

# City of Palo Alto

## Cross Connection Control Device Installation Guide

### (Backflow Prevention)

This guide should help customers who are required to have cross connection control devices on their water services (pipes) know how to proceed to get them installed. Whether you already know you require such a device or the City has sent you a notice telling you that must have one, we are here to help! If you have questions after looking through this guide, please contact us at 650-496-5926. Please visit our website for an easy link to email us.

#### What is a cross connection control device?

These devices prevent water from “backflowing” from your business or residence into the City’s water system and are required by California Administrative Code, Title 17, Chapter V, Sections 7583-7605.

When you install cross connection control devices, you help keep the water supply safe for everyone in the City. All new commercial buildings are required to have these devices. In addition, the City of Palo Alto Utilities Department may require backflow devices at the water meter, based upon the level of hazard, at all existing commercial buildings.

#### Where are cross connection control devices installed and who does the work?

These devices are installed on all water service lines and are tested initially and annually by a licensed backflow tester. Many plumbing companies provide both of these services. Normally the backflow device is installed at the property line directly after the water meter, not more than five feet from the property line. The City may allow a variance to install the device so that it does not obstruct a sidewalk, driveway, or other public easement. The City Planning and Building departments can assist you with exact placement.

A licensed professional or the property owner must install the device and all applicable City permits must be obtained. Your annual test must be performed by a tester registered with the City’s Cross Connection Control Program office. Please note that the City requires all new devices to be “Reduced Pressure” type devices unless they are being installed on a fire service line, in which case “Double Check” type devices may be allowed. **You can find easy links to City codes, standards, and other backflow information on our website:** [www.cityofpaloalto.org/backflow](http://www.cityofpaloalto.org/backflow)

## SEVEN BASIC INSTALLATION STEPS

### STEP 1 Determine what needs to be done.

You or your contractor/plumber need to:

- Decide where the device will be physically located. The Building Department can assist you with placement advice. Contact Brent Hipsher or Paul Schultz at 650-329-2496 to request a placement appointment.
- Determine which City permits will be required
- Identify whether the installation will require any other changes. *(For example, all water heating devices are required to have an expansion tank which is sized for the system.)*
- Ensure all new materials are lead free unless they are being installed on a dedicated Fire Service.
- Verify any work on sidewalks, city medians, or driveways complies with current City building codes.
- If your property has multiple addresses on-site, affix a brass tag to each backflow device identifying the address which it serves.
- If you are receiving this notice but don’t own the property, coordinate with the landlord to determine who is paying and for what. Remember that inaction will result in the water service being shut off.

## **STEP 2 Fill out the Building Department Permit Application.**

To get a permit for installing a backflow device, you or your contractor/plumber will need to complete the general information sections of the application and then the subsection for the Plumbing Permit. Visit [www.cityofpaloalto.org/BuildingPermit](http://www.cityofpaloalto.org/BuildingPermit) or visit the Development Center to obtain copies of the full application. The Building Department has also set up an expedited online permit process and a comprehensive checklist; find links for these at [www.cityofpaloalto.org/backflow](http://www.cityofpaloalto.org/backflow). Please note that if you use the online permit system you must comply with all applicable City requirements. If you have questions, it is your responsibility to contact the City for clarification.

## **STEP 3 Apply for your Permit.**

**If applying for your permit in person**, bring your completed application to the Development Center where your permit can be obtained over the counter without a delay as long as your request is not part of a major remodel. Fees are subject to change but as of July 2010 you can expect to pay:

\$82.00 for the permit      \$2.00 digitization fee      \$3.00 per backflow device

**3a. If you will cross or impact the public right of way** (i.e.: the sidewalk, curb, or parking strip) during the installation process you will also need a Public Works Street Cut Permit. More information about this permit and the permit itself can be found on the Public Works Department's site: [http://www.cityofpaloalto.org/depts/pwd/forms\\_permits.asp](http://www.cityofpaloalto.org/depts/pwd/forms_permits.asp) or you may contact the Public Works Representative at the Development Center for assistance.

**Please Note: Privately owned devices, such as backflow prevention devices, may not be installed in the public right of way.**

**3b. If you are installing a device on a Fire Service**, you will need to contact the Fire Prevention Bureau, 250 Hamilton Ave, 6<sup>th</sup> Floor. The current fee to modify a fire assembly is \$275.00. This includes the fee to review your plan, inspect the installation, and archive all associated records. A link to the Fire Department's permit form is available at: [www.cityofpaloalto.org/backflow](http://www.cityofpaloalto.org/backflow)

**3c. If you feel you are unable to place your device within 5 feet of your property line, as close as possible to the City's water meter** as per the City's Rules and Regulations and California Plumbing Code, you should contact the Building Department and request a pre-installation meeting to help determine an appropriate location for your backflow prevention device. You must be present at this meeting unless you have a signed contract with a plumber to do the work. The Building Department does not have the resources to meet with every bidding contractor for your project.

## **STEP 4 Have your plumber or backflow professional install your new backflow device.**

Once you have determined where your device will be installed, request price quotes (we recommend calling at least three different vendors) and schedule the installation. You can use different vendors for different parts of the project, but do not start any work until you have the necessary City permits in hand.

## **STEP 5 Once installed, your new device must be tested.**

**Your device must pass** a field test (it is possible to have a defective new device) and the results must be submitted to the Cross Connection Control Program Office. Be sure that your tester has registered with the City's Cross Connection Office **before** performing the test. You should expect your Backflow Professional to do all of the following:

- Use an official City test form
- Submit the results to the City for you
- Provide you with a copy of your test results
- Attach a City of Palo Alto color-coded, serialized, metal tag to your device

**STEP 6 Call for your Building Inspection.**

**Leave any pipe or excavations exposed.** The City Building inspector will want to see the work before you close the job up. Your device will need to have already been tagged by a certified tester in order to obtain sign off from the Building Inspector.

**STEP 7 Remember that your backflow device must be tested annually.**

- No building permit is required to do the annual test.
- You can select any tester from the City's list to do the test each year.
- You do not need to use the same company that installed your device.

**Your City staff are here to help! Contact us:**

**Cross Connection Control  
WGW Operations, Utilities**

P.O. Box 10250  
Palo Alto, CA 94303

Telephone: **650-496-5926**

Hours: Mon –Thurs 6:30am -4:00pm  
Friday 6:30am – 3:00pm

**Development Center  
Building Department**

285 Hamilton Avenue  
Palo Alto, CA 94301

Telephone: **650-329-2496**

Hours: Mon-Fri 8:00am-12:00pm & 1:00pm-4:00pm  
Wed, open at 9:00am

**Fire Prevention Bureau**

250 Hamilton Avenue 6<sup>th</sup> Floor  
Palo Alto, CA 94301

Telephone: **650-329-2184**

Hours: Mon –Thurs 7:30am – 5pm  
Fri– 5pm (closed alternate Fridays)

**Water-Gas-Wastewater Engineering, Utilities**

1007 Elwell Court  
Palo Alto, CA 94303

Telephone: **650-566-4511**

Hours: Mon-Fri 7am – 3pm

**Development Center  
Public Works**

285 Hamilton Avenue  
Palo Alto, CA 94301

Telephone: **650-329-2151**

Hours: Mon - Fri 8am – 5pm