

FACILITIES STANDARD

NAME: Plumbing Fixtures
NUMBER: 15460

ORIGINAL DATE: 03-01-94
REVISION DATE: 12-08-00

PURPOSE:

1. The general purpose of each Facilities Standard is to provide minimal criteria for construction materials at University facilities regarding code compliance, warranty, approved products, execution and uniformity.
2. To protect the health and safety of patients, visitors, students, faculty and staff, in addition to protecting non-project UAB property, all construction must be in accordance with: NFPA 241 safeguarding construction, alteration and demolition operations; Standard Building Code, Chapter 33, regarding site work, demolition and construction; NFPA 101 Life Safety Code.
3. Construction safety is the responsibility of the contractor in accordance with the regulations and codes of the agency having jurisdiction, and according to the guidelines adapted by OSHA.
4. The **Plumbing Fixtures Facilities Standard** establishes a series of guidelines for specifying this particular item on any construction project at the University. ***This Facilities Standard is not to be regarded as a specification.***

GENERAL:

1. Warranty shall be one year from Substantial Completion.
2. Plumbing Fixtures shall conform to all the Americans with Disabilities Act (ADA), Americans with Disabilities Act Accessibility Guidelines (ADAAG), and other applicable codes and standards.

PRODUCTS:

GENERAL INFORMATION:

1. Plumbing Fixtures shall be new and free of defects.
2. Plumbing Fixtures shall be of one-piece construction.
3. Plumbing Fixtures shall be of the water-saving type.
4. Chrome-plated trim shall be provided on all Plumbing Fixtures.

5. Carrier shall be designed with extended vertical leg support to provide for additional height as required by ADA.
6. Stops shall be loose key type.
7. Exposed waste assemblies and all other supplies located beneath handicapped Plumbing Fixtures shall be protected with pre-molded insulation protectors made especially for that purpose.
8. Faucets installed on handicapped Plumbing Fixtures shall be equipped with 4" minimum length wrist blades.
9. Exposed waste assemblies and all other supplies shall be chrome plated.
10. EXCEPTION: Infrared sensors (24 Volt Type) may be considered in lieu of hand-operated faucets and flush valves.

WATER CLOSETS:

1. Toilet shall be made of non-absorptive vitreous china.
2. Toilet and trim shall be acid resistant.
3. Toilet bowl shall be elongated.
4. Toilet shall be white in color.
5. Toilet shall be **floor mounted-back outlet (except as noted under retrofit section)**.
6. Toilet shall be flush valve type.
7. Stainless steel hinges shall be provided for all Plumbing Fixture lids.
8. Hold open feature(s) shall be provided on hinged lids.
9. Lid assemblies shall be solid, one-piece type construction without lid cover.
10. Flush valve shall be of the siphon jet water saving type with 1.6 gallons of water consumption in each complete flushing cycle.
11. Toilet passageway shall be a minimum diameter of 2-5/8".
12. Toilet water supply connection shall be top spud type with a minimum inlet diameter of 1-1/2".

13. Acceptable Manufacturers (including model numbers) shall be:

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| <u>For New Construction:</u> | Floor Mount Back Outlet |
| Standard Toilet: | Crane #3-480E or ELJER#111-2155 |
| Flush Valve: | Sloan Royal #111 , Delany #F402-3 , or Zurn #Z-6000-WS1 . |
| Toilet Seat: | BEMIS #1655C or OLSONITE #95 |
| Flange: | No HUB Water Closet Flange - Rough in height per manufacturer's instructions |
| ADA Toilet: | CRANE #3-709E or ELJER #111-2875 |
| Flush Valve: | Sloan Royal #111 , Delany # F402-3, or Zurn #Z-6000-WSI . |
| Toilet Seat: | BEMIS #1655C or OLSONITE #95 |
| Flange: | No HUB Water Closet Flange - Rough in height per manufacturer's instructions |
| <u>FOR RETROFIT:</u> | Floor Mount/Back Outlet |

Where Existing Wall Hung Toilet Rough-In Height is 5" or Less

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| Standard Toilet: | Crane #3-480E or ELJER #111-2155 w/1/2" Floor Spacer; Spacer material equal to UHMC B4 Commercial Plastics |
| Flush Valve: | Sloan Royal #111 , Delany #F402-3, or Zurn #Z-6000-WS1 . |
| Toilet Seat: | BEMIS #1655C or OLSONITE #95 |
| Flange: | Adapt Chair Carrier to Water Closet Flange |
| ADA Toilet: | Floor Mount/Back Outlet Crane #3-709E, Kohler # K-4386, or ELJER #111-2875 w/ 1/2" Floor Spacer; Spacer Material Equal to Ultra High Molecular Weight Polyurethane (UHMW) by Commercial Plastics |
| Flush Valve: | Sloan Royal #111 , Delany #F402-3, or Zurn #Z-6000-WS1 . |

Toilet Seat: BEMIS #1655C or OLSONITE #95
Flange: Adapt Chair Carrier to Water Closet Flange
FOR RETROFIT: Wall hung

Where Existing Wall Hung Toilet Rough-In Height is Greater Than 5"

Toilet: ACORN #3333-T-1-HS-EG/FV
Toilet Seat: BEMIS #1655C or OLSONITE #95
Chair Carrier: Rough-in measurements must be field verified before ordering replacements

14. EXCEPTION: In existing buildings equipped with floor mounted water closets, the same type mounting may be considered in lieu of wall hung type.
15. EXCEPTION: In private applications, toilet bowl may be rounded type in lieu of elongated type.
16. EXCEPTION: In private applications, flush tank toilet may be considered in lieu of flush valve type.
17. EXCEPTION: In private applications, flush tank toilet may be two piece construction.

ENVIRONMENTAL SERVICE ROOM BASINS:

1. Mop service basins shall be floor/wall assemblies.
2. Basin shall be a one-piece terrazzo construction.
3. Basin shall be equipped with aluminum bumperguards.
4. Basin shall be equipped with a mop hanger bracket.
5. Basin shall be equipped with a service faucet complete with vacuum breaker, integral stops, an adjustable wall brace, a pail hook, and a 3/4" hose thread on spout.
6. Basin shall be equipped with a hose and hose bracket.
7. Basin shall be equipped with stainless steel wall guards.

8. Acceptable manufacturers (including model numbers) shall be:

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| Basin: | Fiat #TSG Series with stainless steel caps on all curbs and Crane #MSG Series with stainless steel bumper guard |
| Faucet: | Fiat #830-AA and Crane #830-AA. |
| Hose and Bracket: | Fiat #832-AA and Crane #832-AA. |
| Mop Hanger: | Fiat #889-CC and Crane #889-CC. |
| Drain: | Minimum 3" |
| Strainer: | Fiat #1453-BB and Crane #1453-BB. |
| Sealant: | Fiat #833-AA and Crane #833-AA. |

FOOD SERVICE KITCHEN SINKS:

1. Food preparation fixture basin(s) shall be stainless steel.
2. Food preparation fixture drain shall be equipped with a crumb cup strainer(s).
3. Food preparation fixture shall be equipped with waste outlet fittings including a lever handle drain stop. Drain should include no trap smaller than 2".
4. EXCEPTION: Lavatory installed for hand washing may conform to the requirements for lavatories listed below.

LAVATORIES:

1. Basin shall be made of non-absorptive vitreous china.
2. Basin and trim shall be acid resistant.
3. Basin shall be white in color.
4. Basin faucet holes shall be spaced four (4) inches apart, center-to-center. For Hospital faucet, holes shall be spaced eight (8) inches apart, center-to-center.
5. Drains shall be grid type strainers.
6. Faucets shall be equipped with minimum 4" long wrist blade handles.

7. EXCEPTION: In private applications, pop-up lavatory drains may be considered.
8. Acceptable manufacturers (including model numbers) shall include:
- Basin: Kohler #K-2005
- Faucet: Kohler #K-13335, Eljer #559-2550, and American Standard #7516.172
- Drain: Kohler #K-7715, Eljer #803-0554, and American Standard #7719.016
- P-trap: Kohler #K-13885
- Supplies: Brass Craft 51212AC and Eljer #802-0235 and 801-0115 assembly
- Chair Carrier: J.R. Smith #700-27-M31, Josam #17100-(67 for extended base support), and Zurn #ZR-1231- (79 for extended base support)

URINALS:

1. Urinal shall be made of non-absorptive vitreous china.
2. Urinal and trim shall be acid resistant.
3. Urinal shall be equipped with an extended lip.
4. Urinal shall be white in color.
5. Urinal shall be wall-hung type.
6. Urinal shall be flush valve type.
7. Provide carrier designed with extended base for additional weight bearing capacity.
8. Flush valve shall be of the siphon jet water saving type with a maximum of **one (1) gallon** of water consumption each complete flushing cycle.
9. Urinal passageway shall be a minimum diameter of 2".
10. Urinal water supply connection shall be top spud type with a minimum inlet diameter of 1-1/4".

11. Acceptable manufacturers (including model numbers) shall be:

- Urinal: Kohler **#K-5016-T**, Eljer **#161-1060**, and American Standard **#6601.012**
- Flush Valve: Sloan Royal **#180-1**, Delany #F452, and Zurn **#Z-6001-WS1**
- Chair Carrier: J.R. Smith #637 with extended base height, Josam #17815 with extended base height

EMERGENCY EYEWASH (DECK MOUNTED):

1. Unit shall deliver soft aerated water at discharge.
2. Unit shall be equipped with showerhead covers.
3. Unit shall be securely fixed to countertop.
4. Unit shall be chrome plated.
5. Unit shall conform to ANSI Z358.1 specifications.
6. Unit shall be activated by 1/2" NPTF chrome plated brass, stay-open type ball valve for continuous water flow for hands free operation.
7. Unit shall be activated by a stainless steel push handle.
8. Unit shall be capable of 90-degree swivel rotation.
9. Spray heads shall provide 2.5 GPM of potable cold water.
10. Unit shall be easily accessible.
11. Acceptable manufacturers (including model numbers) shall be:

Speakman #SE-572 with perforated face showerheads, Haws #7612 with perforated face showerheads, and Western #W612 with WP1101.14 showerheads.

EMERGENCY EYEWASH (WALL MOUNTED):

1. Unit shall deliver soft aerated water at discharge.
2. Unit shall be equipped with showerhead covers.
3. Unit shall be securely fixed to wall.

4. Unit shall be chrome plated.
5. Unit shall conform to ANSI Z358.1 specifications.
6. Unit shall be activated by 1/2" NPTF chrome plated brass, stay-open type ball valve, for continuous water flow for hands free operation.
7. Unit shall be activated by a stainless steel push handle.
8. Spray heads shall provide 2.5 GPM of potable cold water.
9. Unit shall be easily accessible.
10. Acceptable manufacturers (including model numbers) shall be:

Speakman #SE-400 with perforated face showerheads, Haws #7360 with perforated face showerheads, and Western #W460B with WP1101.14 showerheads.

DRENCH SHOWERS:

1. Unit shall be installed flush to ceiling.
2. Unit shall be equipped with a 1" NPTF chrome plated brass, stay-open valve.
3. Unit shall be equipped with a 10" diameter showerhead.
4. Showerhead shall be chrome-plated brass, with polished chrome plated impeller and showerhead flange.
5. Unit shall deliver a minimum water flow of 44 GPM at 5 PSI.
6. Unit shall deliver cold domestic water at discharge.
7. Unit shall be activated by a chrome plated pull rod with triangular handle.
8. Triangular handle shall be installed 68" above finished floor.
9. Acceptable manufacturers including model numbers shall be:

Speakman SE-236-PR and Western #W869

EXCEPTION: If shut-off valves or stops are installed in the branch line leading to safety drenching equipment, the valves shall be OS and Y (outside steam and yoke), labeled for identification, and sealed in the open position (NFPA 99 Section 10-6).

PRIVATE SHOWER UNITS:

1. Plastic liner pan shall be provided for installation with built-up unit furnished by general contractor. Membrane shall be securely attached to drain body by a bolted flashing ring in lieu of lapping to edge of flange.
2. All shower unit components shall be equipped with vandal proof features.
3. Shower control valve shall be pressure-balancing type with adjustable stop screw to limit handle turn.
4. Mixing valve shall have a diverter equipped with integral volume control.
5. Shower unit shall be equipped with a fixed shower arm and flange.
6. Shower unit shall be equipped with a wall/hand shower with flexible metal hose, wall connection and flange, and 24" slide bar for hand shower mounting.
7. Fixed showerhead shall be equipped with an integral 2.75 GPM flow controller.
8. Shower unit shall be equipped with a drain including a 6" strainer and a sediment bucket.
9. Shower unit shall be equipped with built-in soap dish.
10. Drain shall be installed at low point in shower stall to allow all water to completely escape shower compartment through drain opening.
11. Grab bars shall be installed only where ADA Guidelines require. Where grab bars are installed, care should be taken to ensure that no water leaks around wall penetration.
12. Drain shall be equipped with nickel bronze top.
13. Drain shall be equipped with deep seal trap.
14. Acceptable manufacturers (including model numbers) shall be:

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| Mixing Valve and Accessories | Symmons #96-500-B24 |
| Fixed Shower Head | Chatham #202 |
| Drain | Wade Series #1100, J.R. Smith Series #2001, and Zurn Series #Z-415 |

EXECUTION:

1. An even, consistent, bead of caulk shall be provided around Plumbing Fixtures to fill void between Plumbing Fixture and/or wall, casework, and/or floor as required giving a neat appearance. Color shall match color of fixture.
2. Plumbing Fixtures shall be installed level and flush with building components.
3. Installation shall be coordinated with all existing conditions so as not to create an unsightly or hazardous condition.
4. Plumbing Fixture(s) shall be installed where water spillage will not create a problem and inspection and service are easily accessible.
5. Plumbing Fixtures shall be left in a clean, operable condition upon completion of construction.

END OF STANDARD

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