



P.C. # ____
date ____
by ____

Long Beach Water

Exceptional Water • Exceptional Service

Backflow Plan Check Information Form (Domestic & Residential Fire Systems)

Type of Business: _____

Service Address: _____

Contact Person / Phone: _____
(Architect / Contractor / Owner)

- Residential Fire System:
 - Passive Purge Connected to toilet. (Passive purge systems must be connected to toilet.)
 - Sprinkler piping material for Passive Purge systems is "suitable for potable water" (ref. Table 604.1 of California Plumbing Code.)

Backflow: A backflow device is required due to the following conditions or cross-connection hazards: _____

Type Required*: RP DC PVB

- _____
- Size, Make, Model, Serial Number:
- USC Foundation Approved (see <http://fccchr.usc.edu/list.html>)
 - Low Lead Low Lead Not Required (non-potable uses only)

Anticipated Installation Date / Existing**: _____

Date Last Certified**: _____
(Per Meter Shop)

- | | |
|--|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Location of backflow device shown on plan (see requirements on sheet 2); <input type="checkbox"/> Backflow Information (Size, Make, Model, S/N) listed on plan; <input type="checkbox"/> Site plan showing curb face and property line; <input type="checkbox"/> Manufacturer's cut sheet shown on plan; | <ul style="list-style-type: none"> <input type="checkbox"/> Location of water meter shown on plan. Svc. Info: _____ Projected demand per Plumbing Plans:
_____ FU / _____ gpm. <input type="checkbox"/> Customer advised a new meter is required (see over for sizing requirement). |
|--|---|

Plan Check By: _____
(Name)

Plan check approval date: _____

* RP is required for commercial applications; DC is accepted for residential fire sprinklers; PVB is accepted for irrigation where the backflow device is a minimum of 12 inches above all sprinklers.

** Approval for existing backflow devices will be granted after the Meter Shop has re-certified the device.

LBWD Engineering Development Services – (562) 570-2419
Note: This form and these guidelines are subject to change without notice.
Please contact us to confirm current plan check guidelines.

- Database entry complete Plan scanned & saved Form scanned & saved



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NOTE: Backflow prevention device may be required depending on the existing or potential degree of hazard which exists on the facility. Please refer to LBWD Rules and Regulations, Part 8, for more information.

- Backflow prevention devices located indoors must be provided drainage per the California Plumbing Code, latest edition adopted by the City. Plan check will be by the City of Long Beach Development Services.
- If LBWD Backflow & Meter Shop personnel deem the device location(s) to be inaccessible, device certification testing must be performed by a Certified Backflow Prevention Device Tester contracted by the owner.
- The existing backflow prevention assembly is not low lead. In the event that the water service is shut down for any reason, the Long Beach Water Department may require that the device be replaced with a low-lead unit prior to restoring service.
- Location of Backflow Preventers:

LBWD Backflow Plan Check is for protection of the public water supply only. The Health Department has jurisdiction beyond the "meter-protection" backflow device. The identified cross-connection hazards (as listed on page 1 of this form) may not be comprehensive. **The following criteria shall apply to ALL locations where LBWD requires a backflow device:**

- o **THE DEVICE SHALL BE OUTSIDE OF THE PUBLIC RIGHT-OF-WAY.**
- o "A reduced pressure principle backflow prevention device shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches (12") above grade and not more than thirty-six inches (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance." (17 CA ADC § 7603)

Water services 2" and smaller shall be sized per the CPC, latest edition.

In cases where sizing per CPC is not applicable, it is advised that demand (in gallons per minute / gpm) at the water meter should not exceed the following Meter Size and Lateral Size Criteria:

Safe Maximum Operating Capacity, (defined as 10 percent of usage, or 2 hours per day), and the Recommended Maximum Rate for Continuous Operation (per AWWA C700-15, Table 1):

Meter Size:	3/4"	1"	1 1/2"	2"
Safe Max (GPM):.	30	50	100	160
Continuous (GPM):	15	25	50	80

Lateral size	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"
Demand (gpm)	11	19	44	78	156	310	700	1250	1950	2800

Based on maximum velocity of 8 feet per second.

The minimum water lateral and meter size shall be 1-inch for services with Residential Fire Sprinkler Systems.

Apartments with 10 units or more shall be sized assuming a continuous flow per the CPC flow calculation. Application of continuous or safe max value shall be at discretion of LBWD plan checker.



Please choose from the following:

Frequently identified Cross-Connection Hazards:

- Gravity Grease Interceptor on Site
- Ice Maker
- Mop sink
- Multi-storied Buildings (3 stories or more)
- Trap Primer

Other:

- Aircraft and Automobile Manufacturing Plants
- Apartment Building
- Beverage Bottling Plants
- Buildings with house pumps and/or water storage tank
- Buildings with Sewage ejectors
- Breweries
- Canneries, Packing Houses and Reduction Plants
- Car Wash with water reclamation system
- Centralized Heating and Air Conditioning Plants
- Chemical Plants
- Chemically Treated Potable Water Systems
- Condominium
- Commercial Laundries
- Cold Storage Plants
- Dye Works
- Film Processing Laboratories
- Food Processing Plants
- High Schools and Colleges
- Hospitals and Convalescent Facilities
- Irrigation Systems (premises having separate systems - such as parks, playgrounds, cemeteries, golf courses, and schools)
- Laboratories using toxic materials
- Manufacturing, Processing and Fabricating Plants using toxic and non-toxic materials
- Medical and Dental Buildings
- Mobile Home Parks
- Mortuaries
- Multiple Services-Interconnected



Long Beach Water

- Oil and Gas Production Facilities
- Paper and Paper Production Plants
- Plating Plants
- Radioactive Materials Processing Facilities
- Restricted, Classified or other Closed Facilities
- Rubber Plants
- Sewage and Storm Drainage Pump Facilities
- Single-Family Residence
- Others: _____