SECTION 224500

EMERGENCY PLUMBING FIXTURES

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**NOTE TO SPECIFIER**

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 1 Specification with completely editable text; therefore, any portion of the text can be modified by the A/E preparing the Solicitation Package to suit the project.***

*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 emergency plumbing fixtures:
         1. Emergency showers.
         2. Eye/face wash equipment.
         3. Combination units.
         4. Water-tempering equipment.
      2. See Division 22 Section "Domestic Water Piping Specialties" for backflow preventers.
      3. See Division 22 Section "Sanitary Waste Piping Specialties" for floor drains.
   2. DEFINITIONS
      1. Accessible Fixture: Emergency plumbing fixture that can be approached, entered, and used by people with disabilities.
      2. Plumbed Emergency Plumbing Fixture: Fixture with fixed, potable-water supply.
      3. Tepid: Moderately warm.
   3. SUBMITTALS
      1. Product Data: For each type of product indicated. Include flow rates and capacities, furnished specialties, and accessories.
      2. Operation and maintenance data.
   4. QUALITY ASSURANCE
      1. ANSI Standard: Comply with ANSI Z358.1, "Emergency Eyewash and Shower Equipment."
      2. Regulatory Requirements: Comply with requirements in ICC A117.1, "Accessible and Usable Buildings and Facilities" Public Law 90-480, "Architectural Barriers Act"; and Public Law 101-336, "Americans with Disabilities Act" 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.
2. PRODUCTS
   1. EMERGENCY SHOWERS
      1. Emergency Showers:
         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. Bradley Corporation.
            2. Chicago Faucets.
            3. Encon Safety Products.
            4. Guardian Equipment Co.
            5. Haws Corporation.
            6. Lab Safety Supply Inc.
            7. Speakman Company.
         2. Description: Plumbed, single-shower-head vertical, freestanding emergency shower.
            1. Capacity: Deliver potable water at rate not less than 20 gpm for at least 15 minutes.
            2. Supply Piping: NPS 1galvanized steel, chrome-plated brass or stainless steel with flow regulator and stay-open control valve.
            3. Control-Valve Actuator: Pull rod or chain.
            4. Shower Head: 8-inch minimum diameter, chrome-plated brass, stainless steel or plastic.
   2. EYE/FACE WASH EQUIPMENT
      1. Eye/Face Wash Equipment:
         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. Bradley Corporation.
            2. Chicago Faucets.
            3. Encon Safety Products.
            4. Guardian Equipment Co.
            5. Haws Corporation.
            6. Lab Safety Supply Inc.
            7. Speakman Company.
         2. Description: Plumbed, accessible, wall-mounting eye/face wash equipment with receptor and wall bracket.
            1. Capacity: Deliver potable water at rate not less than 3.0 gpm for at least 15 minutes.
            2. Supply Piping: NPS 1/2 chrome-plated brass or stainless steel with flow regulator and stay-open control valve.
            3. Control-Valve Actuator: Paddle.
            4. Receptor: [Chrome-plated brass or stainless-steel] [Plastic] bowl.
            5. Drain Piping: NPS 1-1/4 minimum, chrome-plated brass, receptor drain, P-trap, waste to wall, and wall flange complying with ASME A112.18.2.
   3. COMBINATION UNITS
      1. Combination Units:
         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. Bradley Corporation.
            2. Chicago Faucets.
            3. Encon Safety Products.
            4. Guardian Equipment Co.
            5. Haws Corporation.
            6. Lab Safety Supply Inc.
            7. Speakman Company.
         2. Description: Plumbed, accessible, freestanding, with emergency shower and eye/face wash equipment.
            1. Piping: Galvanized steel.

Unit Supply: NPS 1-1/4 minimum.

Unit Drain: Outlet at side near bottom.

Shower Supply: NPS 1 with flow regulator and stay-open control valve.

Eye/Face Wash Supply: NPS 1/2 with flow regulator and stay-open control valve.

* + - * 1. Shower Capacity: Deliver potable water at rate not less than 20 gpm for at least 15 minutes.

Control-Valve Actuator: Pull rod or chain.

Receptor: Sloped floor drain.

* + - * 1. Eye/Face Wash Equipment: With capacity to deliver potable water at rate not less than 3.0 gpm for at least 15 minutes.

Control-Valve Actuator: Paddle.

Receptor: Chrome-plated brass or stainless-steel or plastic bowl.

* 1. WATER-TEMPERING EQUIPMENT
     1. Water-Tempering Equipment:
        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. Armstrong International, Inc.
           2. Bradley Corporation.
           3. Encon Safety Products.
           4. Haws Corporation.
           5. Lawler Manufacturing Co., Inc.
           6. Leonard Valve Company.
           7. Powers, a Watts Industries Co.
           8. Speakman Company.
           9. Therm-Omega-Tech, Inc.
           10. Western Emergency Equipment.
        2. Description: Factory-fabricated, hot- and cold-water-tempering equipment with thermostatic mixing valve.
           1. Thermostatic Mixing Valve: Designed to provide tepid, 75 deg F potable water at emergency plumbing fixtures, to maintain temperature at plus or minus 5 deg F throughout required 15-minute test period, and in case of unit failure to continue cold-water flow, with union connections, controls, metal piping, and corrosion-resistant enclosure.

1. EXECUTION
   1. INSTALLATION
      1. Assemble emergency plumbing fixture piping, fittings, control valves, and other components.
      2. Install fixtures level and plumb.
      3. Fasten fixtures to substrate.
      4. Install shutoff valves in water-supply piping to fixtures. Use ball, gate, or globe valve if specific type valve is not indicated. Install valves chained or locked in open position if permitted. Install valves in locations where they can easily be reached for operation. Valves are specified in Division 22 Section "General-Duty Valves for Plumbing Piping."
         1. Exception: Omit shutoff valve on supply to group of plumbing fixtures that includes emergency plumbing fixture.
         2. Exception: Omit shutoff valve on supply to emergency equipment if prohibited by authorities having jurisdiction.
      5. Install shutoff valve and strainer in steam piping and shutoff valve in condensate return piping.
      6. Install dielectric fitting in supply piping to fixture if piping and fixture connections are made of different metals. Dielectric fittings are specified in Division 22 Section "Common Work Results for Plumbing."
      7. Install thermometers in supply and outlet piping connections to water-tempering equipment. Thermometers are specified in Division 22 Section "Meters and Gages for Plumbing Piping."
      8. Install trap and waste to wall on drain outlet of fixture receptors that are indicated to be directly connected to drainage system.
      9. Install indirect waste piping to wall on drain outlet of fixture receptors that are indicated to be indirectly connected to drainage system. Drainage piping is specified in Division 22 Section "Sanitary Waste and Vent Piping."
      10. Install escutcheons on piping wall and ceiling penetrations in exposed, finished locations. Escutcheons are specified in Division 22 Section "Common Work Results for Plumbing."
      11. Install equipment nameplates or equipment markers on fixtures and equipment signs on water-tempering equipment. Identification materials are specified in Division 22 Section "Identification for Plumbing Piping and Equipment."
      12. Piping installation requirements are specified in other Division 22 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
      13. Connect cold-water-supply piping to plumbed emergency plumbing fixtures not having water-tempering equipment.
      14. Connect hot- and cold-water-supply piping to hot- and cold-water-tempering equipment. Connect output from water-tempering equipment to emergency plumbing fixtures.
      15. Directly connect emergency plumbing fixture receptors with trapped drain outlet to sanitary drainage and vent piping.
      16. Indirectly connect emergency plumbing fixture receptors without trapped drain outlet to sanitary or storm drainage piping.
      17. Adjust or replace fixture flow regulators for proper flow.
      18. Adjust equipment temperature settings.

END OF SECTION

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