacturer's name>.
2. Fixture:
- a. Standard: ASME A112.19.1/CSA B45.2.
  - b. Style: With front apron and raised back.
  - c. Nominal Size: **28 by 28 inches** (710 by 710 mm).
  - d. Color: White.
  - e. Drain: Grid with [**NPS 2 (DN 50)**] [**NPS 3 (DN 80)**] outlet.
  - f. Rim Guard: Coated wire.
3. Faucet: <Insert sink-faucet designation from "Sink Faucets" Article>.

### 2.3 UTILITY SINKS

#### A. Utility Sinks <Insert drawing designation>: Stainless steel, counter mounted.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- a. Advance Tabco.
  - b. Eagle Group.
  - c. Elkay Manufacturing Co.
  - d. Griffin Products, Inc.
  - e. Just Manufacturing.
  - f. <Insert manufacturer's name>.
2. Fixture:
- a. Standard: ASME A112.19.3/CSA B45.4.
  - b. Type: Ledge back.
  - c. Number of Compartments: [**One**] [**Two**] [**Three**].
  - d. Overall Dimensions: <Insert dimensions>.
  - e. Metal Thickness: [**0.050 inch (1.3 mm)**] <Insert dimension>.
  - f. Compartment:
    - 1) Dimensions: <Insert dimensions>.
    - 2) Drain: [**Grid with NPS 1-1/2 (DN 40) tailpiece and twist drain**] [**Grid with NPS 2 (DN 50) tailpiece and twist drain**] [**NPS 1-1/2 (DN 40) tailpiece with stopper**] <Insert drain>.
    - 3) Drain Location: [**Centered in compartment**] [**Near back of compartment**] [**Near left side of compartment**] [**Near right side of compartment**] <Insert location>.
  - g. Each Compartment:
    - 1) Dimensions: <Insert dimensions>.

- 2) Drains: [Grid with **NPS 1-1/2 (DN 40)** tailpiece and twist drain] [Grid with **NPS 2 (DN 50)** tailpiece and twist drain] [**NPS 1-1/2 (DN 40)** tailpiece with stopper] <Insert drain>.
  - 3) Drain Location: [Centered in compartment] [Near back of compartment] <Insert location>.
3. Faucet(s): <Insert sink-faucet designation from "Sink Faucets" Article>.
    - a. Number Required: [One] [Two].
    - b. Mounting: On ledge.
  4. Supply Fittings:
    - a. Standard: ASME A112.18.1/CSA B125.1.
    - b. Supplies: Chrome-plated brass compression stop with inlet connection matching water-supply piping type and size.
      - 1) Operation: [Loose key] [Wheel handle] <Insert type>.
      - 2) Risers: **NPS 1/2 (DN 15)**, [chrome-plated, rigid-copper pipe] [chrome-plated, soft-copper flexible tube] [ASME A112.18.6, braided or corrugated stainless steel flexible hose].
  5. Waste Fittings:
    - a. Standard: ASME A112.18.2/CSA B125.2.
    - b. Trap(s):
      - 1) Size: [**NPS 1-1/2 (DN 40)**] [**NPS 2 (DN 50)**].
      - 2) Material: Chrome-plated, [two-piece, cast-brass trap and swivel elbow with **0.032-inch- (0.83-mm-)** thick brass tube to wall] [two-piece, cast-brass trap and ground-joint swivel elbow with **0.032-inch- (0.83-mm-)** thick brass tube to wall] <Insert trap type>; and chrome-plated brass or steel wall flange.
      - 3) Material: Stainless steel, two-piece trap and swivel elbow with **0.012-inch- (0.30-mm-)** thick stainless steel tube to wall; and stainless steel wall flange.
    - c. Continuous Waste:
      - 1) Size: [**NPS 1-1/2 (DN 40)**] [**NPS 2 (DN 50)**].
      - 2) Material: Chrome-plated, **0.032-inch- (0.83-mm-)** thick brass tube.
  6. Mounting: On counter with sealant.
- B. Utility Sinks <Insert drawing designation>: Stainless steel, freestanding.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Advance Tabco.
    - b. AERO Manufacturing Company.

- c. Amtekco Industries, Inc; a Wasserstrom Company.
  - d. Eagle Group.
  - e. Elkay Manufacturing Co.
  - f. Griffin Products, Inc.
  - g. Just Manufacturing.
  - h. **<Insert manufacturer's name>**.
2. Fixture:
- a. Standard: ASME A112.19.3/CSA B45.4.
  - b. Type: With backsplash.
  - c. Number of Compartments: **[One] [Two] [Three]**.
  - d. Overall Dimensions: **<Insert dimensions>**.
  - e. Metal Thickness: **[0.050 inch (1.3 mm)] [0.063 inch (1.6 mm)] <Insert dimension>**.
  - f. Compartment:
    - 1) Dimensions: **<Insert dimensions>**.
    - 2) Drain: **[Grid with NPS 1-1/2 (DN 40) tailpiece and twist drain] [Grid with NPS 2 (DN 50) tailpiece and twist drain] [NPS 1-1/2 (DN 40) tailpiece with stopper] <Insert drain>**.
    - 3) Drain Location: **[Centered in compartment] [Near back of compartment] [Near left side of compartment] [Near right side of compartment] <Insert location>**.
  - g. Each Compartment:
    - 1) Dimensions: **<Insert dimensions>**.
    - 2) Drains: **[Grid with NPS 1-1/2 (DN 40) tailpiece and twist drain] [Grid with NPS 2 (DN 50) tailpiece and twist drain] [NPS 1-1/2 (DN 40) tailpiece with stopper] <Insert drain>**.
    - 3) Drain Location: **[Centered in compartment] [Near back of compartment] <Insert location>**.
  - h. Drainboard(s): **[Not required] [Both] [Left] [Right] side(s)**.
    - 1) Dimensions Each: **[Not applicable] <Insert dimensions>**.
3. Supports: Adjustable-length steel legs.
4. Faucet(s): **<Insert sink-faucet designation from "Sink Faucets" Article>**.
- a. Number Required: **[One] [Two]**.
  - b. Mounting: On backsplash.
5. Supply Fittings:
- a. Standard: ASME A112.18.1/CSA B125.1.
  - b. Supplies: Chrome-plated brass compression stop with inlet connection matching water-supply piping type and size.

- 1) Operation: [Loose key] [Wheel handle] <Insert type>.
  - 2) Risers: **NPS 1/2 (DN 15)**, [chrome-plated, rigid-copper pipe] [chrome-plated, soft-copper flexible tube] [ASME A112.18.6, braided or corrugated stainless steel flexible hose].
6. Waste Fittings:
- a. Standard: ASME A112.18.2/CSA B125.2.
  - b. Trap(s):
    - 1) Size: [**NPS 1-1/2 (DN 40)**] [**NPS 2 (DN 50)**].
    - 2) Material: Chrome-plated, [two-piece, cast-brass trap and swivel elbow with **0.032-inch- (0.83-mm-)** thick brass tube to wall] [two-piece, cast-brass trap and ground-joint swivel elbow with **0.032-inch- (0.83-mm-)** thick brass tube to wall] <Insert trap type>; and chrome-plated brass or steel wall flange.
    - 3) Material: Stainless steel, two-piece trap and swivel elbow with **0.012-inch- (0.30-mm-)** thick stainless steel tube to wall; and stainless steel wall flange.
  - c. Continuous Waste:
    - 1) Size: [**NPS 1-1/2 (DN 40)**] [**NPS 2 (DN 50)**].
    - 2) Material: Chrome-plated, **0.032-inch- (0.83-mm-)** thick brass tube.

## 2.4 HANDWASH SINKS

### A. Handwash Sinks <Insert drawing designation>: Stainless steel, wall mounted.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. Advance Tabco.
  - b. AERO Manufacturing Company.
  - c. Amtekco Industries, Inc; a Wasserstrom Company.
  - d. Eagle Group.
  - e. Elkay Manufacturing Co.
  - f. Griffin Products, Inc.
  - g. Just Manufacturing.
  - h. Sloan Valve Company.
  - i. <Insert manufacturer's name>.
2. Fixture:
  - a. Standards: ASME A112.19.3/CSA B45.4 and NSF/ANSI 2.
  - b. Type: Basin with radius corners, back for faucet, and support brackets.
  - c. Nominal Size: **17 by 16 by 5 inches (432 by 406 by 127 mm)**.
3. Faucet: <Insert sink-faucet designation from "Sink Faucets" Article>.
4. Supply Fittings: Comply with requirements in "Supply Fittings" Article.

5. Waste Fittings: Comply with requirements in "Waste Fittings" Article.
6. Support: [Type II sink carrier.]<Insert carrier>.
7. Lavatory Mounting Height: [Standard] [Child] [Handicapped/elderly in accordance with ICC A117.1].

## 2.5 SACRISTY SINKS

### A. Sacristy Sinks <Insert drawing designation>: Stainless steel, two bowl, counter mounted.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. Elkay Manufacturing Co.
  - b. Just Manufacturing.
  - c. <Insert manufacturer's name>.
2. Fixture:
  - a. Standard: ASME A112.19.3/CSA B45.4.
  - b. Type: Self-rimming.
  - c. Material: Stainless steel.
  - d. Nominal Size: Approximately [22 by 42 inches (560 by 1070 mm)] <Insert dimensions>.
  - e. Cover: Hinged with lock on [left] [right] bowl.
3. Faucet: <Insert sink-faucet designation from "Sink Faucets" Article>.
  - a. Location: On [left] [right] bowl.
4. Supply Fittings: Comply with requirements in "Supply Fittings" Article.
5. Waste Fittings:
  - a. Standard: ASME A112.18.2/CSA B125.2.
  - b. [Left] [Right] Bowl:
    - 1) Drain: Cup with stopper and NPS 1-1/2 (DN 40) tailpiece.
    - 2) Drain Piping: NPS 1-1/2 (DN 40) chrome-plated, tubular-brass direct waste without trap, separate waste piping, and wall flange.
  - c. Opposite Bowl:
    - 1) Drain: Grid with stopper and NPS 1-1/2 (DN 40) tailpiece.
    - 2) Trap:
      - a) Size: NPS 1-1/2 (DN 40).
      - b) Material: Comply with requirements in "Waste Fittings" Article.

## 2.6 SINK FAUCETS

A. NSF Standard: Comply with NSF 372 for faucet-spout materials that will be in contact with potable water.

B. Sink Faucets: Manual type, [**single control**] [**two lever handle**] <Insert type> mixing valve.

1. Commercial, Solid-Brass Faucets <Insert faucet designation>:

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1) American Standard.
- 2) Bradley Corporation.
- 3) Chicago Faucets; Geberit Company.
- 4) Delta Faucet Company.
- 5) Elkay Manufacturing Co.
- 6) GROHE America, Inc.
- 7) Just Manufacturing.
- 8) Kohler Co.
- 9) Moen Incorporated.
- 10) Sloan Valve Company.
- 11) Speakman Company.
- 12) T&S Brass and Bronze Works, Inc.
- 13) Zurn Industries, LLC.
- 14) <Insert manufacturer's name>.

2. General-Duty, Solid-Brass Faucets <Insert faucet designation>:

a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1) American Standard.
- 2) Bradley Corporation.
- 3) BrassTech Inc.
- 4) Central Brass Company.
- 5) Chicago Faucets; Geberit Company.
- 6) Danze, Inc.
- 7) Delta Faucet Company.
- 8) Eljer, Inc.
- 9) Elkay Manufacturing Co.
- 10) Franke Consumer Products, Inc.
- 11) Gerber Plumbing Fixtures LLC.
- 12) Griffin Products, Inc.
- 13) GROHE America, Inc.
- 14) Hansgrohe USA.
- 15) Hydrotek International, Inc.
- 16) Intersan Manufacturing Company.
- 17) Just Manufacturing.
- 18) Kohler Co.

- 19) Matco-Norca.
- 20) Moen Incorporated.
- 21) Price Pfister, Inc.
- 22) Speakman Company.
- 23) T&S Brass and Bronze Works, Inc.
- 24) WhiteRock Corp.
- 25) Wolverine Brass, Inc.
- 26) Zurn Industries, LLC.
- 27) <Insert manufacturer's name>.

3. Copper- or Brass-Underbody Faucets <Insert faucet designation>:

- a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1) American Standard.
- 2) Briggs Plumbing Products, Inc.
- 3) Danze, Inc.
- 4) Delta Faucet Company.
- 5) Eljer, Inc.
- 6) FNW; Ferguson Enterprises, Inc.
- 7) Gerber Plumbing Fixtures LLC.
- 8) Matco-Norca.
- 9) Moen Incorporated.
- 10) Sterling.
- 11) WhiteRock Corp.
- 12) Wolverine Brass, Inc.
- 13) <Insert manufacturer's name>.

4. Standard: ASME A112.18.1/CSA B125.1.
5. General: Include hot- and cold-water indicators; coordinate faucet inlets with supplies and fixture hole punchings; coordinate outlet with spout and sink receptor.
6. Body Type: [Centerset] [Widespread] [Single hole] <Insert type>.
7. Body Material: [Commercial, solid brass] [General-duty, solid brass] [Copper or brass underbody].
8. Finish: [Chrome plated] [Polished chrome plate] <Insert finish>.
9. Maximum Flow Rate: [2.2 gpm (8.3 L/min.)] [4.0 gpm (15 L/min.)] <Insert value>.
10. Handle(s): [Lever] [Cross, four arm] [Wrist blade, 4 inches (102 mm)] [Elbow, 6 inches (152 mm)] [Not applicable] <Insert handles>.
11. Mounting Type: [Deck, concealed] [Deck, exposed] [Back/wall, exposed].
12. Spout Type: [Rigid, solid brass] [Rigid, solid brass with wall brace] [Swing, round tubular] [Swing, shaped tube] [Swing, solid brass] [Rigid gooseneck] [Swivel gooseneck] <Insert type>.
13. Vacuum Breaker: [Required] [Not required] for hose outlet.
14. Spout Outlet: [Aerator] [Laminar flow] [Hose thread in accordance with ASME B1.20.7] [Plain end] [Spray] <Insert type>.

- C. Sink Faucets: Automatic, sensor-operated type, [120 V ac hard-wired] [battery-powered] <Insert type>, mixing valve.

1. Commercial, Solid-Brass Faucets <Insert faucet designation>:
  - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - 1) American Standard.
    - 2) Bradley Corporation.
    - 3) Chicago Faucets; Geberit Company.
    - 4) Delta Faucet Company.
    - 5) Elkay Manufacturing Co.
    - 6) GROHE America, Inc.
    - 7) Just Manufacturing.
    - 8) Kohler Co.
    - 9) Moen Incorporated.
    - 10) Sloan Valve Company.
    - 11) Speakman Company.
    - 12) T&S Brass and Bronze Works, Inc.
    - 13) Zurn Industries, LLC.
    - 14) <Insert manufacturer's name>.
2. General-Duty, Solid-Brass Faucets <Insert faucet designation>:
  - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - 1) American Standard.
    - 2) Bradley Corporation.
    - 3) Chicago Faucets; Geberit Company.
    - 4) Delta Faucet Company.
    - 5) Hydrotek International, Inc.
    - 6) Intersan Manufacturing Company.
    - 7) Just Manufacturing.
    - 8) Kohler Co.
    - 9) Moen Incorporated.
    - 10) Speakman Company.
    - 11) T&S Brass and Bronze Works, Inc.
    - 12) Wolverine Brass, Inc.
    - 13) Zurn Industries, LLC.
    - 14) <Insert manufacturer's name>.
3. Standard: ASME A112.18.1/CSA B125.1.
4. General: Coordinate faucet inlets with supplies and fixture hole punchings; coordinate outlet with spout and sink receptor.
5. Body Type: [Centerset] [Single hole] <Insert type>.
6. Body Material: [Commercial, solid brass] [General-duty, solid brass].
7. Finish: [Chrome plated] [Polished chrome plate] <Insert finish>.
8. Maximum Flow Rate: [0.5 gpm (1.9 L/min.)] <Insert value>.
9. Mounting Type: [Deck] [Back/wall].
10. Spout Type: [Rigid spout] [Rigid gooseneck] <Insert type>.
11. Spout Outlet: [Aerator] [Laminar flow] <Insert type>.

12. Thermostatic Mixing Valve: [**Above deck,**] [**Below deck,**] [**single temperature**] [**adjustable temperature manual side handle, with hot/cold water indicators**], with check valves.
13. Control module: [**Above deck,**] [**Below deck,**] water-resistant module with internal flow setting switches.

## 2.7 LAMINAR-FLOW, FAUCET-SPOUT OUTLETS

- A. NSF Standard: Comply with NSF 372 for faucet-spout-outlet materials that will be in contact with potable water.
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  1. AM Conservation Group, Inc.
  2. Chronomite Laboratories, Inc; a division of Morris Group International.
  3. NEOPERL, Inc.
  4. T&S Brass and Bronze Works, Inc.
  5. **<Insert manufacturer's name>**.
- C. Description: Chrome-plated brass, faucet-spout outlet that produces non-aerating, laminar stream. Include external or internal thread that mates with faucet outlet for attachment to faucets where indicated and flow-rate range that includes flow of faucet.

## 2.8 SUPPORTS

- A. Type II Sink Carrier:
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Jay R. Smith Mfg Co; a division of Morris Group International.
    - b. Josam Company.
    - c. MIFAB, Inc.
    - d. Wade Drains.
    - e. WATTS.
    - f. Zurn Industries, LLC.
    - g. **<Insert manufacturer's name>**.
  2. Standard: ASME A112.6.1M.

## 2.9 SUPPLY FITTINGS

- A. NSF Standard: Comply with NSF 372 for supply-fitting materials that will be in contact with potable water.
- B. Standard: ASME A112.18.1/CSA B125.1.

- C. 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.
- D. Supply Stops: Chrome-plated brass, one-quarter-turn, ball-type or compression valve with inlet connection matching supply piping.
- E. Operation: [**Loose key**] [**Wheel handle**] <Insert type>.
- F. Risers:
  - 1. [**NPS 3/8 (DN 10)**] [**NPS 1/2 (DN 15)**].
  - 2. [**Chrome-plated, rigid-copper pipe**] [**Chrome-plated, soft-copper flexible tube**] [**ASME A112.18.6, braided or corrugated stainless steel flexible hose**].

## 2.10 WASTE FITTINGS

- A. Standard: ASME A112.18.2/CSA B125.2.
- B. Drain: Grid type with **NPS 1-1/2 (DN 40)** offset and straight tailpiece.
- C. Trap:
  - 1. Size: **NPS 1-1/2 (DN 40)**.
  - 2. Material: Chrome-plated, [**two-piece, cast-brass trap and swivel elbow with 0.032-inch- (0.83-mm-) thick brass tube to wall**] [**two-piece, cast-brass trap and ground-joint swivel elbow with 0.032-inch- (0.83-mm-) thick brass tube to wall**] [**one-piece, cast-brass trap with swivel 0.029-inch- (73-mm-) thick tubular brass wall bend**] <Insert trap type>; and chrome-plated brass or steel wall flange.
  - 3. Material: Stainless steel, two-piece trap and swivel elbow with **0.012-inch- (0.30-mm-)** thick stainless steel tube to wall; and stainless steel wall flange.

## 2.11 GROUT

- A. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- B. Characteristics: Nonshrink; recommended for interior and exterior applications.
- C. Design Mix: **5000-psi (34.5-MPa)**, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine roughing-in of water supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before sink installation.
- B. Examine walls, floors, and counters for suitable conditions where sinks will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. Install sinks level and plumb in accordance with roughing-in drawings.
- B. Install supports, affixed to building substrate, for wall-hung sinks.
- C. Install accessible wall-mounted sinks at handicapped/elderly mounting height in accordance with ICC/ANSI A117.1.
- D. Set floor-mounted sinks in leveling bed of cement grout.
- E. Install water-supply piping with stop on each supply to each sink faucet.
  - 1. 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."
  - 2. Install stops in locations where they can be easily reached for operation.
- F. 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 220518 "Escutcheons for Plumbing Piping."
- G. 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."
- H. 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."

## 3.3 CONNECTIONS

- A. Connect sinks with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- B. Comply with water piping requirements specified in Section 221116 "Domestic Water Piping."

- C. Comply with soil and waste piping requirements specified in Section 221316 "Sanitary Waste and Vent Piping."

#### 3.4 ADJUSTING

- A. Operate and adjust sinks and controls. Replace damaged and malfunctioning sinks, fittings, and controls.
- B. Adjust water pressure at faucets to produce proper flow.

#### 3.5 CLEANING AND PROTECTION

- A. After completing installation of sinks, inspect and repair damaged finishes.
- B. Clean sinks, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
- C. Provide protective covering for installed sinks and fittings.
- D. Do not allow use of sinks for temporary facilities unless approved in writing by Owner.

END OF SECTION 224216.16