How do you Winterize Your Backflow Preventer Devices?



Many backflow devices broke in the Freeze of 2021 causing businesses to shut down, high water bills and expensive repair to broken backflow devices.

Preparing for a hard freeze may not always be necessary, but if the temperature drops into the teens or single digits it's important to protect your backflow device from damage.

Pressure Vacuum Breaker devices (PVBs) are normally used solely for irrigation systems and can be turned off completely during the winter months.

How to Winterize your RPZ (Reduced Pressure Zone) Backflow Device

Step 1:

Insulate the RPZ by wrapping the device in foam insulation around all exposed pipes. The insulation should be tight to eliminate any pockets of air.

Next wrap duct tape or any heavy rubber tape around the foam insulation to protect the insulation from moisture.





Step 2:

After wrapping the device in foam and tape, cover the backflow device with an insulated bag to provide additional protection. Several varieties can be found on the internet.

Alternately, you may choose to invest in a hot box. Hot boxes come in a variety of sizes and some include heaters.



If winterizing your backflow device is the responsibility of your landlord please forward this information to him/her.

Steps to Help Protect Your Irrigation Backflow Device from Freezing

If there IS an isolation valve:

Step 1: Shut off water to the irrigation system at the isolation valve

Locate the shut off isolation valve to the irrigation system. This valve is usually located near your main water meter on a pipe that juts off to the side of the main water line.

To properly winterize your PVB you must have an isolation valve. The rules of the Texas Commission on Environmental Quality (TCEQ) Code requires that "All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device", Rule §344.62.

Turn the valve a ¼ turn (it will only turn one way). It may be to the right or left depending on the pipe position. Please check a faucet to be sure you have not turned off the main water supply.

- **STEP 2:** Turn the two rectangular handles clockwise 45 degrees (half open / half closed).
- **STEP 3:** Open the two side port valves, test cocks, halfway with a flathead screwdriver. Water will come out of these ports while draining.

If there is NOT an isolation valve:

To properly winterize your PVB you must have an isolation valve. The rules of the Texas Commission on Environmental Quality (TCEQ) Code requires that "All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device", Rule §344.62.

Please consider installing an isolation valve for your backflow preventer.

Step 1 - Shut water off at the device:

Turn the bottom rectangular handle 90 degrees to shut off water to the system.

Step 2 - Release pressure at the device: Open the two side port valves, test cocks, halfway with a flathead screwdriver. Water will come out of these ports while draining.

With or without an isolation valve both need to be wrapped:

RUN SYSTEM TO RELIEVE PRESSURE:

Go to sprinkler controller/timer (usually located in the garage) and turn on one or two zones to run for a minute or two. Little water will come out of the irrigation heads, but it should be enough to relieve the pressure in the main line.



Insulate the Backflow Device: Wrap the pipes with foam insulation and then duct tape to keep the insulation dry. If there was no isolation valve, wrapping the valve is imperative particularly in hard freezes.



An insulated bag can further protect your device.