SECTION 224300 - HEALTHCARE PLUMBING FIXTURES

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section includes the following healthcare fixtures and specialties:

Healthcare water closets.

Flushometer valves.

Toilet seats.

Patient care units.

Healthcare showers.

Healthcare bathing units.

Perineal baths.

Bedpan washers.

Bedpan washing equipment.

Clinic sinks.

Plaster sinks.

Scrub sinks.

Hydrotherapy whirlpools.

Outlet boxes.

Morgue equipment.

Supports.

* + - * 1. Related Requirements:

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

Section 224100 "Residential Plumbing Fixtures" for residential fixtures for use in healthcare facilities, but not requiring special healthcare fixture attributes.

Section 224213.13 "Commercial Water Closets" for conventional water closets, flushometer valves, carriers, and seats for use healthcare facilities, but not requiring special healthcare fixture attributes.

Section 224213.16 "Commercial Urinals" for urinals for use in healthcare facilities.

Section 224216.13 "Commercial Lavatories" for lavatories for use in healthcare facilities, but not requiring special healthcare fixture attributes.

Section 224216.16 "Commercial Sinks" for sinks for use in healthcare facilities, but not requiring special healthcare fixture attributes.

Section 224223 "Commercial Showers" for showers for use in healthcare facilities, but not requiring special healthcare fixture attributes.

Section 224500 "Emergency Plumbing Fixtures" for emergency showers and eye-wash units.

* + - 1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: For each type of product.

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

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

* + - * 1. Sustainable Design Submittals:

Retain "Shop Drawings" paragraph below if fixtures or equipment includes wiring.

* + - * 1. Shop Drawings: Include diagrams for power, signal, and control wiring.
			1. CLOSEOUT SUBMITTALS
				1. Operation and Maintenance Data: For plumbing fixtures and faucets to include in operation and maintenance manuals.

In addition to items specified, include the following:

Servicing and adjustments of [**flushometer valves**] [**electronic sensors**] [**healthcare bathing units**] [**bedpan washer/sanitizers**] [**hydrotherapy whirlpools**] [**and**] [**morgue equipment**].

* + - 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.

Flushometer-Valve Repair Kits: Equal to [**10**] <**Insert number**> percent of amount of each type installed, but no fewer than [**one**] [**six**] <**Insert number**> of each type.

Toilet Seats: Equal to [**5**] <**Insert number**> percent of amount of each type installed.

1. PRODUCTS

Manufacturers and products listed in SpecAgent and MasterWorks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications.

* + - 1. HEALTHCARE WATER CLOSETS

Copy "Healthcare Water Closets" paragraph below and re-edit for each type of wall-mounted healthcare water closet required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare water closet.

* + - * 1. Healthcare Water Closets <**Insert drawing designation**>: Wall mounted, [**top**] [**back**] spud[**, accessible**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2685) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457156647).

[Crane Plumbing, L.L.C](http://www.specagent.com/Lookup?uid=123457156648).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457156649).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457156650).

Approved equivalent.

Bowl:

Standards: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures” and ASME A112.19.5 “Flush Valves and Spuds for Water Closets, Urinals, and Tanks”.

Material: Vitreous china.

Type: Siphon jet.

Style: Flushometer valve.

Height: Standard.

Rim Contour: Elongated with bedpan lugs or slots.

Water Consumption: [**1.28 gal.**] [**1.6 gal.**] per flush.

Spud Size: NPS 1-1/2.

Coordinate "Flushometer Valve" subparagraph below with "Flushometer Valves" Article. To require conventional flushometer valves on healthcare water closets, cross-reference Section 224213.13 "Commercial Water Closets."

Flushometer Valve: <**Insert flushometer-valve designation**>.

Coordinate "Toilet Seat" subparagraph with "Toilet Seats" Article.

Toilet Seat: <**Insert toilet-seat designation**>.

Coordinate "Water Closet Support" subparagraph below with "Supports" Article.

Water Closet Support: [**Water closet carrier**] <**Insert carrier**>.

Water-Closet Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly according to UNIFORM CODE A117.1**].

Design Consultant to review code references and verify that the referenced sections/tables are current. Note that code references shall be based on the current version of the Uniform Code.

* + - * 1. Healthcare Water Closets <**Insert drawing designation**>: Floor mounted, floor outlet, [**top**] [**back**] spud[**, accessible**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2687) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457156596).

[Crane Plumbing, L.L.C](http://www.specagent.com/Lookup?uid=123457156597).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457156598).

[Willoughby Industries](http://www.specagent.com/Lookup?uid=123457156600).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457156599).

Approved equivalent.

Bowl:

Standards: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures” and ASME A112.19.5 “Flush Valves and Spuds for Water Closets, Urinals, and Tanks”.

Material: Vitreous china.

Type: Siphon jet.

Style: Flushometer valve.

Height: [**Standard**] [**Handicapped/elderly**].

Rim Contour: Elongated with bedpan lugs or slots.

Water Consumption: [**1.28 gal.**] [**1.6 gal.**] per flush.

Spud Size: NPS 1-1/2.

Coordinate "Flushometer Valve" subparagraph below with "Flushometer Valves" Article. To require conventional flushometer valves on healthcare water closets, cross-reference Section 224213.13 "Commercial Water Closets."

Flushometer Valve: <**Insert flushometer-valve designation**>.

Coordinate "Toilet Seat" subparagraph with "Toilet Seats" Article.

Toilet Seat: <**Insert toilet-seat designation**>.

Copy "Healthcare Water Closets" paragraph below and re-edit for each type of floor-mounted, back-outlet healthcare water closet required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare water closet.

* + - * 1. Healthcare Water Closets <**Insert drawing designation**>: Floor mounted, back outlet, [**top**] [**back**] spud[**, accessible**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2688) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457156605).

[Crane Plumbing, L.L.C](http://www.specagent.com/Lookup?uid=123457156602).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457156603).

[Willoughby Industries](http://www.specagent.com/Lookup?uid=123457156606).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457156604).

Approved equivalent.

Bowl:

Standard: Standards: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures” and ASME A112.19.5 “Flush Valves and Spuds for Water Closets, Urinals, and Tanks”.

Material: Vitreous china.

Type: Siphon jet.

Style: Flushometer valve.

Height: [**Standard**] [**Handicapped/elderly**].

Rim Contour: Elongated with bedpan lugs or slots.

Water Consumption: [**1.28 gal.**] [**1.6 gal.**] per flush.

Spud Size: NPS 1-1/2.

Coordinate "Flushometer Valve" subparagraph below with "Flushometer Valves" Article.

Flushometer Valve: <**Insert flushometer-valve designation**>.

Coordinate "Toilet Seat" subparagraph with "Toilet Seats" Article.

Toilet Seat: <**Insert toilet-seat designation**>.

* + - 1. FLUSHOMETER VALVES

Caution: Consumption of flushometer valves for healthcare water closets and clinic sinks must match the fixture consumption. Copy "Lever-Handle, Diaphragm Flushometer Valves" paragraph below and re-edit for each type of lever-handle, diaphragm flushometer valve with bedpan washer required. A separate bedpan washer is unnecessary where this flushometer valve is specified.

Insert letter and number combination number to complete designation. Use these designations on Drawings to identify each flushometer valve.

* + - * 1. Lever-Handle, Diaphragm Flushometer Valves <**Insert designation**>.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2690) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Delany Products](http://www.specagent.com/Lookup?uid=123457156683).

[Sloan Valve Company](http://www.specagent.com/Lookup?uid=123457156681).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457156682).

Approved equivalent.

Standard: ASSE 1037 “Performance Requirements for Pressurized Flushing Devices for Plumbing Fixtures”.

Minimum Pressure Rating: 125 psig.

Features: Integral check stop, backflow-prevention device, and outlet-tube-mounted bedpan washer.

Material: Brass body with corrosion-resistant components.

Exposed Flushometer-Valve Finish: Chrome plated.

Style: Exposed.

Consumption: [**1.28 gal.**] [**1.6 gal.**] [**3.5 gal.**] <**Insert value**> per flush.

Minimum Inlet: NPS 1.

Minimum Outlet: NPS 1-1/4, extended length.

* + - 1. TOILET SEATS

Copy "Toilet Seats" paragraph below and re-edit for each type of toilet seat required.

Insert letter and number combination to complete designation. Use these designations on Drawings to identify each toilet seat.

* + - * 1. Toilet Seats <**Insert designation**>.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2691) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200619).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200491).

[TOTO USA, INC](http://www.specagent.com/Lookup?uid=123457200620).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200494).

Approved equivalent.

Standard: IAPMO Z124.5 “Interim Guide Criteria for Plastic Toilet (Water Closet) Seats”.

Material: Plastic with antimicrobial agent.

Type: [**Commercial (standard)**] [**Commercial (heavy duty)**].

Shape: Elongated rim, open front.

Hinge: Check.

Hinge Material: Noncorroding metal.

Color: White.

* + - 1. PATIENT CARE UNITS

Copy "Patient Care Units" paragraph below and re-edit for each type of patient care unit required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each patient care unit.

* + - * 1. Patient Care Units <**Insert drawing designation**>: Factory-fabricated, combination, swing-away water closet and lavatory healthcare plumbing fixture.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2692) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200497).

Willoughby Industries, Inc.

Approved equivalent.

Cabinet: Fixed installation with storage space and toilet paper holder.

Material: [**Stainless steel**] [**Stainless steel, plastic laminate, or fiberglass**] with [**laminated-wood or -plastic**] [**solid-plastic**] [**stainless-steel**] top surface.

Color: [**Not applicable**] <**Insert color**>.

Mounting: Wall bracket.

Water Closet: Swivel, floor mounted, [**back**] [**floor**] outlet.

Material: Stainless steel.

Orientation: [**Left**] [**Right**] hand.

Seal: For outlet.

Flushometer: Concealed flushometer valve with push-button trip mechanism, check stop, and vacuum breaker on tailpiece.

Toilet Seat: White, solid plastic.

Support: Floor plate.

Lavatory: Counter mounted.

Material: [**Stainless steel**] [**Cultured marble**] [**Solid-surface material**] <**Insert material**>.

Color: [**Not applicable**] <**Insert color**>.

Faucet: [**Gooseneck type with wrist-blade handles**] [**Swing-spout type with single lever**] <**Insert type**> complying with ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings” and NSF 61 Annex G “Drinking Water Systems Components - Health Effects”.

Waste Fittings: Grid drain, with NPS 1-1/4 tailpiece and [**NPS 1-1/4**] [**NPS 1-1/2 by NPS 1-1/4**] chrome-plated, cast-brass P-trap; tubular-brass waste to wall; and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.

Copy "Patient Care Units" paragraph below and re-edit for each type of factory-fabricated, combination, fixed-position patient care unit required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each patient care unit.

* + - * 1. Patient Care Units <**Insert drawing designation**>: Factory-fabricated, combination, fixed-position water closet and lavatory healthcare fixture.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2693) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200497).

Willoughby Industries, Inc.

Approved equivalent.

Cabinet: Fixed installation; swing-away cabinet or retractable, water-closet cover design with storage space and toilet paper holder.

Material: [**Stainless steel**] [**Stainless steel, plastic laminate, or fiberglass**] with [**laminated-wood or -plastic**] [**solid-plastic**] [**stainless-steel**] top surface.

Color: [**Not applicable**] <**Insert color**>.

Support: Wall bracket.

Water Closet: Floor mounted, floor outlet.

Material: Stainless steel or vitreous china.

Orientation: [**Left**] [**Right**] hand.

Seal: For outlet.

Flushometer: Concealed flushometer valve with push-button trip mechanism, check stop, and vacuum breaker on tailpiece.

Toilet Seat: White, solid plastic.

Lavatory: Counter mounted.

Material: [**Stainless steel**] [**Cultured marble**] [**Solid-surface material**] <**Insert material**>.

Color: [**Not applicable**] <**Insert color**>.

Faucet: [**Gooseneck type with wrist-blade handles**] [**Swing-spout type with single lever**] <**Insert type**> complying with ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings” and NSF 61 Annex G “Drinking Water Systems Components - Health Effects”.

Waste Fittings: Grid drain, with NPS 1-1/4 tailpiece and [**NPS 1-1/4**] [**NPS 1-1/2 by NPS 1-1/4**] chrome-plated, cast-brass P-trap; tubular-brass waste to wall; and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.

* + - 1. HEALTHCARE SHOWERS

Copy "Healthcare Showers" paragraph below and re-edit for each type of healthcare shower required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare shower.

* + - * 1. Healthcare Showers <**Insert drawing designation**>: Accessible, [**glass-fiber-reinforced plastic**] [**acrylic**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2694) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Aqua Bath Company, Inc](http://www.specagent.com/Lookup?uid=123457200426).

[Florestone Products Co., Inc](http://www.specagent.com/Lookup?uid=123457200428).

Approved equivalent.

Standard: ANSI Z124.1.2 “Plastic Bathtub and Shower Units” and complying with UNIFORM CODE A117.1 “Accessible and Usable Buildings and Facilities” for roll-in shower compartments.

Nominal Size: [**60 by 36 inches**] <**Insert dimensions**>.

Retain one of two "Surround" subparagraphs below. Retain first paragraph for fiber-glass-reinforced plastic surround; retain second paragraph for acrylic surround.

Surround: One piece[**or sealed, multiple piece**].

Surround: One piece.

Bathing Surface: Slip resistant according to ASTM F462 “Consumer Safety Specification for Slip-Resistant Bathing Facilities”.

Color: [**White**] <**Insert color**>.

Drain Location: [**Left side**] [**Center**] [**Right side**].

Accessibility Options: Include grab bar and bench.

Coordinate "Faucet" paragraph with "Healthcare Shower Faucets" Article.

Faucet: <**Insert healthcare shower-faucet designation**>.

Drain: Grid, NPS 2, complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.

* + - 1. HEALTHCARE SHOWER FAUCETS
				1. NSF Standard: Comply with NSF 61 Annex G, "Drinking Water System Components - Health Effects," for faucet materials that will be in contact with potable water.

Copy "Healthcare Shower Faucets" paragraph below and re-edit for each type of pressure-balance mixing valve, healthcare shower faucet required.

Insert letter and number combination to complete designation. Use these designations on Drawings to identify each healthcare shower faucet.

* + - * 1. Healthcare Shower Faucets <**Insert drawing designation**>: Pressure-balance mixing valve.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2697) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Acorn Engineering Company; a Division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200444).

[American Standard](http://www.specagent.com/Lookup?uid=123457200433).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200436).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200437).

Approved equivalent.

Faucet:

Standards: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings” and ASSE 1016 “Performance Requirements for Individual Thermostatic Pressure Balancing and Combination Control for Bathing Facilities”.

Body Material: Solid brass.

Finish: Polished chrome plate.

Maximum Flow Rate: [**2.5 gpm**] <**Insert value**> unless otherwise indicated.

Mounting: [**Concealed**] [**Exposed**].

Operation: Single-handle, [**push-pull**] [**or**] [**twist or rotate**] control.

Antiscald Device: [**Integral with mixing valve**] [**Separate unit**] [**Not required**].

Check Stops: Check-valve type, integral with or attached to body; on hot- and cold-water-supply connections.

Indicators: For hot and cold water.

Shower Head:

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Type: [**Ball joint with arm and flange**] [**Without ball joint, but with arm and flange**] [**Ball joint and head integral with mounting flange**] [**Integral with mounting flange**] [**Hand held, slide bar mounted**] [**Hand held, hook mounted**] <**Insert type**>.

Shower Head Material: Metallic with chrome-plated finish.

Spray Pattern: [**Adjustable**] [**Fixed**].

Integral Volume Control: [**Not required**] [**Required**].

Retain "Shower-Arm, Flow-Control Fitting" subparagraph below only if option retained in "Type" subparagraph above includes arm and flange; otherwise, delete "Shower-Arm, Flow-Control Fitting" subparagraph below.

Shower-Arm, Flow-Control Fitting: [**Not required**] [**1.5 gpm**] [**2.0 gpm**].

Verify availability of feature in "Temperature Indicator" subparagraph below if required.

Temperature Indicator: [**Integral with faucet**] [**Not required**].

Copy "Healthcare Shower Faucets" paragraph below and re-edit for each type of thermostatic mixing valve, healthcare shower faucet required.

Insert letter and number combination to complete designation. Use these designations on Drawings to identify each healthcare shower faucet.

* + - * 1. Healthcare Shower Faucets <**Insert drawing designation**>: Thermostatic mixing valve.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2699) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Acorn Engineering Company; a Division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200625).

[POWERS; A WATTS Brand](http://www.specagent.com/Lookup?uid=123457200500).

[Symmons Industries, Inc](http://www.specagent.com/Lookup?uid=123457200626).

Approved equivalent.

Faucet:

Standards: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings” and ASSE 1016 “Performance Requirements for Individual Thermostatic Pressure Balancing and Combination Control for Bathing Facilities”.

Body Material: Solid brass.

Finish: Polished chrome plate.

Maximum Flow Rate: [**2.5 gpm**] <**Insert value**> unless otherwise indicated.

Mounting: [**Concealed**] [**Exposed**].

Operation: Single-handle, [**push-pull**] [**or**] [**twist or rotate**] control.

Antiscald Device: [**Integral with mixing valve**] [**Separate unit**] [**Not required**]

Check Stops: Check-valve type, integral with or attached to body; on hot- and cold-water-supply connections.

Indicators: For hot and cold water.

Shower Head:

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Type: [**Ball joint with arm and flange**] [**Without ball joint, but with arm and flange**] [**Ball joint and head integral with mounting flange**] [**Integral with mounting flange**] [**Hand held, slide bar mounted**] [**Hand held, hook mounted**] <**Insert type**>.

Material: Metallic with chrome-plated finish.

Spray Pattern: [**Adjustable**] [**Fixed**].

Integral Volume Control: [**Not required**] [**Required**].

Retain "Shower-Arm, Flow-Control Fitting" subparagraph below only if option retained in "Type" subparagraph above includes arm and flange; otherwise, delete "Shower-Arm, Flow-Control Fitting" subparagraph below.

Shower-Arm, Flow-Control Fitting: [**Not required**] [**1.5 gpm**] [**2.0 gpm**].

Verify availability of feature in "Temperature Indicator" subparagraph below if required.

Temperature Indicator: [**Integral with faucet**] [**Not required**].

* + - 1. HEALTHCARE BATHING UNITS

Caution: Provide one or more floor drains near bathing units.

Copy "Healthcare Bathing Units" paragraph below and re-edit for each type of side-entry healthcare bathing unit required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare bathing unit.

* + - * 1. Healthcare Bathing Units <**Insert drawing designation**>: Side-entry[**, whirlpool**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2700) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Arjo Inc](http://www.specagent.com/Lookup?uid=123457200504).

[Invacare Continuing Care Group](http://www.specagent.com/Lookup?uid=123457200503).

Approved equivalent.

Fixture: Plastic-tub, institutional bath fixture with integral controls.

Retain "Standard" subparagraph below if unit has whirlpool.

Standard: UL 1795 “Standard for Hydromassage Bathtubs”.

Tub Size: [**60 by 30 inches**] <**Insert dimensions**>.

Controls: Vacuum breakers on supplies, thermostatic mixing valve, tub fill spout, and hand-held shower head.

Supply Connections: [**NPS 3/4**] [**NPS 1**] with shutoff valve.

Drain: Manufacturer's standard [**NPS 1-1/2**] [**NPS 2**] with tailpiece.

Drain Piping: [**NPS 1-1/2**] [**NPS 2**] cast-brass P-trap, waste to wall, and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”. Include combined drain piping if two drains.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Healthcare bathing units in paragraph below may require additional data for optional features or special applications.

Copy "Healthcare Bathing Units" paragraph below and re-edit for each type of healthcare bathing unit required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare bathing unit.

* + - * 1. Healthcare Bathing Units <**Insert drawing designation**>: [**Side**] [**Transfer-lift**] [**Slide-on**] entry, [**adjustable**] [**fixed**] height.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2702) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Clarion Bathware](http://www.specagent.com/Lookup?uid=123457200505).

Comfort Designs Bathware.

Approved equivalent.

Fixture: Plastic-tub, institutional bath fixture with integral controls.

Tub Size: [**60 by 30 inches**] <**Insert dimensions**>.

Controls: Vacuum breakers on supplies, thermostatic mixing valve, tub fill spout, and hand-held shower head.

Supply Connections: [**NPS 3/4**] [**NPS 1**] with shutoff valve.

Drain: Manufacturer's standard [**NPS 1-1/2**] [**NPS 2**] with tailpiece.

Drain Piping: [**NPS 1-1/2**] [**NPS 2**] cast-brass P-trap, waste to wall, and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”. Include combined drain piping if two drains.

Lift System: [**Not required**] <**Insert description**>.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Healthcare Bathing Units" paragraph below and re-edit for each type of front-entry shower, healthcare bathing unit required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each healthcare bathing unit.

* + - * 1. Healthcare Bathing Units <**Insert drawing designation**>: Front-entry shower.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2703) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Arjo Inc](http://www.specagent.com/Lookup?uid=123457200509).

Comfort Designs Bathware.

[Invacare Continuing Care Group](http://www.specagent.com/Lookup?uid=123457200508).

Approved equivalent.

Fixture: Plastic-tub, institutional fixture with integral controls.

Cabinet Size: [**35 by 41 inches**] <**Insert dimensions**>.

Controls: Vacuum breakers on supplies, thermostatic mixing valve, tub fill spout, and hand-held shower head.

Supply Connections: [**NPS 3/4**] [**NPS 1**] with shutoff valve.

Drain: Manufacturer's standard NPS 2 with tailpiece.

Drain Piping: NPS 2 P-trap, waste to wall, and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”. Include combined drain piping if two drains.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

* + - 1. PERINEAL BATHS

Copy "Perineal Baths" paragraph below and re-edit for each type of pedestal-mounted, vitreous-china perineal bath required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each perineal bath.

* + - * 1. Perineal Baths <**Insert drawing designation**>: Pedestal mounted, vitreous china.

Fixture:

Standard: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures”.

Color: White.

Drain: NPS 1-1/2 with tailpiece and removable overflow attachment.

Support: Pedestal.

Faucet: Wall-mounting, single-lever-handle, thermostatic mixing valve with concealed supplies and wall-mounting thermometer.

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Material: Brass body and escutcheon.

Flow Rate: Modified to [**1.5 gpm**] <**Insert value**> maximum unless otherwise indicated.

Finish: Polished chrome plate.

Temperature Indicators: Color-coded for hot and cold water.

Exposed Piping: Chrome plated; brass pipe or copper tube.

Supply Connections: NPS 1/2.

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

* + - 1. BEDPAN WASHERS

See "Flushometer Valves" Article for flushometer-valve-mounted bedpan washers.

Copy "Bedpan Washers" paragraph below and re-edit for each type of wall-mounted, compact bedpan washer required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each bedpan washer.

* + - * 1. Bedpan Washers <**Insert drawing designation**>: Wall mounted, compact.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2708) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200513).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200512).

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200516).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200517).

Approved equivalent.

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Hose Assembly: [**48-inch-**] <**Insert dimension**> long rubber or vinyl hose with self-closing, hand-held spray nozzle, wall bracket, and hook.

Vacuum Breaker: ASSE 1001 “Performance Requirements for Atmospheric Type Vacuum Breakers”, atmospheric, wall mounted.

Shutoff Valve: Wall-mounted, [**cross-handle**] <**Insert type**> supply stop upstream of vacuum breaker.

Connecting Piping: Concealed.

Finish: Polished chrome-plated finish on exposed metal parts.

Supply Connection: [**NPS 1/2**] <**Insert size**>.

Copy "Bedpan Washers" paragraph below and re-edit for each type of wall-mounted, bedpan-washer assembly required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each bedpan washer.

* + - * 1. Bedpan Washers <**Insert drawing designation**>: Wall-mounted assembly with [**floor**] [**wall**]-mounted, [**single-pedal**] [**double-pedal, hot- and cold-water**] foot control.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2709) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200519).

[T&S Brass and Bronze Works, Inc](http://www.specagent.com/Lookup?uid=123457200520).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200522).

Approved equivalent.

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Hose: [**48-inch-**] <**Insert dimension**> long rubber or vinyl hose with self-closing, hand-held spray nozzle, wall bracket, and hook.

Vacuum Breaker: ASSE 1001 “Performance Requirements for Atmospheric Type Vacuum Breakers”, atmospheric, wall mounted.

Shutoff Valve: Wall-mounted, [**cross-handle**] <**Insert type**> supply stop between foot control and vacuum breaker.

Connecting Piping: Concealed.

Finish: Polished chrome-plated finish on exposed metal parts.

Control Mounting: [**Floor**] [**Wall**].

Supply Connection(s): [**NPS 1/2**] <**Insert size**>.

* + - 1. BEDPAN WASHING EQUIPMENT

Units in this article require separate atmospheric and sanitary vents. Do not connect atmospheric-vent to sanitary-vent piping.

Copy "Bedpan Washers/Sanitizers" paragraph below and re-edit for each type of bedpan washer/sanitizer required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each bedpan washer/sanitizer.

* + - * 1. Bedpan Washers/Sanitizers <**Insert drawing designation**>: [**Recessed**] [**Wall**] mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2710) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[MEIKO](http://www.specagent.com/Lookup?uid=123457200628).

[Steelco S.p.A](http://www.specagent.com/Lookup?uid=123457200630).

Approved equivalent.

Fixture:

Construction: Cast-iron chamber and P-trap waste assembly with spray nozzles and [**enameled**] [**stainless**]-steel front panel and cover box.

Controls: Electric, 120-V ac, automatic operation with timer, solenoid valves, and circuit breaker.

Door Mechanism: Foot-pedal operation.

Supply Connections: NPS 1 cold water and NPS 3/8 [**hot water**] [**steam**].

Drain Piping: NPS 3 P-trap and soil pipe.

Atmospheric Vent Connection: NPS 2.

Mounting Hardware: Matching fixture-mounting arrangement.

Accessories:

Bedpan Rack(s): [**One**] [**Two**] <**Insert number**>.

Urinal Rack(s): [**One**] [**Two**] <**Insert number**>.

Drain Tray(s): [**One**] [**Two**] <**Insert number**>.

Copy "Bedpan Washers/Disinfectors" paragraph below and re-edit for each type of bedpan washer/disinfector required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each bedpan washer/disinfector.

* + - * 1. Bedpan Washers/Disinfectors <**Insert drawing designation**>: [**Freestanding**] [**Wall**] [**Undercounter**] mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2712) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Arjo Inc](http://www.specagent.com/Lookup?uid=123457200524).

[MEIKO](http://www.specagent.com/Lookup?uid=123457200631).

[Steelco S.p.A](http://www.specagent.com/Lookup?uid=123457200633).

Approved equivalent.

Fixture:

Controls: Electric, automatic operation.

Cabinet: Stainless steel.

Wash Chamber: Stainless steel.

Supply Connections: NPS 1/2 cold water and NPS 1/2 hot water.

Drain Piping: NPS 4 P-trap and soil pipe.

Mounting Hardware: Matching fixture-mounting arrangement.

Unit Electrical Characteristics:

Volts: [**208**] [**240**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

* + - 1. CLINIC SINKS

Copy "Clinic Sinks" paragraph below and re-edit for each type of wall-mounted clinic sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each clinic sink.

* + - * 1. Clinic Sinks <**Insert drawing designation**>: Wall mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2713) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200529).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200528).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200527).

Approved equivalent.

Fixture: Back-outlet, vitreous-china, blowout-type, flushing-rim, service sink.

Standard: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures”.

Nominal Size: [**25 by 20 inches**] <**Insert dimensions**>.

Outlet Size: NPS 4[**or NPS 3**].

Color: White.

Rim Guard: Stainless steel, on front.

Coordinate "Flushometer Valve" subparagraph below with "Flushometer Valves" Article. Use flushometer valve designed for 3.5 gal. (13.2 L) per flush.

Flushometer Valve: <**Insert flushometer-valve designation**>.

Coordinate "Faucet" subparagraph below with "Sink Faucets" Article. Use polished, chrome-plated, solid-brass, wall-mounted, service-sink-faucet type in first subparagraph below. Include integral stops in shanks, vacuum breaker, hose-thread outlet, and pail hook.

Faucet: [**Not required**] <**Insert sink-faucet designation**>.

Coordinate "Support" subparagraph below with "Supports" Article.

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

Sink Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly according to UNIFORM CODE A117.1**].

Copy "Clinic Sinks" paragraph below and re-edit for each type of floor-mounted clinic sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each clinic sink.

* + - * 1. Clinic Sinks <**Insert drawing designation**>: Floor mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2715) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200531).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200533).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200534).

Approved equivalent.

Caution: This fixture may require a raised base to attain correct height. Verify with manufacturer.

Fixture: Bottom-outlet, vitreous-china, siphon-jet, flushing-rim, service sink.

Standard: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures”.

Nominal Size: [**27 by 20 inches**] <**Insert dimensions**>.

Color: White.

Rim Guards: Stainless steel on front.

Sink Base: [**10 inches**] <**Insert dimension**> high; cast terrazzo if required.

Coordinate "Flushometer Valve" subparagraph below with "Flushometer Valves" Article. Use flushometer valve designed for 3.5 gal. (13.2 L) per flush.

Flushometer Valve: <**Insert flushometer-valve designation**>.

Coordinate "Faucet" subparagraph with "Sink Faucets" Article. Use polished, chrome-plated, solid-brass, wall-mounted, service-sink-faucet type in first subparagraph below. Include integral stops in shanks, vacuum breaker, hose-thread outlet, and pail hook.

Faucet: <**Insert sink-faucet designation**>.

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

* + - 1. PLASTER SINKS

Copy "Plaster Sinks" paragraph below and re-edit for each type of wall-mounted, vitreous-china plaster sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each plaster sink.

* + - * 1. Plaster Sinks <**Insert drawing designation**>: Wall mounted, vitreous china.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2717) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200537).

[Crane Plumbing, LLC; a division of American Standard](http://www.specagent.com/Lookup?uid=123457200535).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200536).

Approved equivalent.

Fixture:

Standard: ASMA A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures”.

Type: Utility sink.

Nominal Size: [**24 by 22 inches**] [**30 by 22 inches**] <**Insert dimensions**> with back.

Color: White.

Faucet Holes: [**One**] [**Two**] in back.

Drain: Grid, NPS 1-1/2[**with NPS 1-1/2 to NPS 2 adaptor**].

Coordinate "Faucet" subparagraph below with "Sink Faucets" Article.

Faucet: <**Insert sink-faucet designation**>.

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

Drain Piping: [**NPS 1-1/2**] [**NPS 2**] chrome-plated brass; 0.045-inch- thick waste to interceptor; interceptor to wall; and wall flange complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.

Plaster Interceptor:

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2718) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200539).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200538).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200542).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200543).

Approved equivalent.

Description: Cast-iron or steel body and removable cover with acid-resistant-enameled interior lining and outside coating; removable, corrosion-resistant metal screens or strainer; and [**NPS 1-1/2**] [**NPS 2**] inlet and outlet.

Coordinate "Support" subparagraph below with "Supports" Article.

Support: [**Type III sink carrier with white-enameled-steel brackets**] <**Insert carrier**>.

Sink Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly according to UNIFORM CODE A117.1**].

* + - 1. SCRUB SINKS

Copy "Scrub Sinks" paragraph below and re-edit for each type of stainless-steel, wall-mounted scrub sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each surgeon's scrub sink.

* + - * 1. Scrub Sinks <**Insert drawing designation**>: Stainless steel, wall mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2719) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Elkay](http://www.specagent.com/Lookup?uid=123457200452).

[Sloan Valve Company](http://www.specagent.com/Lookup?uid=123457200454).

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200451).

Approved equivalent.

Fixture:

Standard: ASME A112.19.3/CSA B45.4 “Stainless Steel Plumbing Fixtures”.

Nominal Size: 31 by 20 inches with back with one faucet hole.

Drain: [**Grid**] <**Insert type**>, NPS 1-1/2.

Coordinate "Faucet" subparagraph below with "Sink Faucets" Article.

Faucet: <**Insert sink-faucet designation**>.

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

Coordinate "Support" subparagraph below with "Supports" Article.

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

Sink Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly according to UNIFORM CODE A117.1**].

Copy "Scrub Sinks" paragraph below and re-edit for each type of vitreous-china, wall-mounted scrub sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each surgeon's scrub sink.

* + - * 1. Scrub Sinks <**Insert drawing designation**>: Vitreous china, wall mounted.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2720) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200388).

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200390).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200389).

Approved equivalent.

Fixture:

Standard: ASME A112.19.2/CSA B45.1 “Ceramic Plumbing Fixtures”.

Nominal Size: [**28 by 22 inches**] [**30 by 22 inches**] <**Insert dimensions**> with back or ledge with one faucet hole.

Color: White.

Drain: [**Grid**] <**Insert type**>, NPS 1-1/2.

Coordinate "Faucet" subparagraph with "Sink Faucets" Article.

Faucet: <**Insert sink-faucet designation**>.

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

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

Coordinate "Support" subparagraph below with "Supports" Article.

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

Sink Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly according to UNIFORM CODE A117.1**].

* + - 1. SINK FAUCETS
				1. NSF Standard: Comply with NSF 61 Annex G, "Drinking Water System Components - Health Effects," for faucet-spout materials that will be in contact with potable water.

Copy "Sink Faucets" paragraph below and re-edit for each type of manual-operation mixing valve, sink faucet required.

Insert letter and number combination to complete drawing designation. Use these designations to identify each sink faucet.

* + - * 1. Sink Faucets <**Insert drawing designation**>: Manual-operation mixing valve.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2721) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200398).

[Bradley Corporation](http://www.specagent.com/Lookup?uid=123457200636).

[Elkay](http://www.specagent.com/Lookup?uid=123457200401).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200391).

[T&S Brass and Bronze Works, Inc](http://www.specagent.com/Lookup?uid=123457200402).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200397).

Approved equivalent.

Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.

Configuration: Hot- and cold-water indicators; coordinate faucet inlets with supplies and fixture hole punchings; coordinate outlet with spout and sink receptor.

Option in "Body Type" subparagraph below must match fixture hole punching.

Body Type: [**Centerset**] [**Widespread**] [**Single hole**] <**Insert type**>.

Body Material: Solid brass.

Finish: [**Chrome plated**] [**Polished chrome plate**] <**Insert finish**>.

Maximum Flow Rate: [**2.2 gpm**] [**2.5 gpm**] <**Insert value**>.

Retain one of two "Control" subparagraphs below.

Control: [**Lever**] [**Cross, four-arm**] [**Wrist-blade, 4-inch**] [**Elbow, 6-inch**] <**Insert type**> handle(s).

Control: [**Foot pedal**] [**Knee action**] <**Insert type**>.

Mounting Type: [**Deck, concealed**] [**Deck, exposed**] [**Back/wall, exposed**] <**Insert type**>.

Spout Type: [**Rigid**] [**Swivel**], [**low profile**] [**gooseneck**] <**Insert type**>.

Retain first option in "Vacuum Breaker" subparagraph below for sink faucets with hose-thread outlet.

Vacuum Breaker: [**Required**] [**Not required**] for hose outlet.

Spout Outlet: [**Aerator**] [**Laminar flow**] [**Hose thread**] [**Plain end**] [**Spray**] <**Insert type**>.

Copy "Sink Faucets" paragraph below and re-edit for each type of automatic, electronic-sensor-operated mixing valve, sink faucet required.

Insert letter and number combination to complete drawing designation. Use these designations to identify each sink faucet.

* + - * 1. Sink Faucets <**Insert designation**>: Automatic, [**battery-powered**] [**hard-wired**], electronic-sensor-operated mixing valve.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2723) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200409).

[Kohler Co](http://www.specagent.com/Lookup?uid=123457200405).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200411).

Approved equivalent.

Standards: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings” and UL 1951 “Standard for Safety Electric Plumbing Accessories”.

Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70 “Standard for Electrical Safety in the Workplace”, by a qualified testing agency, and marked for intended location and application.

Configuration: Hot- and cold-water indicators; coordinate faucet inlets with supplies and fixture hole punchings; coordinate outlet with spout and fixture receptor.

Option in "Body Type" subparagraph below must match fixture hole punching.

Body Type: [**Centerset**] [**Widespread**] [**Single hole**] <**Insert type**>.

Body Material: Solid brass.

Finish: [**Polished chrome plate**] <**Insert finish**>.

Maximum Flow Rate: [**2.2 gpm**] [**2.5 gpm**] <**Insert value**> unless otherwise indicated.

Mounting Type: [**Deck, concealed**] [**Deck, exposed**] [**Back/wall, exposed**].

Spout Type: [**Rigid**] [**Swivel**], [**low profile**] [**gooseneck**] <**Insert type**>.

Retain first option in "Vacuum Breaker" subparagraph below for sink faucets with hose-thread outlet.

Vacuum Breaker: [**Required**] [**Not required**] for hose outlet.

Spout Outlet: [**Aerator**] [**Laminar flow**] [**Hose thread**] [**Plain end**] [**Spray**] <**Insert type**>.

* + - 1. LAMINAR-FLOW, FAUCET-SPOUT OUTLETS

Retain this article if specifying a laminar-flow, faucet-spout outlet for any sink faucet.

Spout outlets in this article are non-aerating, produce less splashing than conventional faucet spouts, and help reduce bacteria growth.

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=2724) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[American Standard](http://www.specagent.com/Lookup?uid=123457200637).

[Delta Faucet Company](http://www.specagent.com/Lookup?uid=123457200639).

[Elkay](http://www.specagent.com/Lookup?uid=123457200640).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200646).

Approved equivalent.

* + - * 1. 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 faucet flow.
				2. NSF Standard: Comply with NSF 61 Annex G, "Drinking Water System Components - Health Effects," for faucet-spout-outlet materials that will be in contact with potable water.
			1. HYDROTHERAPY WHIRLPOOLS

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of podiatry, hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Podiatry.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2726) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200549).

Approved equivalent.

Description: Stationary stainless-steel tank for feet and ankles.

Water Capacity: 15 gal.

Drain: Waste connection.

Controls.

Thermometer: Control panel or tank mounted.

One electric turbine ejector.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of upper-extremity hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Upper extremity.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2727) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200550).

Approved equivalent.

Description: Stationary, pedestal-mounted, stainless-steel tank for arms, hands, and elbows.

Water Capacity: 25 gal.

Drain: Waste connection.

One arm support.

Controls.

Thermometer: Control panel or tank mounted.

One electric turbine ejector.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of high-tank, body hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: High tank, body.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2729) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200553).

Approved equivalent.

Description: Stationary stainless-steel tank for legs, hips, and back.

Water Capacity: 105 gal.

Drain: Waste connection.

Controls.

Thermometer: Control panel or tank mounted.

One electric turbine ejector.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phases: [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of low-tank, body hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Low tank, body.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2730) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200555).

Approved equivalent.

Description: Stationary, extended-length, stainless-steel tank for legs, hips, and lower back.

Water Capacity: 105 gal.

Drain: Waste connection.

Controls.

Thermometer: Control panel or tank mounted.

Head rest.

One electric turbine ejector.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of small Hubbard-immersion-tank hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Small Hubbard immersion tank.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2732) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200556).

Approved equivalent.

Description: Stationary butterfly-shaped tank for full-body massage.

Tank Dimensions: [**93 by 64 by 22 inches**] <**Insert dimensions**>.

Overall Height: [**34 to 38 inches**] <**Insert dimensions**>.

Water Capacity: [**268 gal.**] <**Insert value**>.

Material: Stainless steel.

Supports: Legs or base.

Controls.

Thermometer: Control panel or tank rim mounted.

Supply: Over-the-rim fill spout.

Drains: Two waste connections.

Electric Turbine Ejectors: Two; one rail mounted on each side.

Thermostatic, mixing-valve assembly.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Insert or delete optional features below to suit Project. Many are available.

Hose and hand-held shower.

Wash-out-hose assembly.

Stretcher lift.

Overhead[**electric**] hoist.

<**Insert option**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of medium Hubbard-immersion-tank hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Medium Hubbard immersion tank.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2733) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Arjo Inc](http://www.specagent.com/Lookup?uid=123457200558).

Approved equivalent.

Description: Stationary butterfly-shaped tank for full-body massage.

Tank Dimensions: [**100 by 73 by 24 inches**] <**Insert dimensions**>.

Overall Height: [**34 to 38 inches**] <**Insert dimensions**>.

Water Capacity: [**377 gal.**] <**Insert value**>.

Material: Stainless steel.

Supports: Legs or base.

Controls.

Thermometer: Control panel or tank rim mounted.

Supply: Over-the-rim fill spout.

Drain: One waste connection.

Electric Turbine Ejector: One; panel mounted.

Thermostatic, mixing-valve assembly.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Insert or delete optional features below to suit Project. Many are available.

Hose and hand-held shower.

Wash-out-hose assembly.

Stretcher lift.

Overhead[**electric**] hoist.

<**Insert option**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of large Hubbard-immersion-tank hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Large Hubbard immersion tank.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2734) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200560).

Approved equivalent.

Description: Stationary butterfly-shaped tank for full-body massage.

Tank Dimensions: [**106 by 77 by 22 inches**] <**Insert dimensions**>.

Overall Height: [**34 inches**] <**Insert dimension**>.

Water Capacity: [**425 gal.**] <**Insert value**>.

Material: Stainless steel.

Supports: Legs or base.

Controls.

Thermometer: Control panel or tank rim mounted.

Supply: Over-the-rim fill spout.

Drain(s): One or two waste connections.

Electric Turbine Ejectors: Two; one rail mounted on each side.

Thermostatic mixing-valve assembly.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Insert or delete optional features below to suit Project. Many are available.

Hose and hand-held shower.

Wash-out-hose assembly.

Stretcher lift.

Overhead[**electric**] hoist.

<**Insert option**>.

Copy "Hydrotherapy Whirlpools" paragraph below and re-edit for each type of full-body, immersion-tank hydrotherapy whirlpool required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each hydrotherapy whirlpool.

* + - * 1. Hydrotherapy Whirlpools <**Insert drawing designation**>: Full-body immersion tank.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2735) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Arjo Inc](http://www.specagent.com/Lookup?uid=123457200561).

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200562).

Approved equivalent.

Description: Stationary rectangular tank for full-body massage.

Tank Dimensions: [**90 by 32 by 19 inches**] [**95 by 41 by 22 inches**] <**Insert dimensions**>.

Overall Height: 32 or 34 inches.

Water Capacity: [**195 gal.**] [**260 gal.**] <**Insert value**>.

Material: Stainless steel.

Supports: Legs or base.

Controls.

Thermometer: Control panel or tank rim mounted.

Supply: Over-the-rim fill spout.

Drain(s): One or two waste connections.

Electric Turbine Ejector: One, tank mounted [**at end**] [**on rail**] [**on side**].

Thermostatic mixing-valve assembly.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Insert or delete optional features below to suit Project. Many are available.

Hose and hand-held shower.

Wash-out-hose assembly.

Stretcher lift.

Overhead[**electric**] hoist.

<**Insert option**>.

* + - 1. OUTLET BOXES

Caution: Authorities having jurisdiction may require backflow preventers in water-supply piping or on hose-thread outlets.

Copy "Outlet Boxes" paragraph below and re-edit for each type of dialysis-equipment outlet box required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each outlet box.

* + - * 1. Outlet Boxes <**Insert drawing designation**>: For dialysis equipment.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2737) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Acorn Engineering Company; a Division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200414).

[Whitehall Manufacturing; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200416).

Approved equivalent.

Description: Recessed-mounted outlet box with water-supply and drain connections.

Box and Faceplate: Stainless steel.

Add "Box Dimensions" subparagraph below if required.

Supply Fitting(s): [**One**] [**Two**] NPS 1/2 PVC ball valve(s) and adapter with male hose-thread outlet.

Drain: NPS 2 standpipe, P-trap, and direct waste connection to drainage piping.

Reinforcement: Fire-retardant-treated wood blocking between studs. Comply with fire-retardant-treated wood requirements specified in Section 061000 "Rough Carpentry."

* + - 1. MORGUE EQUIPMENT

Equipment in this article is typically custom made. Consult user or manufacturer's representative before equipment and option selection.

Copy "Autopsy Table" paragraph below and re-edit for each type of autopsy table required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify morgue equipment.

* + - * 1. Autopsy Table <**Insert drawing designation**>:

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2738) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[CSI Industries Inc](http://www.specagent.com/Lookup?uid=123457200566).

[Mopec](http://www.specagent.com/Lookup?uid=123457200648).

Approved equivalent.

Description: Pedestal stainless-steel table with sink; designed for downdraft ventilation.

Material: Stainless steel.

Nominal Size: [**88 by 30 inches**] <**Insert dimensions**> with deck faucet holes.

Faucet: Manufacturer's standard, deck mounted with wrist- or elbow-blade handles.

Aspirator: Deck mounted.

Removable body supports.

Rinse Assembly: Deck-mounted faucet with hose.

Disposer: [**Not required**] [**Required, according to UL 430**].

Receptacle: Duplex, hospital grade with ground-fault interruption.

Supplies: With atmospheric vacuum breakers, according to ASSE 1001 “Performance Requirements for Atmospheric Type Vacuum Breakers”, and stops.

Drain: [**Grid**] <**Insert type**> with NPS 1-1/2 tailpiece.

Waste piping.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Copy "Dissecting Sink" paragraph below and re-edit for each type of dissecting sink required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify morgue equipment.

* + - * 1. Dissecting Sink <**Insert drawing designation**>:

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2740) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[CSI Industries Inc](http://www.specagent.com/Lookup?uid=123457200567).

[Mopec](http://www.specagent.com/Lookup?uid=123457200649).

Approved equivalent.

Description: Wall-mounted sink with backsplash.

Material: Stainless steel.

Nominal Size: [**84 by 28 inches**] <**Insert dimensions**> with back faucet holes.

Nominal Size: Approximately 30 inches wide.

Equipment drawer.

Coordinate "Faucet" subparagraph with "Sink Faucets" Article.

Faucet: <**Insert faucet designation**>.

Aspirator: Back mounted.

Rinse Assembly: One back-mounted faucet with hose.

Disposer: [**Not required**] [**Required, according to UL 430**].

Coordinate "Support" subparagraph below with "Supports" Article.

Support: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”, [**Type I sink carrier**][**Type III sink carrier**]<**Insert carrier**>.

Supplies: With atmospheric vacuum breakers, according to ASSE 1001 “Performance Requirements for Atmospheric Type Vacuum Breakers”, and stops.

Drain: [**Grid**] <**Insert type**> with NPS 1-1/2 tailpiece.

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

Back-mounted, hand-held-type eye wash.

Unit Electrical Characteristics:

Volts: [**120**] [**240**] [**277**] [**480**] <**Insert number**>.

Phase(s): [**One**] [**Three**].

Hertz: [**60**] <**Insert number**>.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

* + - 1. SUPPORTS
				1. Water Closet Carrier: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

Description: Waste-fitting assembly as required to match drainage piping material and arrangement with faceplates, couplings gaskets, and feet; bolts and hardware matching fixture.[**Include additional extension coupling, faceplate, and feet for installation in wide pipe space.**]

[Manufacturers:](http://www.specagent.com/Lookup?ulid=12555) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200457).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200460).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200458).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200456).

Approved equivalent.

* + - * 1. Type I Sink Carrier: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=12556) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200463).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200466).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200464).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200462).

Approved equivalent.

* + - * 1. Type II Sink Carrier: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=12557) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200469).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200472).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200470).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200468).

Approved equivalent.

* + - * 1. Type III Sink Carrier: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use “[**, with white-enameled-steel brackets**].

[Manufacturers:](http://www.specagent.com/Lookup?ulid=12558) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200475).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200478).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200476).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200474).

Approved equivalent.

* + - * 1. Type IV Sink Carrier: ASME A112.6.1M “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=12559) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Jay R. Smith Mfg Co; a division of Morris Group International](http://www.specagent.com/Lookup?uid=123457200481).

[Josam Company](http://www.specagent.com/Lookup?uid=123457200484).

[WATTS; A Watts Water Technologies Company](http://www.specagent.com/Lookup?uid=123457200482).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457200480).

Approved equivalent.

* + - 1. SUPPLY FITTINGS
				1. NSF Standard: Comply with NSF 61 Annex G, "Drinking Water System Components - Health Effects," for supply-fitting materials that will be in contact with potable water.
				2. Standard: ASME A112.18.1/CSA B125.1 “Plumbing Supply Fittings”.
				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 1/2 [**chrome-plated, rigid-copper pipe and brass straight or offset tailpieces**] [**chrome-plated, soft-copper flexible tube**] [**ASME A112.18.6, braided or corrugated stainless-steel, flexible hose**].
			1. WASTE FITTINGS
				1. Standard: ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.
				2. Drain: [**Grid**] <**Insert type**> with NPS 1-1/2 DN 40 tailpiece.
				3. Trap:

Size: NPS 1-1/2.

Retain one of two "Material" subparagraphs below.

Material: Chrome-plated, [**two-piece, cast-brass trap and swivel elbow with 0.032-inch- thick brass tube to wall**] [**two-piece, cast-brass trap and ground-joint swivel elbow with 0.032-inch- thick brass tube to wall**] [**one-piece, cast-brass trap with swivel 0.029-inch- thick tubular brass wall bend**] <**Insert trap type**>; and chrome-plated brass or steel wall flange.

Material: Stainless-steel, two-piece trap and swivel elbow with 0.012-inch- thick stainless-steel tube to wall; and stainless-steel wall flange.

* + - 1. GROUT
				1. Standard: ASTM C1107 “Standard Specification for Packaged Dry, Hydraulic-Cement Grout”, 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 of water-supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before fixture installation.
				2. Examine walls, floors, cabinets, and counters for suitable conditions where fixtures will be installed.
				3. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. INSTALLATION
				1. Install healthcare plumbing fixtures level and plumb according to roughing-in drawings.
				2. Install supports, affixed to building substrate, for wall-mounted fixtures.

Use carrier supports with waste fitting and seal for back-outlet fixtures.

Use carrier supports without waste fitting for fixtures with tubular waste piping.

Use chair-type carrier supports with rectangular steel uprights for accessible fixtures.

* + - * 1. Install floor-mounted healthcare water closets on bowl-to-drain, connecting fitting attachments to piping or building substrate.

First paragraph below applies to counter-mounted fixtures such as sinks.

* + - * 1. Install counter-mounted fixtures in and attached to casework.
				2. Install water-supply piping with stop on each supply to each fixture to be connected to water-distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.

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

* + - * 1. Install flushometer valves on healthcare water closets.
				2. Install flushometer valves for accessible healthcare water closets, with lever handle mounted on wide side of compartment.
				3. Install toilet seats on healthcare water closets.
				4. Install faucet flow-control fittings with specified flow rates and patterns in faucet spouts, if faucets are not available with required rates and patterns. Include adapters if required.
				5. Install laminar-flow, faucet-spout fittings in faucet spouts where laminar-flow fittings are specified.
				6. Install shower flow-control fittings with specified maximum flow rates in shower arms.
				7. Install traps on fixture outlets.

Exception: Omit trap on fixtures with integral traps.

* + - * 1. Set healthcare showers in leveling bed of cement grout.

Coordinate first paragraph below with Drawings. Indicate on Drawings those fixtures and 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."
				2. Seal joints between healthcare plumbing fixtures, 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."
				3. 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."
			1. CONNECTIONS

Coordinate piping installations and specialty arrangements with schematics on 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 requirements for water piping specified in Section 221116 "Domestic Water Piping."
				3. Comply with requirements for soil and waste drainage piping[**and vent piping**] specified in Section 221316 "Sanitary Waste and Vent Piping."
				4. Comply with requirements for atmospheric vent piping specified in Section 221316 "Sanitary Waste and Vent Piping."
				5. 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. ADJUSTING
				1. Operate and adjust faucets and controls. Replace damaged and malfunctioning healthcare plumbing fixtures, fittings, and controls.
				2. Adjust water pressure at [**faucets**] [**and**] [**flushometer valves**] to produce proper flow.
				3. Install fresh batteries in battery-powered, electronic-sensor mechanisms.
			2. CLEANING AND PROTECTION
				1. After installing healthcare plumbing fixtures, inspect and repair damaged finishes.
				2. Clean healthcare plumbing fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
				3. Provide protective covering for installed fixtures and fittings.
				4. Do not allow use of healthcare plumbing fixtures for temporary facilities unless approved in writing by Director’s Representative.

END OF SECTION 224300