

**PROJECT ADDRESS:** 

TENANT:

# **Plumbing Permit Application**

Community Development
6000 Main St. SW ◆ Lakewood, WA 98499
Phone (253) 512-2261 ◆ permits@cityoflakewood.us

Office use	
Permit #:	_
Date rec'd:	

Parcel #:

Phone:

Applications and all required documentation are required to be submitted through our online dashboard <a href="https://pals.cityoflakewood.us/palsonline/#/dashboard">https://pals.cityoflakewood.us/palsonline/#/dashboard</a>.

APPLICANT:	Phone:	Phone:					
Address (City, State, Zip):	E-Mail Address:	E-Mail Address:					
OWNER:	Phone:						
Address (City, State, Zip):	E-Mail Address:						
CONTRACTOR*:	Phone:	Phone:					
Address (City, State, Zip):	License #:	Exp. Date:					
*Contractor must have a valid City of	f Lakewoo	od business license prior to doing work in the C	ity				
DESCRIPTION OF WORK:							
TYPE OF BUILDING: Residential or	Co	mmercial					
VALUATION OF PROJECT: \$							
During the plan review process, the building valuation will	be evalua	ted. When necessary, the valuation of construction	will be updated.				
PLUMBING EQUIPMENT	#			#			
Plumbing fixtures (# of traps)		Building Sewer					
Hot Water tanks		Cesspool (requires TPCH approval)					
Vacuum Breakers (or check valves)	Private sewage system (requires TPC)						
Rainwater drains (within building)							
Backflow devices for other systems >2" in diameter	Repair or alteration of drainage or vent						
Water piping or water treating system	r piping or water treating system Medical ga						
Waste interceptor traps	Gas piping outlets	utlets					
Gray water system		Other (specify):					
I hereby certify that the information provided is correct and that th	ne constru	ction on the above described property, the occupa	ncy, and use wil	l be in			
accordance with the laws, rules, and regulations of the State of W. Lakewood as to any claim incurred as a result of this work.	Vashingtoi	n and the Lakewood Municipal Code. I agree to hol	ld harmless the (	City of			
Print Name:		□Owner □Agent/Other (specify):					
Signature:		Date:					

### PLUMBING PACKET REQUIREMENTS

- 1. Scope of work.
- 2. Plumbing equipment layout over the floor plan.
- 3. Show plumbing isometric drawings (riser diagrams showing all plumbing dimensions for supply lines and drains).
- 4. Equipment schedules for boilers, water heaters, etc. including size, type and location.
- 5. One line schematic of domestic water service.
- 6. Riser diagram for multi floor buildings.
- 7. Location of backflow prevention devices.
- 8. Ground plan with pipe layout relative to structure foundations including type of material and water pressure at site.
- 9. Water supply fixture units (WSFU) calculations.
- 10. Drainage fixture units (DFU) calculations.
- 11. Vent pipe sizing calculations.
- 12. Grease interceptor-sizing calculations.
- 13. Pipe size and material for potable water and sewer.

## **BACKFLOW PERMITS**

#### PERMIT INFORMATION

A LAKEWOOD WATER DISTRICT/CROSS CONNECTION CONTROL PROGRAM/WATER USE QUESTIONAIRE MUST BE FILLED OUT AT THE TIME OF THE BUILDING PERMIT APPLICATION IN ORDER TO DETERMINE EXTENT OF BACKFLOW PREVENTION THAT MY BE REQUIRED, COMMERCIAL OR RESIDENTIAL.

**ALL** NEW COMMERCIAL CONSTRUCTION WILL REQUIRE PREMISE ISOLATION AT THE WATER METER OR PRIOR TO THE FIRST CONNECTION AT A MINIMUM.

A PERMIT WILL BE REQUIRED FOR EVERY BACKFLOW INSTALLATION, RELOCATION OR REPLACEMENT. WATER SERVICE MAY BE DISCONTINUED OR DENIED UNTIL ALL BACKFLOW PREVENTION REQUIREMENTS ARE MET.

PERMITS WILL ONLY BE AVAILABLE AT THE LAKEWOOD WATER DISTRICT OFFICE AT 11900 GRAVELLY LAKE DR SW, LAKEWOOD WA 98499. PHONE 253-588-4423.

IF A JOB IS IN PROGRESS <u>WITHOUT</u> A PERMIT, **WE WILL GIVE A MAXIMUM FORTY-EIGHT (48) HOURS TO OBTAIN THE PERMIT** OR A STOP WORK ORDER WILL BE ISSUED.

PERMITS ARE \$65.00 FOR THE FIRST AND SECOND BACKFLOW PREVENTION ASSEMBLY, AND \$32.50 FOR EACH ADDITIONAL ASSEMBLY. NO LIMIT ON THE QUANTITY.

# COMPLETION OF THE PERMIT PROCESS REQUIRES THE FOLLOWING STEPS.

- IT IS THE CUSTOMER'S RESPONSIBILITY TO HAVE ALL BACKFLOW PREVENTION ASSEMBLIES TESTED UPON INSTALLATION, RELOCATION OR REPLACEMENT. ONLY A WASHINGTON STATE DEPT. OF HEALTH CERTIFIED BACKFLOW ASSEMBLY TESTER (B.A.T.) IS QUALIFIED TO PERFORM THIS TEST. LAKEWOOD WATER DISTRICT CAN ASSIST IN FINDING QUALIFIED TESTERS.
- 2. AFTER TESTING IS COMPLETED AND A COPY OF A PASSING TEST REPORT IS AVAILABLE, CALL 253-588-4423 AND REQUEST AN INSPECTION FOR YOUR PERMIT. TO REQUEST AN INSPECTION, YOU WILL NEED THE PERMIT NUMBER AND ADDRESS TO SCHEDULE A MUTUALLY CONVENIENT TIME FOR THE INSPECTION. YOU MUST HAVE THE COMPLETED TEST REPORT AVAILABLE AT THE TIME OF INSPECTION.
- 3. ALL ASSEMBLIES ARE TO BE INSPECTED BY LAKEWOOD WATER DISTRICT TO ENSURE THAT THE PROPER ASSEMBLIES ARE CORRECTLY INSTALLED.
- 4. AFTER THE INSPECTION IS COMPLETED AND THE TEST HAS PASSED, THE PERMIT WILL BE SIGNED BY THE INSPECTOR AND A COPY WILL BE FORWARDED TO THE CUSTOMER DIRECTLY OR WILL BE MAILED TO YOU IF UNAVAILABLE.

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT LAKEWOOD WATER DISTRICT AT 253-588-4423.



# LAKEWOOD WATER DISTRICT CROSS CONNECTION CONTROL PROGRAM WATER USE QUESTIONAIRE

To be completed by the applicant and returned with building permit application for each structure and/or irrigation/fire system where water service is requested from the District, commercial or residential.

Applicant Project Name:	Phone:	Email:			
Property Address:	City:	State:	Zip:		
Mailing Address:	City:	State:	Zip:		
Building Height (feet): # of Flo	# of Floors Aboveground:		Rooftop Elevation:		

Will the premise have or use any of the following items? Please mark ("X") the appropriate column for each numbered item. If not sure an item will be used, the backflow prevention requirement will be enforced as if it were, in fact, used. List other items not in the list below that may require backflow prevention on the back of this form.

	YES	NO	NOTSURE	1		YES	NO	NOTSURE
I Air compressors				25	Fire sprinkler systems			
2 Air conditioningsystems				26	Heat exchangers			
3 Aspirators, medical/lab				27	Heap pumps			
4 Autoclaves				28	Hot tubs			
5 Autopsy tables				29	Hydrotherapy baths			
6 Auxiliary water supply on the premises 7 Boiler feed lines					Ice machines			
					Irrigation systems			
8 Booster or any other type of water pump				32				
9 Bottle washing equipment				33	Janitor sinks			
10 Car washing equipment				34	Laboratory equipment	i		
11 Chemical feeds for industrial process or eauioment				35	Make up tanks			
12 Chlorinators				36	Photo developing sinks/tanks			
13 Commercial dishwashers				37	Pwnp prime lines			
14 Commercial laundry machines				38	Radiator flushing equipment			
15 Computer cooling lines				39	Sewer-connected equipment			
16 Cooling towers				40 .	Spas			
17 CO2 dispensing equipment				41	Steam-generating equipment			
18 Degreasing equipment				42	Sterilizers			
19 Dental equipment				43	Stills			
20 Dialysis equipment		ĺ		44	Swimming pools			
21 Dye vats				45	Trap primers			
22 Etching tanks				46	Used or gray water systems			
23 Fermenting tanks					X-ray equipment			
24 . Film processors								

то ссс дерт.		DISTRIC	T USE ONLY CCCSREVIEV	W		
DEVICE REQUIRED: (Circle all that annly)	RPBA	RPDA	DCVA	DCDA	NONE	
BFPA PERMIT#:						

## What is a Cross Connection?

A cross connection is a point in a plmnbing system where the potable water supply is connected to a non-potable source. Briefly, a cross connection exists whenever the drinking water system is or could be connected to any nonpotable source (plmnbing fixture, equipment used in any plmnbing system). Pollutants or contaminants can enter the safe drinking water system through uncontrolled cross connections when backflow occurs. Backflow is the unwanted flow of non-potable substances back into the consmner's plumbing system and/or public water system (i.e., drinking water).

There are two types ofbackflow: backsiphonage and backpressure. Backsiphonage is caused by a negative pressure in the supply line to a facility or plmnbing fixture. Backsiphonage may occur during waterline breaks, when repairs are made to the waterlines, when shutting off the water supply, etc. Backpressure can occur when the potable water supply is connected to another system operated at a higher pressure or has the ability to create pressure, etc. Principal causes are booster pmnps, pressure vessels, elevated plmnbing, etc. Backflow preventers are mechanical devices designed to prevent backflow through cross connections. However, for backflow preventers to protect as designed, they must meet stringent installation requirements. Backflow Prevention, or Cross Connection Control is for protection of water quality and is regulated by WAC 246-240-290 and administrated and enforced by the Lakewood Water District Resolution# B-1287.

# Why Be Concerned?

Most water systems in the United States have good sources of water and/or sophisticated treatment plants to convert impure water to meet dtinking water standards. Millions of dollars are spent to make the water potable before it enters the distribution system so most water purveyors think that their supplies are not in jeopardy from this point on. Studies have proven this to be wrong. D1inking water systems may become polluted or contaminated in the distribution system through uncontrolled cross connections. Cross connections are installed each day in the United States because people are unaware of the problems they can create. Death, illness, contaminated food products, industrial and chemical products rendered useless are some of the consequences of such connections. As a result, many hours and dollars are lost due to cross connections.

# Where are Cross Connections Found?

Cross connections are found in all plmnbing systems. It is important that each cross connection be identified and evaluated as to the type of backflow protection required to protect the drinking water supply. Some plmnbing fixtures have built-in backflow protection in the form of a physical air gap. However, most cross connections will need to be controlled through the installation of an approved mechanical backflow prevention device or assembly.

Every water system has cross connections. Plmnbing codes and State drinking water regulations require cross connections to be controlled by approved methods (physical air gap) or approved mechanical backflow prevention devices or assemblies. The various types of mechanical backflow preventers include: reduced pressure backflow assembly (RPBA), reduced pressure detector assembly (RPDA), double check valve assembly (DCDA), double check detector assembly (DCDA), pressure vacuum breaker assembly (PVBA), spill resistant vacuum breaker assembly (SVBA). Other products such as atmospheric vacuum breaker (AVB) or hose connection vacuum breaker are backflow devices but are not approved, testable, assemblies, and are not accepted by Lakewood Water District.

For a backflow preventer to provide proper protection, it must be approved for backflow protection, designed for the degree of hazard and backflow it is controlling, installed coITectly, tested annually by a State ce1tified tester, and repaired as necessary. Some States require mandat01y backflow protection on ce1tain facilities where high health hazard-type cross connections are nonnally found.