# GENERAL

## SECTION INCLUDES

### Installation requirements of plumbing fixtures scheduled in Plumbing Fixture Schedule.

### Plumbing fixture carriers.

## REFERENCE SECTION 22 05 00 FOR THE FOLLOWING GUIDELINES

### References

### Submittals

### Quality Assurance

### Delivery, Storage and Handling

## FIELD MEASUREMENTS

### Verify that field measurements are as indicated on shop drawings and instructed by the manufacturer.

### Confirm that millwork is constructed with adequate provision for the installation of countertop lavatories and sinks.

# PRODUCTS

## PLUMBING FIXTURES

### Refer to Plumbing Fixture Schedule for all required product information.

### Acceptable Manufacturers

#### Flush Valves: Sloan or Zurn. Automatic with battery power.

#### Lavatory Faucets: Moen, American Standard, Kohler

#### Water Cooler / Bottle Filler: Elkay

### The Contractor is responsible for ensuring that all roof drains are compatible with roof types and roof insulation. Refer to architectural and structural plans for roof information. No additional compensation will be allowed for failure to coordinate roof drains with roof types.

## PLUMBING FIXTURE CARRIERS

### All wall mounted fixtures such as urinals, water closets, lavatories, drinking fountains, electric water coolers, etc. shall be installed with compatible carriers. All carriers shall be commercial or industrial grade and shall be suitable for the fixture served, space available and building construction. All carriers shall extend to the floor and be anchored into the slab.

### Water closet carriers shall be heavy-duty type, rated for a minimum of 750 lbs.

# EXECUTION

## EXAMINATION

### Verify that walls and floor finishes are prepared and ready for installation of fixtures.

### Verify that electric power is available and of the correct characteristics.

## PREPARATION

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

## INSTALLATION

### Install in accordance with manufacturer's instructions.

### Install each fixture with trap with 2 slip joints, easily removable for servicing and cleaning.

### Provide chrome plated rigid or flexible supplies to fixtures with stops, reducers, and escutcheons.

### Install components level and plumb.

### Install and secure fixtures in place with scheduled wall supports or wall carriers and bolts.

### Seal fixtures to wall and floor surfaces with sealant, color to match fixture.

## WATER CLOSET INSTALLATION

* + - * 1. Water-Closet Installation:

Install level and plumb according to roughing-in drawings.

Indicate on Drawings those water closets that are required to be accessible.

Install accessible, wall-mounted water closets at mounting height for handicapped/elderly, according to ICC/ANSI A117.1. Coordinate exact locations with drawings.

Where installing piping adjacent to water closets, allow space for service and maintenance.

* + - * 1. Support Installation:

Use carrier supports with waste-fitting assembly and seal.

Install wall-mounted, back-outlet water-closet supports with waste-fitting assembly and waste-fitting seals; and affix to building substrate.

* + - * 1. Flushometer-Valve Installation:

Install flushometer-valve, water-supply fitting on each supply to each water closet.

Attach supply piping to supports or substrate within pipe spaces behind fixtures.

Install lever-handle flushometer valves for accessible water closets with handle mounted on open side of water closet.

Install actuators in locations that are easy for people with disabilities to reach.

* + - * 1. Install toilet seats on water closets.
				2. Wall Flange and Escutcheon Installation:

Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations and within cabinets and millwork.

Install deep-pattern escutcheons if required to conceal protruding fittings.

Retain "Joint Sealing" Paragraph below if sealants are not specified in Division 07 Section "Joint Sealants."

* + - * 1. Joint Sealing:

Seal joints between water closets and walls and floors using sanitary-type, one-part, mildew-resistant silicone sealant.

Match sealant color to water-closet color.

## URINAL INSTALLATION

* + - * 1. Urinal Installation:

Install urinals level and plumb according to roughing-in drawings.

Install wall-hung, back-outlet urinals onto waste fitting seals and attached to supports.

Indicate on Drawings those urinals that are required to be accessible.

Install accessible, wall-mounted urinals at mounting height for the handicapped/elderly, according to ICC/ANSI A117.1. Coordinate exact locations with drawings.

* + - * 1. Support Installation:

Install supports, affixed to building substrate, for wall-hung urinals.

Use off-floor carriers with waste fitting and seal for back-outlet urinals.

Use chair-type carrier supports with rectangular steel uprights for accessible urinals.

* + - * 1. Flushometer-Valve Installation:

Install flushometer-valve water-supply fitting on each supply to each urinal.

Attach supply piping to supports or substrate within pipe spaces behind fixtures.

Install fresh batteries in battery-powered, electronic-sensor mechanisms.

* + - * 1. Wall Flange and Escutcheon Installation:

Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations.

Install deep-pattern escutcheons if required to conceal protruding fittings.

Retain "Joint Sealing" Paragraph below if sealants are not specified in Division 07 Section "Joint Sealants."

* + - * 1. Joint Sealing:

Seal joints between urinals and walls and floors using sanitary-type, one-part, mildew-resistant silicone sealant.

Match sealant color to urinal color.

## LAVATORY AND SINK INSTALLATION

* + - * 1. Install lavatories and sinks level and plumb according to roughing-in drawings.
				2. Install supports, affixed to building substrate, for wall-mounted lavatories and sinks.

Indicate on Drawing those lavatories that are required to be accessible.

* + - * 1. Install accessible wall-mounted lavatories at handicapped/elderly mounting height for people with disabilities or the elderly, according to ICC/ANSI A117.1. Coordinate exact locations with drawings.
				2. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings.
				3. Seal joints between lavatories/sinks, counters, and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color.

Indicate on Drawings those lavatories that are required to be accessible.

* + - * 1. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible lavatories and sinks.
				2. Install water-supply piping with stop on each supply to each faucet.

Exception: Use ball, gate, or globe valves if supply stops are not specified with lavatory/sink.

Install stops in locations where they can be easily reached for operation.

## INTERFACE WITH OTHER PRODUCTS

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

## ADJUSTING

### Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

### Operate and adjust water closets and controls. Replace damaged and malfunctioning water closets, fittings, and controls.

### Adjust water pressure at flushometer valves to produce proper flow.

### Install fresh batteries in battery-powered, electronic-sensor mechanisms.

## CLEANING

### Directly prior to project turnover, clean plumbing fixtures and fittings with manufacturers' recommended cleaning methods and materials.

### Install protective covering for installed water closets, urinals, and fittings.

### Do not allow use of plumbing fixtures for use during construction unless approved in writing by Owner.

END OF SECTION 22 40 00