

FACILITIES BUILDING STANDARDS

Section 22 0000 Plumbing

Revision date: **12/30/2022**

1. Water Closets
 - a. BOD American Standard
 - b. Provide floor-mounted, wall-outlet/rear-discharge, **flush mount SS toilet flange**, neoprene gasket, standard seat, specify weight limit. **There will not be in-wall carriers.**
 - c. Provide bariatric-rated water closets where required (project specific)
 - d. Flush valve shall be Sloan type. Do not provide solar sensor flush valves.
2. Urinals
 - a. BOD American Standard
 - b. Provide neoprene gasket
3. Sinks
 - a. Sinks in patient rooms and gang public bathrooms shall be solid surface, integral with countertop.
 - b. Sinks in staff areas (multipurpose, lounge, clean holding, soiled holding, workrooms, etc) shall be stainless steel, barrier-free. BOD Elkay.
 - c. Sinks may be wall-hung porcelain for handwashing, etc, where required. This type of sink shall be provided in private public toilet rooms for both patients and staff.
 - d. Verify whether manual or sensor faucets will be used with Shands; project specific.
Sensor faucet: BOD Sloan. Provide sensor faucet with above-deck mixer 120VAC. Do not provide solar sensor faucets.
Manual faucet: BOD T&S Brass. Lever faucet.
Aerators: Laminar flow aerators shall be permitted. Screen type aerators shall not be permitted in patient care areas.
 1. Clinical sinks shall have wrist blades handles, unless approved otherwise by Shands.
 2. Patient toilet rooms shall have IR sensors
 - e. Mop sinks BOD Stern Williams Hi Low, floor-mounted.
 - f. Floor "sinks" shall be used for drains instead of flush floor drains. Verify with Shands, based on project requirements.
 - g. Locations where automatic faucets are provided shall be Sloan EFT only.
 - h. Trap primers shall be minimum 1/2" interior diameter.
4. Water Coolers are BOD Elkay.
5. Shower pans must be set in concrete, covering the entire base. Drains at shower pans shall be glued-in type, not mechanically fastened. Follow manufacturer instructions.
 - a. BOD for mixing valves shall be Symmons. Provide Watts dual/double check valves above the ceiling in accessible location at all mixing valve locations.
6. Wall-mounted or recessed eyewash stations are preferred. Avoid sink-mounted units.
7. Cold water for emergency showers is acceptable; no tepid water.
8. Prefer to use pipe chases and not rated shafts, so that fire stopping is done at floor level.
9. Pipe drops to fixtures shall be from ceiling to avoid pipe run through studs.
10. Water hammer arrestors shall be installed at top of vertical to avoid access panels.
11. Domestic water supply lines shall be CPVC for hot and cold water. Provide separate water supply line in environmental services (EVS) rooms for chemical dispensers. Copper lines may be permitted for supply lines; verify with Shands. If provided, Propress fittings may be used.
12. LXT (low extractable) PVC Schedule 80 shall be used for RO/DI water supply lines.
13. RO/DI systems shall be designed for continuous circulation, without deadlegs.
14. General contractor must verify drain line falls and conduct water quality testing processes, as required by code or by project specifications. All piping must be flushed to eliminate PVC shavings before fixtures are installed.
15. Dead legs on waste water lines shall be minimum length; 2-3" maximum permitted.

16. Dead legs are not permitted on any domestic water lines.
17. At all waste/drain lines, PVC piping shall be used, unless prohibited by temperature or other considerations.
18. Insulate clear water condensate waste piping to prevent sweating.
19. Drain line connections shall enter through 45° wye branch, and 1/8 bend branch. 60° branches or offsets may be used only when in a true vertical position. Double combination sanitary tees/wyes or crosses shall not be used at any location. All piping and fittings must be installed to allow for maintenance/cleaning/snaking of pipes.
20. Floor drains shall have trap primers in all mechanical rooms.
21. Trap primers shall be electronic.
22. All storm waste piping shall be insulated PVC.
23. Valves shall be full-port ball valves. Preferred manufacturer is Apollo.
24. Provide shut-off valves for all water supply lines at all floor levels, on both sides of recirculating hot water.
25. Valves shall be properly secured at all shower valve locations.
26. One series of valves for each bathroom is acceptable.
27. Vacuum breakers shall be provided at 6" above chemical dispensers in EVS rooms.
28. Drip pans are required above-ceiling in ORs, data center, food prep and ICU rooms. Sensors/detectors shall be used on a per-project basis.
29. No plumbing piping is permitted in Telecomm or Electrical rooms, except for required fire protection. Exception provided for all sanitary/storm piping originating from fixtures above.
30. Sanitary and storm gravity piping shall be avoided over patient beds.
31. Provide hose bibs in mechanical rooms and at 200' intervals at exterior locations. Provide a hot water hose bib at all grease trap locations.
32. Provide VFDs with a bypass at all circulating pump locations.
33. Provide float controls and a backup alarm at all lift stations and sump pits. Include float backup at sump pits. No transducers are permitted.
34. Med-gas installation/work must be done by a certified group. The individual who holds the certification must be present on-site, with credentials on hand.
35. Med-gas valves shall be lockable, always.
36. Med-gas master alarm panels shall be Amico Alert 2 series.
37. Med-gas area alarm panels shall be Amico Alert 3 series.
38. Med-gas terminal unit pattern shall be Chemetron.
39. Med-gas alarms shall be integrated into building automation system.
40. MTA must be used for med-gas certification.
41. Mop sinks shall be plastic resin material, not concrete.
42. Hemodialysis boxes shall have brass fittings only; no PVC.
43. All 6" or less cast iron lines shall be replaced during renovations in a space. Discuss with project manager and/or operations to discuss scope.
44. All piping valves shall have labels and a valve index chart shall be provided. A flag/ribbon shall be attached to identify manual valves.