

Metro Water Services  
**Guidelines for Water Backflow Installation and Requirements**  
(Not Intended To Be All-Inclusive)

The following guidelines were developed to assist in backflow installation.

- Backflow assemblies required for water service will remain the responsibility of the property owner. Testing and enforcement will be the responsibility of Metro Water Services (MWS).
- All devices must meet University of Southern California (USC) specifications.
- MWS requires all backflow devices for commercial and residential applications be placed immediately behind the meter or property line valve on private property and outside of the building unless an alternate location has been approved by the MWS Variance Committee. Requests for a variance are processed through the Permits Office. Upon approval, a letter of responsibility will be required from the customer to provide a waiver "holding the utility harmless" for damage or restoration to property.
- MWS' responsibility will be for repairs from main to meter only.
- Double Check and Double Detector Check Valve Assemblies may be installed vertically with a MWS variance and must meet USC specifications.
- All materials used must meet MWS specifications including use of brass, copper or ductile iron pipe (DIP) per MWS approval on new installations. Pipe from meter to backflow device must be copper or DIP per MWS approval. Heating devices for freeze protection are recommended but not required.
- All new and replacement Reduced Pressure Backflow Prevention Devices (RPBP) shall be equipped with a "Y" strainer.
- A mainline backflow device on a combination fire/domestic line does not require a "Y" strainer.
- The relief valve must be installed a minimum of twelve (12) inches plus the diameter of the device above finish floor level/grade. This height is not to exceed six (6) feet from the ground.
- The RPBP device cannot be used as a number two shut off or isolation valve for meter testing.
- New commercial businesses considered to be low hazard may not be required to install a RPBP device. This will be determined by a MWS inspector during a site visit or through the variance process.
- If, during the annual inspection of an existing commercial business, it is determined the conditions are low hazard, the owner may remove the existing device and straight line with copper.
- All commercial and irrigation water service connections will be surveyed annually for hazard status as well as testing of all prevention devices. If a customer would like to request a change in hazard status, an appeal to the department should be submitted. If approved, customer must provide MWS with a letter of intent of usage and agreement to notify MWS of any changes.
- High hazard premises include, but are not limited to, jails, laboratories, nursing homes, sanitariums, laundries, hotels/motels, restaurants, major office buildings (multi-story), apartment houses, condominiums, service stations, shopping centers, mobile home parks, swimming pools, parks, mortuaries, morgues, hospital and medical buildings, chemical plants, manufacturing/food/beverage plants, car wash, exterminating, airports and transportation facilities, greenhouses, baptisteries without air gap, commercial buildings with commercial ice machines.
- You can request a variance, inspection or approval on a building application for use and occupancy, by calling (615)862-7225, fax a written request to (615)862-7257, or email request to [robert.collier@nashville.gov](mailto:robert.collier@nashville.gov).