

**GENERAL:**

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1. The objective of this guideline is to provide minimum standards for PLUMBING FIXTURES that will be durable, functional and maintainable system which reduce failures over the life of the facility.
2. Maximum consideration shall be given to water and energy conservation but should also consider life cycle cost.
3. The health and safety of building occupants shall be the highest priority.

**DESIGN GUIDELINES:**

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1. All fixtures, flush valves, faucets shall be water conserving types.
2. Water free urinals are NOT permitted.
3. Fixtures shall be standard commercially available units. Replacement parts and/or fixtures shall be supported by a local vendor. Delany is not an acceptable manufacturer.

## 1. Water Closets

- 1.1. Vitreous china, wall mounted, (action), 1.6 gallon flush, white with white seats.

*Note: Verify the residual pressure required of any low flow fixture.*

- 1.1.1. Kohler, American Standard, Sloan or Zurn

- 1.2. Sensor operated, battery powered (hard wired **at MS&T** and UMSL) flush valves with manual flush option, 1" connections

- 1.2.1. Zurn, Sloan and AMTC (MU)

- 1.2.2. Zurn, Sloan and AMTC (MS&T)

- 1.2.3. Toto, Sloan and AMTC (UMKC) – Toto is preferred.

- 1.2.4. Zurn, Sloan, and AMTC (UMSL)

## 2. Urinals

- 2.1. Vitreous china, wall mounted, (action), 0.5 gallon per flush, siphon-jet type, white.

- 2.1.1. Zurn, Kohler, Sloan or American Standard

- 2.2. Sensor operated, battery powered (hard wired **at MS&T** and UMSL) flush valves with manual flush option, ¾" connections.

- 2.2.1. Zurn, Sloan and AMTC (MU)

- 2.2.2. Zurn, Sloan and AMTC (MS&T)

- 2.2.3. Toto and Sloan (UMKC) – Toto is preferred.

- 2.2.4. Zurn, Sloan and AMTC (UMSL)

## 3. Lavatories

- 3.1. As selected by the architect and engineer.

- 3.2. Sensor operated, battery powered faucets connections, serviceable above the sink.

- 3.2.1. Zurn or Sloan

- 3.3. Polypropylene faucets are not allowed for lab pure water, DI or RO faucets.

## 4. Service sinks

- 4.1. Custodial service sinks shall be a floor sink style with a maximum 12" lift.

- 4.2. Trap size shall be a minimum of 3” diameter.
- 4.3. Provide stainless steel protective band on 2 sides.

## REFERENCES