

SECTION 224000 – PLUMBING FIXTURES

PART 1 - GENERAL

1.01 BUY AMERICAN REQUIREMENTS

- A. Provide certificates to show that all products meet the following requirements.
 - 1. American Iron and Steel (AIS).
 - 2. Build America, Buy America Act.

1.02 SUMMARY

- A. Section Includes:
 - 1. Hose bibbs.
 - 2. Emergency Eye Wash.

1.03 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI Z358.1 - Emergency Eyewash and Shower Equipment.
- B. American Society of Mechanical Engineers:
 - 1. ASME A112.18.1 - Plumbing Fixture Fittings.
- C. International Association of Plumbing and Mechanical Officials (IAPMO)
 - 1. UPC – Uniform Plumbing Code
- D. International Code Council
 - 1. IBC – International Building Code
 - 2. ICC A117.1 – Accessible and Usable Buildings and Facilities
 - 3. IPC – International Plumbing Code

1.04 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit catalog illustrations of fixtures, sizes, rough-in dimensions, utility sizes, trim, and finishes.
- C. Manufacturer's Installation Instructions: Submit installation methods and procedures.
- D. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.05 CLOSEOUT SUBMITTALS

- A. Section 017700 "Closeout Procedures": Requirements for submittals.
- B. Operation and Maintenance Data: Submit installation instructions, spare parts lists, exploded assembly views.

1.06 COORDINATION

- A. Confirm location and size of all fixtures and openings with all trades. Coordinate locations for structural fixture supports in walls, floors, and structural members.
- B. Coordinate electrical locations and requirements for fixtures with electrical trade.

1.07 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Installer: Company specializing in performing Work of this section with minimum three years documented experience.

PART 2 - PRODUCTS

2.01 HOSE BIB (HB-1)

- A. Manufacturers: Woodford model 24P or approved equal.
- B. Exterior Hose Bib: ASSE 1011; Anti-contamination wall faucet for use in warm space. Single faucet with 3/4 inch supply, vacuum breaker, with hand wheel, and 3/4 inch hose thread spout. Bronze or brass with integral mounting flange, replaceable hexagonal disc.

2.02 HOSE BIB (HB-2)

- A. Manufacturers: Woodford model 65 or approved equal.
- B. Exterior Hose Bib: ASSE 1019-B; Cast bronze, non-freeze wall hydrant, with integral vacuum breaker, chrome plate face, loose key "T" handle, automatic draining, for exterior wall installation, and 3/4-inch hose threaded spout.

2.03 EMERGENCY EYEWASH (EW-1)

- A. Manufacturers: Bradley Model S19-921 or approved equal.
- B. Self-contained, gravity eyewash with 7-gallon translucent tank of impact resistant plastic. Provide with stainless steel mounting bracket for polypropylene pedestal and pull down arm. Full, one year warranty.

2.04 EMERGENCY EYEWASH (EW-2)

- A. Manufacturers: Bradley Model S19-788LHS or approved equal.
- B. ANSI Z358.1-2004; Portable, pressurized emergency eye wash, 15-gallon stainless steel pressurized tank, 30-3/8 inches high by 12-1/4 inches diameter, with tire type filler valve with 0 to 160 psi air gauge and overpressure relief valve. Eyewash to have twin chrome plated brass, soft-flow eyewash heads, hand-operated, automatic flow control valve with stay-open valve, with high-visibility stainless steel push handle, protective eyewash dust covers, with safety markings and emergency sign. Full, one-year warranty.
- C. Provide one case of water preservative concentrate consisting of 8 oz. water preservative concentrate intended to mix with 6-20 gallons of potable water to prevent bacterial, fungal and algae growth for up to four months.

2.05 UTILITY SINK (P-1)

- A. Reference section “224216 - Commercial Sinks”.

2.06 TRAP PRIMER (TP-1)

- A. Reference section 220523 – “Plumbing Piping Valves and Specialties”.

PART 3 - EXECUTION

3.01 GENERAL

- A. Install fixtures in accordance with manufacturer’s recommended installation instructions.
- B. Provide maintenance access to all fixtures and those appurtenances that require maintenance, replacement, or isolation.
- C. Install Work in accordance with the Uniform Plumbing Code, State of Alaska, Borough of Yakutat standards.
- D. Install emergency eyewash and shower equipment in accordance with ANSI Z358.1.

3.02 EXAMINATION

- A. Section 013100 “Project Management and Coordination”: Coordination and project conditions.
- B. Verify walls and floor finishes are prepared and ready for installation of fixtures.
- C. Verify electric power is available and of correct characteristics.

3.03 PREPARATION

- A. Rough-in fixture piping connections in accordance with minimum sizes indicated in fixture rough-in schedule for particular fixtures.

3.04 INSTALLATION

- A. Install components level and plumb.
- B. Install and secure fixtures in place with wall supports and bolts.

3.05 INTERFACE WITH OTHER PRODUCTS, SYSTEMS, AND TRADES

- A. Review millwork shop-drawings. Confirm location and size of fixtures and openings before rough in and installation.
- B. Provide structural backing/support in walls, floor, and structural components per manufacturer's recommendations, contract documents, code compliance, and local Authority Having Jurisdiction's requirements.
- C. Verify that adjacent finishes are ready for installation of the fixture.
 - 1. Wall and floor surfaces are to be finished and sealed prior to fixture installation.

3.06 ADJUSTING

- A. Section 017700 "Closeout Procedures": Testing, adjusting, and balancing.
- B. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

3.07 CLEANING

- A. Section 017700 "Closeout Procedures": Final cleaning.
- B. At completion, clean plumbing fixtures and equipment.

3.08 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 017300 "Execution": Protecting installed construction.
- B. Do not permit use of fixtures before final acceptance.

END OF SECTION