## SECTION 224500 - PLUMBING FIXTURES AND TRIM

### PART 1 - GENERAL

### 1.1 DESCRIPTION

- A. All work specified in this section is governed by the Mechanical General Section 230100.
- B. This Section 224500 and the accompanying drawings cover the provisions of all labor, fixtures, equipment, appliances and materials, and performing all operations in connection with the construction and installation of the plumbing fixtures and trim as specified herein and as shown.
- C. All exposed piping, valves, stops, P-traps, etc. shall be chrome-plated. Also, all exposed piping penetrations through walls, floors or ceilings shall be provided with chrome-plated cast brass escutcheons.
- D. All P-traps shall be minimum 17-gauge brass.
- E. Flush valves shall have non-hold open feature, vacuum breakers and cover cap on angle-type stop.
- F. Provide all final connections to all equipment and fixtures furnished by Owner.
- G. Unless otherwise specified in an individual fixture description, all enameled cast-iron and porcelain fixtures shall be white.

### 1.2 INTENT

A. It is the intent of this Section of the specifications to provide complete, operable, adjusted, clean plumbing fixtures as shown and specified, which are free of leaks, noise, air, vibration and waterflow fluctuations.

### 1.3 BASIS OF DESIGN

A. The basis of design is as outlined for each fixture in the <u>PART 2 - PRODUCTS</u> subsection. Any proposed substitutions shall be proven equal in all respects to the equipment specified as the basis of design.

### 1.4 ACCEPTABLE MANUFACTURERS

- A. Acceptable fixture manufacturers are American Standard, Zurn, Falcon and Kohler, provided that their units are equal in all respects for this specific project. Faucets and trim may be equal products as manufactured by Chicago, Delany, Zurn, T&S Bronze, Brass Craft, Speakman and McQuire.
- B. Flush valves may be equal products by Sloan, Zurn and Delany. Stainless steel sinks and drinking fountains shall be as manufactured by those companies specified for each specific item outlined under subsection.

#### PART 2 - PRODUCTS

2.1 Refer to drawings for all fixture specifications.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Units shall be installed as indicated and in conformance with the manufacturer's recommendations. Coordinate the actual units to be provided with all trades.
- B. All plumbing fixtures shall be free of leaks, provided completely finished, trimmed, adjusted, cleaned and ready for use. They shall be properly secured to the structure by the use of thrubolting, backplates, carriers, expansion shields (for floor mounting only) or toggle bolts.
- C. Wall hung fixtures supported on chair carriers shall be bolted to the floor slab. Carefully coordinate space requirements and fixture mounting height requirements with supports being furnished.
- D. Fixtures supported with wall hangers on masonry chase walls shall be fastened to the wall with not less than 3/8" bolts which shall pass through the wall and through a 1/4" x 4" wide steel backplate on the unfinished chase wall side.
- E. Where fixtures are hung on single masonry walls without a pipe chase behind, they shall be mounted with 3/8" toggle bolts.
- F. Fixtures on steel stud walls shall have a 1/4" x 4" wide steel backplate wired with 1/16" steel wire to the studs. Bolts not less than 3/8" shall secure the fixtures through the fixture hanger and the backplate.
- G. All mounting holes provided in fixtures shall be used for support. In addition to the main hangers, 1/4" toggle bolts shall secure the bottom of all wall hung fixtures at each drilling provided for this purpose.
- H. Mount wall-hung fixtures at the heights indicated on the Architectural Drawings or as prescribed by local code. Special attention is called to the installation requirements of the ANSI Handicap Code.

## 3.2 CLEANING AND ADJUSTMENT

A. The units shall be cleaned, tested and field-adjusted to provide optimum flow and drainage.

# END OF SECTION 224500