

CONSTRUCTION REQUIREMENTS

Note: The buildings on the UCCS campus are divided into two categories: General Fund and Auxiliaries. General Fund Buildings include academic and administrative functions. Auxiliary buildings include dormitories, athletic, and dining facilities. In some cases, construction standards differ depending on the building category. Confirm building category with Facilities Services Project Manager.

DIVISION TWENTY-TWO : PLUMBING

A. Plumbing Design Requirements:

1. Specify stop valves at all fixtures and equipment and at rough-in locations.
2. Specify all-white fixtures with acid resisting finish.
3. Specify rigid anchors behind walls for all supplies and stops to eliminate push or pull movement.
4. Specify carriers for all wall mounted fixtures. Do not allow wood or metal mounting plates anchored to the wall framing or studs.
5. Laboratory faucets and cocks shall have vacuum breakers, as well as all devices to which hoses can be connected.
6. Tub and tile caulk shall be applied under all self-rimming sinks.
8. Specify ½" anchor bolts on all carriers, lavatories, urinals, and closet carriers.
9. All 17 gauge P-traps shall have brass slip nuts
10. Floor drains are REQUIRED in every toilet room.
11. Specify contractor to provide all fixtures and trim using a single manufacturer where possible. Allow deviation only where specifications indicate otherwise.
12. For every shock arrester, an isolation valve is required. Provide 12" x 12" access door at each shock arrester.
13. Isolation valves are required for each multi-stall bathroom.

14. Provide unions at each trap primer and isolation valve.

B. Plumbing Fixtures:

1. General: Fixtures, manufacturers and catalog numbers specified are shown only to establish type and quality of fixtures required. Other equal products may be selected from the lists of acceptable manufacturers.

2. WATER CLOSETS

a. Provide wall hung (preferred) , or floor mounted, siphon jet, valve operated, water saver, 5" rough with open front seat and no lid, Shall be certified by an approved agency for operation not exceeding 1.6 gallons per flush.

b. Women's water closets to have manual dual flush valve.

c. Acceptable Fixtures:

i. Kohler/ Crane

Model #K-4330/3-446E.

Color - White

Set Floor to Rim: 15" Standard
 18" Handicapped

Flush Valve

Make: Sloan

Style Regal or Royal

Model:

Men's: 111-YB (1.6 gpf)

Women's, Unisex, and Family: WES-111(dual flush valve)

Chair Carrier: Josam ,Series 12000 with cast iron nipple
Vandal Proof Trim

ii. Zurn

Model # Z5610

Flush Valve:

Men's #Z6000AV

Women's, Unisex, and Family: # Z6000AV-WS-1-DF(dual flush)

Color - White

Set Floor to Rim: 15" Standard
 18" Handicapped

Carriers- Jay R. Smith, horizontal or vertical

Seat-Z5950 White, open front
Vandal Proof Trim

- b. Equals-
 - For General Fund Buildings- NONE
 - For Housing/ Dormitories: Toto ONLY
- c. Do not caulk any wall-mounted fixtures (need to remove often due to blockages).
- d. Locate handicapped water closets such that the flush lever is easily accessible to wheelchair users. Typically, the lever is on the left when facing the water closet.

3. URINALS

a. White, vitreous china, wall hung. Shall be certified by an approved agency for operation not exceeding 1/8 gallon per flush. Battery operated sensor flush.

b. Acceptable Fixture:

Make: Zurn

Model: #Z5798 (HEU)

Set Floor to Rim:

U-1 (standard) 24"

U-2 (handicapped) 17"

Flushometer Valve

Supply: 3/4"

Carrier: Jay R. Smith

c. Waterless urinals NOT permitted

d. Equals

For General Fund Buildings- NONE

For Housing/ Dormitories: NONE

e. Do not caulk any wall-mounted fixtures (need to remove often due to blockages).

4. LAVATORIES

a. Vandal resistant aerator to limit flow to 0.5 GPM.

ii. Provide closed cell pipe insulation on the waste pipes and hot water pipes below each lavatory for the handicapped.

iii. Hardwire automatic sensors. Set run time to 5 seconds.

iv. Plane Code: L-1

Make: American Standard
Model: 3301-025
Color: White
Style: Self Rimming
Size: 9" diameter
Trap: 1 ¼" all brass

v. Equals by Kohler, Crane, Universal-Rundle, Eljer

vi. Undermount lavatories permitted

3.. Stainless Steel:

a. Type (302) (304) and (316) 18 gage minimum

b. Manufacturers:

Bradley
Elkay
Just

C. Coffee Bar Sinks- Stainless steel sink with drainboard. Elkay ILRG-4322 or equal.

4. Molded Stone:

Fiat
Florestone

5. Terrazzo:

a. Manufacturers

Bradley
Fiat
Florestone

b. Mop Basins- Precast terrazzo, stainless steel drain, with stainless steel caps on all curbs

6. Electric Water Coolers

a. Manufactures:

Elkay Model ERFPM28K preferred
Cordley
Halsey Taylor
Haws

Oasis

- b. 36" maximum mounting height to spout.
- c. Infrared-sensing actuation is not acceptable.
- d. Provide bottle/glass filler at each handicapped height EWC.

7. Emergency Showers and Eye/Face Wash Equipment

a. Manufactures:

Desert Assembly, Inc.
Haws
Sloan
Water-Saver Co.

8. Laboratory Faucets and Cocks

Zurn
Delta D23C634
Moen M8225

9. Water Mixing Valves

Leonard
Powers
CVR DR2470MIX

10. Lavatory Faucets, Single Handle, 4 inch center Spacing, with ceramic cartridge (avoid ceramic stems).

a. Standard-

Zurn Z8100-3M
Moen M8413

b. Infrared

Delta D591T1250 with DRP32856
Moen M8301 with M104427

11. Flush Valves:

- 1. Shall not exceed 1 gallon per flush for urinals and 1.6 gallons per flush for water closets.
- 2. In new facilities and remodels, electric flush valves shall be 24 volt with 110 volt transformers for urinal only, 1/8 gallon battery operated flush.
- 3. Manufacturers:
Sloan Regal

Zurn Aqua Advantage
Automatic Flushing Device: Zurn E-Z Flush CFM

12. Toilet Seats(all plastic- White)

Kohler
American Standard,
Universal Rundle,
Toto,
Zurn

13. Shower Equipment

- a. Shall not exceed 1.5 gallons per minute.
- b. Single handle , pressure compensating, tamper-proof
- c. Manufactuters:
 - Delta
 - Bricor
 - Kohler
 - Leonard

14. Garbage Disposers

Insinkerator
Pro SS (Preferred)
Waste King

15. Traps, Stops (all metal) Supplies, Air gaps, Drains:

American Standard
Brasscraft
Eljer
Kohler

16. Chair Carriers (4 bolt)

Josam
J. R. Smith
Wade
Zurn

17. Kitchen Faucet and Trim:

Moen M7425
Delta D26C3934

18. Coffee Bar Faucets: Single handle faucet with goose-neck spout
Delta 711HDF or equal