



Variance Requirements – Backflow Installation

Metro Water Services requires all backflow devices be located directly behind the meter and/or on the customer side of the right of way. Request for variance to this policy shall be submitted to the MWS Development Services Center as part of the preliminary site utility plans review process. MWS will continue to consider these situations on a case-by-case basis through our Variance Review Process. Please submit plumbing and utility specifications with dimensions, clearances, and all devices related to the water main and meter.

1. **Fire Service Lines – DDCVA/RPDA.** If variance includes inside placement of fire backflow device, a request shall be submitted prior to obtaining Fire Marshal approval. If the distance between the fire backflow device and the domestic water service tee or water main connection is more than 20 feet, an automatic flushing system must be installed within 5 feet on the front side of the backflow device prior to the number 1 shutoff valve. The location of the backflow must have clear, open, walk-in access to and around the backflow. Only fire backflows can be put in vertically. Detector check valve meter should meet Customer Service Meter Shop specifications for MXU placement inside building.
2. **Domestic Service Lines - RPBP.** If variance includes inside placement of backflow device, the inside location must have a clear, open, walk-in access to and around the backflow device (no crawlspaces, at least 7 feet of head clearance, at least 3 feet of clearance on front side of device for inspections and maintenance). Additionally, there may not be tees in line before the backflow device. The backflow must maintain the diameter of the backflow plus 12 inches off floor surface. (Dual System may be stacked, but must remain under 66 inches in height)
3. **Irrigation Backflow – RPBP.** MWS requires installation of backflow device for all irrigation systems. A combination domestic irrigation backflow device must be installed behind the meter with no other tees or connection points.
4. **Materials for backflow variances.** All fire, domestic, and irrigation water lines, depending on size of line, must be copper, brass, or ductile iron from the tap to the meter and the backflow device. All materials must be approved by Metro Water Services.

For any questions concerning the relocation, refurbishment, or existing backflow inspections please contact the MWS Cross Connections Inspection Group at (615) 862-4872 or email mwscrossconnection@nashville.gov.

For any questions concerning new construction please contact the MWS Development Services Center at (615) 862-7225 or email mws.ds@nashville.gov.

**For more information, contact:
MWS Cross Connection Department
615-862-4872 | mwscrossconnection@nashville.gov**