SECTION 224700

DRINKING FOUNTAINS AND WATER COOLERS

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**NOTE TO SPECIFIER**

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 2 Specification with primarily editable text; therefore, most of the text can be edited, but there is some required text which is noted within the Section with a “Note to Specifier.” Do not revise these paragraphs without an approved Deviation from USPS Headquarters, Facilities Program Management, through the USPS Project Manager.***

*For Design/Build projects, do not delete the Notes to Specifier in this Section so that they may be available to Design/Build entity when preparing the Construction Documents.*

*For the Design/Build entity, this specification is intended as a guide for the Architect/Engineer preparing the Construction Documents.*

*The MPF specifications may also be used for Design/Bid/Build projects. In either case, it is the responsibility of the design professional to edit the Specifications Sections as appropriate for the project.*

*Text shown in brackets must be modified as needed for project specific requirements.* *See the “Using the USPS Guide Specifications” document in Folder C for more information.*

*The last date that USPS revised this standard specification section occurs in two places, at the end of this section and in the Table of Contents. If the date in this section matches the date in the Table of Contents, then you are using the latest version. Do not delete or revise the “last revised” date at the end of the section during the development of the Project Manual.*

*The footer in this section should be edited to replace the text, “USPS MPF SPECIFICATION” with the project name, and the blank date in the center should be replaced with the submission date, for interim design reviews, or the issue date of the completed Project Manual.*

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1. GENERAL
   1. SUMMARY
      1. This Section includes the following:
         1. Type PB, pressure with bubbler, Style W, wall-mounting water coolers.
         2. Fixture supports.
   2. SUBMITTALS
      1. Product Data: For each type of product indicated.
      2. Shop Drawings: Diagram power, signal, and control wiring.
      3. Operation and maintenance data.
   3. QUALITY ASSURANCE
      1. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
      2. Regulatory Requirements: Comply with requirements in ICC A117.1, "Accessible and Usable Buildings and Facilities and ADA/USPS Handbook RE-4 for plumbing fixtures for people with disabilities.
      3. NSF Standard: Comply with NSF 61, "Drinking Water System Components--Health Effects," for fixture materials that will be in contact with potable water.
      4. ARI Standard: Comply with ARI's "Directory of Certified Drinking Water Coolers" for style classifications.
      5. ARI Standard: Comply with ARI 1010, "Self-Contained, Mechanically Refrigerated Drinking-Water Coolers," for water coolers and with ARI's "Directory of Certified Drinking Water Coolers" for type and style classifications.
      6. ASHRAE Standard: Comply with ASHRAE 34, "Designation and Safety Classification of Refrigerants" for water coolers. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.
2. PRODUCTS
   1. PRESSURE WATER COOLERS
      1. Water Coolers:
         1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
            1. Elkay Manufacturing Co.
            2. Halsey Taylor.
            3. Haws Corporation.
            4. Larco, Inc.
            5. Oasis Corporation.
            6. Sunroc Corp.
         2. Description: ARI 1010, Type PB, pressure with bubbler, Style W, bi-level wall mounting water cooler.
            1. Cabinet: Vinyl-covered steel with stainless-steel top.
            2. Bubbler: One, with adjustable stream regulator, located on deck.
            3. Control: [Push button] [Foot pedal].
            4. Supply: NPS 3/8 with ball, gate, or globe valve.
            5. Filter: One or more water filters complying with NSF 42 and NSF 53 for cyst and lead reduction to below EPA standards; with capacity sized for unit peak flow rate.
            6. Drain: Grid with NPS 1-1/4 minimum horizontal waste and trap complying with ASME A112.18.2.
            7. Cooling System: Electric, hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.

Capacity: 8 gph of 50 deg F cooled water from 80 deg F inlet water and 90 deg F ambient air temperature.

Electrical Characteristics: 120-V ac; single phase; 60 Hz.

* + - * 1. Support: Type II, water cooler carrier. Refer to "Fixture Supports" Article.

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***NOTE TO SPECIFIER***

*REQUIRED: Only if the facility does not use, or plan to use, a bottled water service, then an electric water cooler with a bottle filling station,* *similar to Elkay LZSTLG8WSSK, may be specified.*

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* + - 1. Description: Electric Water Cooler, Bi-Level Handicap Wall Hung with Bottle Filling Station
         1. Cabinet: Vinyl-covered steel with stainless-steel top.
         2. Bubbler: One, with adjustable stream regulator, located on deck.
         3. Control: Push button.
         4. Supply: NPS 3/8 with ball, gate, or globe valve.
         5. Filter: One or more water filters complying with NSF 42 and NSF 53 for cyst and lead reduction to below EPA standards; with capacity sized for unit peak flow rate.
         6. Drain: Grid with NPS 1-1/4 minimum horizontal waste and trap complying with ASME A112.18.2.
         7. Cooling System: Electric, hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
         8. Capacity: 8 gph of 50 deg F cooled water from 80 deg F inlet water and 90 deg F ambient air temperature.
         9. Electrical Characteristics: 120-V ac; single phase; 60 Hz.
         10. Support: Type II, water cooler carrier. Refer to "Fixture Supports" Article.
  1. FIXTURE SUPPORTS
     1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
        1. Josam Co.
        2. MIFAB Manufacturing, Inc.
        3. Smith, Jay R. Mfg. Co.
        4. Tyler Pipe; Wade Div.
        5. Watts Drainage Products Inc.; a div. of Watts Industries, Inc.
        6. Zurn Plumbing Products Group; Specification Drainage Operation.
     2. Description: ASME A112.6.1M, water cooler carriers. Include vertical, steel uprights with feet and tie rods and bearing plates with mounting studs matching fixture to be supported.
        1. Type I: Hanger-type carrier with two vertical uprights.
        2. Type II: Bilevel, hanger-type carrier with three vertical uprights.

1. EXECUTION
   1. APPLICATIONS
      1. Use carrier off-floor supports for wall-mounting fixtures, unless otherwise indicated.
      2. Set freestanding and pedestal drinking fountains on floor.
      3. Use chrome-plated brass or copper tube, fittings, and valves in locations exposed to view.
   2. INSTALLATION
      1. Install off-floor supports affixed to building substrate and attach wall-mounting fixtures, unless otherwise indicated.
      2. Install fixtures level and plumb. For fixtures indicated for children, install at height required by authorities having jurisdiction.
      3. Install water-supply piping with shutoff valve on supply to each fixture to be connected to water distribution piping. Use ball, gate, or globe valve. Install valves in locations where they can be easily reached for operation. Valves are specified in Division 22 Section "General-Duty Valves for Plumbing Piping."
      4. Install trap and waste piping on drain outlet of each fixture to be connected to sanitary drainage system.
      5. Install pipe escutcheons at wall penetrations in exposed, finished locations. Use deep-pattern escutcheons where required to conceal protruding pipe fittings. Escutcheons are specified in Division 22 Section "Common Work Results for Plumbing."
      6. Seal joints between fixtures and walls and floors using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color. Sealants are specified in Division 07 Section "Joint Sealants."
   3. CONNECTIONS
      1. Connect fixtures with water supplies, traps, and risers, and with soil, waste, and vent piping. Use size fittings required to match fixtures.
      2. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
      3. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."
   4. FIELD QUALITY CONTROL
      1. Water Cooler Testing: After electrical circuitry has been energized, test for compliance with requirements. Test and adjust controls and safeties.
         1. Remove and replace malfunctioning units and retest as specified above.
         2. Report test results in writing.
   5. ADJUSTING
      1. Adjust fixture flow regulators for proper flow and stream height.
      2. Adjust water cooler temperature settings.

END OF SECTION

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