# BACKFLOW PREVENTION (CROSS CONNECTION CONTROL) DEVICE INSTALLATION GUIDELINES

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#### Introduction

This guide provides important information about backflow devices, who needs them, where to install them, and testing and maintenance requirements. It applies to new construction located within the Menlo Park Municipal Water service area. Confirm your water provider using the City's interactive <u>water provider map</u>. If you have questions after reading this guide, please contact us.

Customers of California Water Service should visit <u>California Water Services backflow prevention website</u> or email <u>beargulchbackflow@calwater.com</u> for requirements, or for more information.

### Frequently asked questions

- What is a cross connection control (backflow) device?
   Backflow devices prevent water from "backflowing" from homes and businesses into the City's municipal water system, thus, protecting and keeping the water supply safe. Devices are required per <u>Menlo Park Municipal</u> Code, Title 7, Chapter 7.28 and California Code of Regulations, Title 17, Chapter V, Sections 7583-7605.
- Who is required to have a backflow device?
   The type of backflow device required is dependent on the type of water service as shown below. It applies to all new construction projects.

New Construction	Type of Backflow Device Required
Residential with fire sprinklers (2 dwellings or less)	Reduced pressure principle (RP) or a passive- purge system** may be installed in lieu of an RP
Residential (more than 3 dwellings)	RP
Commercial	RP
Industrial	RP
Irrigation	RP
Fire services	Double check detector check valve assembly (DCDA) minimum, the City may require a reduced pressure principle detector check valve assembly (RPDA)
Multiple users (i.e. businesses) sharing one meter	RP

<sup>\*\*</sup> A passive-purge system uses potable water piping and materials, and has connections to points of regular water use to prevent degradation of water quality.

3. Where are backflow devices installed and who does the work?

Backflow devices are installed above ground after the water meter on the customer's private property, typically not more than five feet from the property line. Installing a backflow device more than five feet from the property line requires an exception approved by the Public Works Director, or his/her designee, <u>before</u> the backflow device is installed. Note that only in very special circumstances will the City allow an exception (i.e., so that it does not obstruct a sidewalk, driveway, or other public easement). If you have a special circumstance, please contact the City for an exception, and the City can assist with exact placement.

The device must be tested by a licensed backflow tester upon installation and then tested annually thereafter. Many plumbing companies provide both installation and testing services. San Mateo County Environmental Health maintains an up-to-date list of certified backflow testers. Testing must be performed by a certified tester on the County's list.

4. Does Menlo Park Fire District need to review my plan?

Yes, <u>all</u> applicants must submit fire sprinkler plans to the Fire District for review/approve <u>before</u> submittal to the City of Menlo Park to ensure sufficient fire flows. The plans shall show the proposed backflow device size(s) with fire sprinkler/standpipe and/or fire hydrant system design. For more information, call the Fire District at 650-688-8425.

For non-residential services, the backflow device may be monitored with tamper switches at the Fire Alarm control panel. The Fire Department connection shall be provided on the system side of the backflow device unless otherwise approved by the Fire District. No additional Fire post indicator valve is required as the backflow device shall serve as the means for Fire District shutoff.

- 5. Do I need a City permit to install a backflow device? A City building permit is required to install a backflow device. For a large construction project, the backflow device installation may already be included in the project's building permit. For permit information, visit the Building Division webpage.
- 6. How often does a backflow device need to be tested? Who is responsible for testing? Backflow devices must be tested at least annually. Testing must be performed by a certified backflow tester on the County's list. The property owner or landlord can determine who is responsible for maintaining the backflow device.
- 7. Will I be notified when it is time to annually test my backflow device?

  San Mateo County Environmental Health manages the City's cross-connection control program, and they will send a letter to the water account holder when the device is due for its annual test.
- 8. What if I do not test my backflow device?

  If a backflow device is not tested and out of compliance with the annual testing requirement, the City may test the device and charge the water customer testing and penalty fees.
- 9. Where can I learn more about backflow requirements?
  The San Mateo County Environmental Health website contains the list of approved backflow devices, a list of certified backflow testers, and additional FAQs.

## **Seven Basic Installation Steps**

# Step 1 – Determine what needs to be done

You or your contractor/plumber need to:

- Determine where the device will be physically located. Installing a backflow device more than five feet from the property line requires an exception approved by the Public Works Director, or his/her designee, <a href="before">before</a> the backflow device is installed. Note that only in very special circumstances will the City allow an exception (i.e., so that it does not obstruct a sidewalk, driveway, or other public easement). If you have a special circumstance, contact <a href="water@menlopark.gov">water@menlopark.gov</a> and request an exception, and the City can assist with exact placement. The property owner must be present at this meeting unless you have a signed contract with a contractor/plumber to do the work.
- Determine if a <u>water connection request</u> must be submitted. Installing a new water service connection or upsizing an existing water service connection will require submittal of a water connection request.
- Determine if an <u>encroachment permit</u> is required. If you are installing or replacing the service line (between the water main and meter), an encroachment permit is required.
- If the property has multiple addresses on-site, affix a brass tag to each backflow device identifying the address to which it serves.

#### Step 2 – Apply for a building permit

The City accepts online building permit applications only. Visit the Building Division webpage.

# Step 3 – Install the new backflow device

Install the device. Do not start any work until you have the necessary City permits in-hand.

#### Step 4 – Test the new backflow device

The new device must pass an initial field test once installed and the tester must submit the results. Testing must be performed by a certified backflow tester on the County's list.

The tester will do all of the following:

- 1. Test the device.
- 2. Complete and sign the San Mateo County test form.
- 3. Attach a County color-coded, serialized, metal tag to the device.
- 4. Provide a copy of the test result to the owner/water account holder.
- 5. Submit the test result to the City and County (see emails below).

The test result must be submitted to the City <u>before</u> final building inspection, and it must be submitted to the County within 10 days from the test date in order to meet State requirements.

- City of Menlo Park (Subject: Engineering-Utilities, Backflow Test Result), water@menlopark.gov
- San Mateo County Environmental Health, <u>backflow@smcgov.org</u>

## Step 5 – Schedule a building inspection

Leave any pipe or excavations exposed. The City's building inspector will want to see the work before you close the job up. Your device must be tested and tagged by a certified tester in order to obtain sign off from the building inspector.

#### Step 6 – Test the device annually

- The water account holder will receive a notification from the County to perform the annual backflow test. If the
  water account holder is not responsible for testing the device, the property owner or landlord can determine who
  is responsible.
- A building permit is not required to perform the annual test.
- You must use a certified tester from the County's list.
- You do not need to use the same company that installed your device.