



Mechanical Permit Application

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

Office use

Permit #: _____

Date rec'd: _____

Received by: _____

PROJECT ADDRESS:	PARCEL #:	
TENANT:	Phone: _____	
APPLICANT:	Phone: _____	
Address (City, State, Zip): _____	E-Mail Address: _____	
OWNER:	Phone: _____	
Address (City, State, Zip): _____	E-Mail Address: _____	
CONTRACTOR*:	Phone: _____	
Address (City, State, Zip): _____	License #: _____	Exp. Date: _____

**Contractor must have a valid City of Lakewood business license prior to doing work in the City*

TYPE OF BUILDING: <input type="checkbox"/> Residential or <input type="checkbox"/> Commercial			
DESCRIPTION OF WORK:			
VALUATION OF PROJECT: \$ _____			
<small>During the plan review process, the building valuation will be evaluated. When necessary, the valuation of construction will be updated.</small>			
MECHANICAL EQUIPMENT	#		#
Furnaces (up to 100,000 Btu)		Appliance vents (if installed separately)	
Furnaces (over 100,000 Btu)		Ventilation and Exhaust (fans & hoods)	
HVAC Unit <input type="checkbox"/> New or <input type="checkbox"/> Replacement		Type I and II hoods	
Air handlers (HVAC) up to 25 ton		Incinerators (domestic)	
Air handlers (HVAC) over 25 ton		Incinerators (commercial)	
Evaporative Coolers		Bath, utility and residential hood exhaust	
Boilers, Compressors, Absorptions systems		Gas Water Heater	
Up to 3 HP		Gas piping	
3 HP to 15 HP		Gas stove, fire place insert	
15 HP to 30 HP		Temperature Controls (Thermostats):	
30 HP to 50 HP		Miscellaneous (list below):	
Over 50 HP			

I hereby certify that the information provided is correct and that the construction on the above described property, the occupancy, and use will be in accordance with the laws, rules, and regulations of the State of Washington and the Lakewood Municipal Code. I agree to hold harmless the City of Lakewood as to any claim incurred as a result of this work.

Print Name: _____	<input type="checkbox"/> Owner <input type="checkbox"/> Agent/Other (specify): _____
Signature: _____	Date: _____

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BACKFLOW PERMITS

PERMIT INFORMATION

A **LAKEWOOD WATER DISTRICT/CROSS CONNECTION CONTROL PROGRAM/WATER USE QUESTIONNAIRE** MUST BE FILLED OUT AT THE TIME OF THE BUILDING PERMIT APPLICATION IN ORDER TO DETERMINE EXTENT OF BACKFLOW PREVENTION THAT MAY 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 **WITHOUT** 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.

1. 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.

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LAKEWOOD WATER DISTRICT CROSS CONNECTION CONTROL PROGRAM WATER USE QUESTIONNAIRE

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 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	NOT SURE		YES	NO	NOT SURE
1 Air compressors				25 Fire sprinkler systems			
2 Air conditioning systems				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				30 Ice machines			
7 Boiler feed lines				31 Irrigation systems			
8 Booster or any other type of water pump				32 Industrial fluid systems			
9 Bottle washing equipment				33 Janitor sinks			
10 Car washing equipment				34 Laboratory equipment			
11 Chemical feeds for industrial process or equipment				35 Make up tanks			
12 Chlorinators				36 Photo developing sinks/tanks			
13 Commercial dishwashers				37 Pump 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				44 Swimming pools			
21 Dye vats				45 Trap primers			
22 Etching tanks				46 Used or gray water systems			
23 Fermenting tanks				47 X-ray equipment			
24 Film processors							

DISTRICT USE ONLY					
TO CCC DEPT.	CCCS REVIEW				
DEVICE REQUIRED: (Circle all that apply)	RPBA	RPDA	DCVA	DCDA	NONE
BFPA PERMIT #:					

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What is a Cross Connection?

A cross connection is a point in a plumbing 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 (plumbing fixture, equipment used in any plumbing 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 consumer's plumbing system and/or public water system (i.e., drinking water).**

There are two types of backflow: backsiphonage and backpressure. **Backsiphonage** is caused by a negative pressure in the supply line to a facility or plumbing 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 pumps, pressure vessels, elevated plumbing, 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 drinking 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. Drinking 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 plumbing 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 plumbing 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. Plumbing 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 (DCVA), 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 correctly, tested annually by a State certified tester, and repaired as necessary. Some States require mandatory backflow protection on certain facilities where high health hazard-type cross connections are normally found.

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