

## SECTION 22 40 00

### PLUMBING FIXTURES

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes:

1. Water closets
2. Urinals
3. Lavatories
4. Sinks
5. Service sinks
6. Drinking fountains
7. Showers
8. Overflow drains
9. Flush valves
10. Seats
11. Carriers
12. Faucets
13. Fittings, trim, accessories
14. Floor drains
15. Floor sinks
16. Roof receptor
17. Hose bibb
18. Area drain
19. Roof drain

###### B. Related Sections:

1. Division 07 - Joint Protection: Product requirements for caulking between fixtures and building components for placement by this section.
2. Division 10 – Toilet and Shower Accessories for grab bars, washroom, utility room accessories not an integral part of fixtures.
3. Division 22 - Facility Water Distribution: Supply connections to plumbing fixtures.
4. Division 22 - Facility Sanitary Sewerage: Waste connections to plumbing fixtures.
5. Division 26 - Equipment Wiring Connections: Execution requirements for electric connections to sensor valves and faucets specified by this section.

##### 1.02 REFERENCES

###### A. American National Standards Institute:

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.

###### B. Air-Conditioning and Refrigeration Institute:

1. ARI 1010 - Self-Contained, Mechanically Refrigerated Drinking-Water Coolers.

###### C. American Society of Mechanical Engineers:

1. ASME A112.6.1 - Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use.
2. ASME A112.18.1 - Plumbing Fixture Fittings.
3. ASME A112.19.1M - Enameled Cast Iron Plumbing Fixtures.

4. ASME A112.19.2M - Vitreous China Plumbing Fixtures.
5. ASME A112.19.3 - Stainless Steel Plumbing Fixtures.
6. ASME A112.19.4 - Porcelain Enameled Formed Steel Plumbing Fixtures.
7. ASME A112.19.5 - Trim for Water-Closet Bowls and Urinals.

#### 1.03 SUBMITTALS

- A. Division 01 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit catalog illustrations of fixtures, sizes, rough-in dimensions, utility sizes, trim, and finishes.
- C. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

#### 1.04 CLOSEOUT SUBMITTALS

- A. Division 01 - Execution and Closeout Requirements: Closeout procedures.
- B. Operation and Maintenance Data: Submit fixture, trim, exploded view and replacement parts lists.

#### 1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with OSHPD standard.
- B. Provide products requiring electrical connections listed and classified by Underwriters Laboratories Inc., as suitable for purpose specified and indicated.
- C. Maintain one copy of each document on site.

#### 1.06 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.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Division 01 - Product Requirements: Product storage and handling requirements.
- B. Accept fixtures on site in factory packaging. Inspect for damage.
- C. Protect installed fixtures from damage by securing areas and by leaving factory packaging in place to protect fixtures and prevent use.

#### 1.08 WARRANTY

- A. Division 01 - Execution and Closeout Requirements: Product warranties and product bonds.

#### 1.09 EXTRA MATERIALS

- A. Division 01 - Execution and Closeout Requirements: Spare parts and maintenance products.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

- A. Manufacturer uniformity of materials and equipment shall be the standard catalogued products of manufacturers regularly engaged in production of such materials or equipment, and shall be their latest standard designs that comply with the specification requirements. Where two units or more of the same class of equipment are required, these units shall be products of a single manufacturer. Each component shall have manufacturer's name, address, model and serial number on a nameplate securely affixed in a conspicuous place. The nameplate of the distributing agent will not be acceptable
- B. Substitutions: Division 01 - Product Requirements
- C. The following specification mentions manufacturers that are acceptable for this project.
1. Lavatories, service sinks, water closets, urinals, sinks:
    - a. American Standard
    - b. Kohler Co.
    - c. Eljer
  2. Stainless steel sinks:
    - a. Elkay Mfg. Co.
    - b. Just Mfg. Co.
  3. Faucets:
    - a. Chicago Faucet Co.
    - b. Delta
    - c. Symmons
    - d. Sloan
  4. Flush valves:
    - a. Sloan Valve Co.
    - b. Zurn
  5. Showers:
    - a. Symmons
    - b. Bradley
  6. Water closet seats:
    - a. Beneke Corp.
    - b. Olsonite
  7. Drinking Fountains
    - a. Haws
  8. Fixture supports/carriers:
    - a. J.R. Smith
    - b. Josam Mfg. Co.
    - c. Zurn Industries

9. Drains, Floor Sinks, Roof Receptors:

- a. J.R. Smith
- b. Josam
- c. Zurn Industries

10. Roof/Overflow Drains

- a. J.R. Smith
- b. Josam Mfg Co
- c. Zurn Industries

11. Mixing valves:

- a. Apollo
- b. Symmons
- c. Bradley

2.02 FIXTURES

- A. Plumbing fixture trim and exposed supplies and wastes are to be brass with polished chromium plated finish unless otherwise specified. Provide individual loose key for all fixture supplies. Separately trap all wastes. Furnish chrome plated wall escutcheons for all exposed supplies and trap arms. Locate stops directly below fixtures or countertops. All fixtures for use by the handicapped with exposed hot and cold water pipe and tailpiece with trap shall be insulated with protective insulation as required per Code.
- B. Fixtures shall be in compliance with state water conservation requirements, local code compliance.

2.03 FIXTURE SUPPORTS

- A. Lavatory and urinal supports: Provide as required and per Code.
- B. Water closet supports: Factory commercial grade adjustable, cast iron face plate, support base, and appropriated type waste fitting having face plate gasket; zinc plated steel fixture studs and fasteners; coated and threaded adjustable wall coupling with neoprene closet outlet gasket; and chrome plated fixture cap nuts and fiber fixture washers. Provide an appropriate model to suit deep or shallow rough-in, siphon jet or blow out water closet and type of sanitary piping system to which is connected.
- C. Drinking Fountain Supports: Fountain factory support assembly may be used unless otherwise noted by structural requirements.

2.04 ESCUTCHEONS

- A. Selection as follows:
  - 1. Chrome plated cast brass with setscrew for all fixture services.
  - 2. Chrome plated sheet metal steel with friction clips or hinged type for larger exposed miscellaneous pipes thru the wall.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Division 01- Administrative Requirements: 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.
- D. Confirm millwork is constructed with adequate provision for installation of counter top lavatories and sinks.

### 3.02 PREPARATION

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

### 3.03 INSTALLATION

- A. Install Work in accordance with Los Angeles County standards.
- B. Install each fixture with trap, easily removable for servicing and cleaning.
- C. Roof/over flow drains, roof receptors shall be installed complete with roof receiver and underdeck clamps.
- D. Shower pans shall be installed per factory requirements and code waterproofing.
- E. Fixtures noted to be insulated for ADA compliance, furnish the following: Safety covers conforming to ANSI A177.1 and consisting of insulation kit of molded closed cell vinyl construction, 3/16 inch thick, white color for insulating tailpiece, P-trap, valves and supply piping. Furnish with weep hole and angle valve access covers.
- F. Provide chrome plated rigid or flexible supplies to fixtures with loose key stops, reducers, and escutcheons.
- G. Install components level and plumb.
- H. Install and secure fixtures in place with wall supports, wall carriers and bolts.
- I. Seal fixtures to wall and floor surfaces with sealant as specified in Division 07, color to match fixture.
- J. Solidly attach water closets to floor with lag screws. Lead flashing is not intended hold fixture in place.
- K. For ADA accessible water closets, install flush valve with handle to wide side of stall.

### 3.04 INTERFACE WITH OTHER PRODUCTS

- A. Review millwork shop-drawings. Confirm location and size of fixtures and openings before rough in and installation.

### 3.05 ADJUSTING

- A. Division 01 - Execution and Closeout Requirements: Testing, adjusting, and balancing.
- B. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

### 3.06 CLEANING

- A. Division 01 - Execution and Closeout Requirements: Final cleaning.
- B. Clean plumbing fixtures and equipment.

3.07 PROTECTION OF INSTALLED CONSTRUCTION

- A. Division 01 - Execution and Closeout Requirements: Protecting installed construction.
- B. Do not permit use of fixtures before final acceptance.

END OF SECTION