SECTION 224713 - DRINKING FOUNTAINS

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 drinking fountains and related components.
      2. 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 drinking fountain.

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

Include operating characteristics, and furnished specialties and accessories.

* + - 1. CLOSEOUT SUBMITTALS
         1. Maintenance Data: For drinking fountains to include in maintenance manuals.

1. PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about named manufacturers and products.

* + - 1. DRINKING FOUNTAINS

Copy "Drinking Fountains" paragraph below and re-edit for each type of drinking fountain required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each drinking fountain.

* + - * 1. Drinking Fountains <Insert drawing designation>: [Concrete] [Painted cast iron or steel][, pedestal][, wheelchair accessible][, freeze resistant][, vandal resistant].

Concrete Drinking Fountains

Cast-Iron or Steel Drinking Fountains

Standards:

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

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.

Retain "with offset to receptor" option in "Pedestal" subparagraph below for wheelchair-accessible drinking fountains.

Pedestal: [Rectangular] [Round] <Insert shape>, [with offset to receptor] [with side receptor(s)][, with bottle filler][, freeze resistant][, vandal resistant].

Receptor(s):

Number: [**One**] [**Two**] [**Three**].

Material: [Bronze] [Chrome-plated brass or stainless steel] <Insert material>.

Shape: [Rectangular] [Round] [Rounded front] <Insert shape>.

Bubbler: One for each receptor, with adjustable stream regulator.

Retain first subparagraph below for all non-secure installations.

Bottle filler: Push-button activation.

Drain: Grid type with NPS 1-1/4 tailpiece.

Maximum Water Flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Controls: [Foot pedal] [Push bar] [Push button] <Insert control>.

Access to Internal Components: Panel in pedestal.

Supply Piping: [**NPS 3/8**] [**NPS 1/2**] with shutoff valve.

Drain Piping: [**NPS 1-1/4**] [**NPS 1-1/2**] minimum trap and waste.

Retain "Freeze-Resistant Supply Fitting" and "Bury Depth, Grade to Valve Components" subparagraphs below for freeze-resistant drinking fountains.

Freeze-Resistant Supply Fittings: Underground freeze-resistant shutoff and flow-control valve assembly.

Bury Depth, Grade to Valve Components: [**36 inches**] [**48 inches**] [**60 inches**] <Insert dimension>.

Copy "Drinking Fountains" paragraph below and re-edit for each type of antifreeze, pedestal drinking fountain required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each drinking fountain.

* + - * 1. Drinking Fountains <**Insert drawing designation**>: Freeze resistant, pedestal.

Standards:

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

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.

Pedestal: [**Rectangular**] [**Round**] <**Insert shape**>, painted cast iron or steel.

Receptor: [**Rectangular**] [**Round**] [**Rounded front**] <**Insert shape**>, chrome-plated brass or stainless steel with adjustable stream regulator bubbler.

Retain first subparagraph below for all non-secure installations.

Bottle Filler: [**Sensor**] [**Push-button**] activation with [**20-second**] <Insert value> automatic shutoff timer. Fill rate [**0.5 to 1.5 gpm**] <Insert value>.

Maximum water flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Control: [Foot pedal] [Push bar] [Push button] <Insert control>.

Drain: Grid type with [**NPS 1**] [**NPS 1-1/4**] [**NPS 1-1/2**] <Insert pipe size> minimum waste.

Freeze-Resistant Supply Fittings: Underground freeze-resistant shutoff and flow-control valve assembly.

Bury Depth, Grade to Valve Components: [**36 inches**] [**48 inches**] [**60 inches**] <Insert dimension>.

Supply Piping: [**NPS 1/2**] [**NPS 3/4**].

Waste Piping: NPS 2 minimum trap and waste.

Copy "Drinking Fountains" paragraph below and re-edit for each type of wall-mounted drinking fountain required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each drinking fountain.

* + - * 1. Drinking Fountains <Insert drawing designation>: [Bronze] [Stainless steel] [Vitreous china][, wheelchair accessible], wall mounted.

Bronze Drinking Fountains

Stainless-Steel Drinking Fountains

Vitreous-China Drinking Fountains

Standards:

In first subparagraph below, retain first option for stainless-steel drinking fountains and second option for vitreous-china drinking fountains.

Comply with [ASME A112.19.3/CSA B45.4] [ASME A112.19.2/CSA B45.1].

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

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.

Type Receptor: [Slab] [With back] [On horizontal support].

Receptor Shape: [Rectangular] [Round] <Insert shape>.

Retain "Back Panel" subparagraph below only for slab-type and on-horizontal-support-type, brass or stainless-steel drinking fountains and only if required. Include size if necessary.

Back Panel: [**Stainless-steel**] <**Insert material**> wall plate behind drinking fountain.

Bubblers: [**One**] [**Two**] [**Three**], with adjustable stream regulator, located on deck.

Retain first subparagraph below for all non-secure installations.

Bottle Filler: [**Sensor**] [**Push-button**] activation with [**20-second**] <Insert value> automatic shutoff timer. Fill rate [**0.5 to 1.5 gpm**] <Insert value>.

Maximum Water Flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Control: [Push button] [Push bar] <Insert control>.

Drain: Grid type with NPS 1-1/4 tailpiece.

Supply: NPS 3/8 with shutoff valve.

Waste Fitting: ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”, NPS 1-1/4 chrome-plated brass P-trap and waste.

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

Support: [Type I water cooler carrier] [Type II water cooler carrier] <Insert carrier>.

Drinking Fountain 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.

Copy "Drinking Fountains" paragraph below and re-edit for each type of wall-mounted, semirecessed drinking fountain required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each drinking fountain.

* + - * 1. Drinking Fountains <**Insert drawing designation**>: [**Stainless steel**] [**Vitreous china**], wall mounted, semirecessed.

Stainless-Steel Drinking Fountains

Vitreous-China Drinking Fountains

Standards:

In first subparagraph below, retain first option for stainless-steel drinking fountains and second option for vitreous-china drinking fountains.

Comply with [ASME A112.19.3/CSA B45.4] [ASME A112.19.2/CSA B45.1].

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

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.

Receptor Shape: Concave with projecting bowl.

Bubbler: One, with adjustable stream regulator, located on deck.

Retain first subparagraph below for all non-secure installations.

Bottle Filler: [**Sensor**] [**Push-button**] activation with [**20-second**] <Insert value> automatic shutoff timer. Fill rate [**0.5 to 1.5 gpm**] <Insert value>.

Maximum Water Flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Control: [Push button] [Push bar] <Insert control>.

Drain: Grid type with NPS 1-1/4 tailpiece.

Supply: NPS 3/8 with shutoff valve.

Waste Fitting: ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”, NPS 1-1/4 brass P-trap.

Support: Mounting frame or brackets for attaching to wood blocking or substrate.

Copy "Drinking Fountains" paragraph below and re-edit for each type of stainless-steel, recessed drinking fountain required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each drinking fountain.

* + - * 1. Drinking Fountains <**Insert drawing designation**>: Stainless steel, recessed[**, wheelchair accessible**].

Standards:

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code A117.1 “Accessible and Usable Buildings and Facilities”.

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.

Receptor Shape: Concave with flush wall flange.

Bubbler: One, with adjustable stream regulator, located on deck.

Retain first subparagraph below for all non-secure installations.

Bottle Filler: [**Sensor**] [**Push-button**] activation with [**20-second**] <Insert value> automatic shutoff timer. Fill rate [**0.5 to 1.5 gpm**] <Insert value>.

Maximum Water Flow: [**0.15 gpm**] [**0.5 gpm**] <Insert value>.

Control: [Push button] [Push bar] <Insert control>.

Drain: Grid with NPS 1-1/4 minimum horizontal waste and trap, complying with ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”.

Supply: NPS 3/8 with shutoff valve.

Support: Mounting frame or brackets for attaching to substrate.

Copy "Bottle-Filling Station" paragraph below and re-edit for each type of bottle-filling station required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each bottle-filling station.

* + - * 1. Bottle-Filling Station <Insert drawing designation>: [Surface-mounted] [Recessed] [,wheelchair accessible] [, vandal-resistant].

Standards:

Retain first subparagraph below for stainless-steel bottle-filling stations.

Comply with ASME A112.19.3/CSA B45.4 “Stainless Steel Plumbing Fixtures”.

Comply with NSF 61 “Drinking Water Systems Components - Health Effects” and NSF 372 “Drinking Water System Components - Lead Content”.

Retain first subparagraph below for wheelchair-accessible drinking fountains.

Comply with Uniform Code

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.

A117.1 “Accessible and Usable Buildings and Facilities”.

Cabinet: [All stainless steel] [Powder-coated exterior over steel] [Stainless steel/ABS combination].

Retain "Finish Color" subparagraph for powder-coated exteriors.

Finish Color: <**Insert color**>.

Retain first subparagraph below for all non-secure installations.

Bottle Filler: [**Sensor**] [**Push-button**] activation with [**20-second**] <Insert value> automatic shutoff timer. Fill rate [**0.5 to 1.5 gpm**] <Insert value>.

Drain: Grid type with NPS 1-1/4 tailpiece.

Supply: NPS 3/8 with shutoff valve.

Waste Fitting: ASME A112.18.2/CSA B125.2 “Plumbing Waste Fittings”, NPS 1-1/4 brass P-trap.

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

Support: [Type I water cooler carrier] [Type II water cooler carrier] <Insert carrier>.

Bottle-Filling Station 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. SUPPORTS
         1. Type I Water Cooler Carrier:

Standard: ASME A112.6.1 “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

* + - * 1. Type II Water Cooler Carrier:

Standard: ASME A112.6.1 “Floor-Affixed Supports for Off-The-Floor Plumbing Fixtures for Public Use”.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine roughing-in for water-supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before fixture installation.
          2. Examine walls and floors for suitable conditions where fixtures will be installed.
          3. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. INSTALLATION
          1. Install fixtures level and plumb according to roughing-in drawings. For fixtures indicated for children, install at height required by authorities having jurisdiction.
          2. Set pedestal drinking fountains on floor.
          3. Install recessed drinking fountains secured to wood blocking in wall construction.
          4. Install off-the-floor carrier supports, affixed to building substrate, for wall-mounted fixtures.
          5. Install water-supply piping with shutoff valve on supply to each fixture to be connected to domestic-water distribution piping. Use ball or gate valve. Install valves in locations where they can be easily reached for operation. Valves are specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
          6. Install trap and waste piping on drain outlet of each fixture to be connected to sanitary drainage system.
          7. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons where required to conceal protruding fittings. Comply with escutcheon requirements specified in Section 220518 "Escutcheons for Plumbing Piping."
          8. Seal joints between fixtures 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. CONNECTIONS

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

* + - * 1. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
        2. Comply with water piping requirements specified in Section 221116 "Domestic Water Piping."
        3. Install ball or gate shutoff valve on water supply to each fixture. Comply with valve requirements specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
        4. Comply with soil and waste piping requirements specified in Section 221316 "Sanitary Waste and Vent Piping."
      1. ADJUSTING
         1. Adjust fixture flow regulators for proper flow and stream height.
      2. CLEANING
         1. After installing fixtures, inspect unit. Remove paint splatters and other spots, dirt, and debris. Repair damaged finish to match original finish.
         2. Clean fixtures, on completion of installation, according to manufacturer's written instructions.
         3. Provide protective covering for installed fixtures.
         4. Do not allow use of fixtures for temporary facilities unless approved in writing by Director’s Representative.

END OF SECTION 224713