



Automatic Shut Off and Safety Valves

Automatic shut off valves can be helpful in areas of the United States that are prone to natural disasters such as earthquakes, tornadoes, and hurricanes. Automatic shut off valves for the gas supply line and the incoming water line can assist in the prevention of fire, explosions, or flooding of the home.

In the event a water heater is installed in the attic, automatic water shut off devices may prevent major ceiling damage; may prevent the water heater from falling through the ceiling; and may prevent additional home insurance claims.

What Does a Gas Shut-Off Valve Do

The objective of a gas shut off valve is to stop the flow of gas to your house or your water heater in the event of a natural disaster. These devices are normally placed at the entrance of the gas supply pipe to the home and are activated based on gas flow. If a pipe breaks, the gas flows freely, and the valve actuates closed. Each manufacturer has their own way in which their device operates. For instance, the ground shaking caused by earthquakes triggers seismic valves. The valve will automatically stop the flow of gas into your house when shaking or agitation reaches the point of the valve's chosen shut-off point. You must reset the valve manually to restart the flow of gas once all danger has passed.

Excess flow valves are designed to cut off the flow of gas when they detect a higher flow rating than the allotted maximum flow of the home. If you have a line break, the escaping gas will cause a flow of gas that exceeds the limits of the valve. Mechanically detectable by the valve, it immediately shuts off the flow of gas into your house. Since they operate on a different principle, excess flow valves will not shut off the gas to your house simply because of an earthquake; but will shut off the gas flow if the water heater falls through the roof and breaks the gas line.

Both types of valves offer effective protection from the threat of fire or explosion. Simply choose the right valve for your particular application.

What Does a Water Shut-Off Valve Do

The operating principle is the same as gas shut off valves. The idea is that is the detection device senses the presence of water or moisture, then it will activate a shut off switch. For instance, a water detector is place in the drain pan of a water heater installed in an attic. The water heater's drain valve springs a leak and the moisture detector in the drain pan activates a shut off switch on the cold-water inlet side of the water heater. Now there is no more water pressure to the water heater. The leak will continue, but now the drain pan and evacuation system will safely allow the water to drain outside the home. Coupled with an audible alarm switch, this system provides a positive notification and shut off system in the event of a leaking water heater.

Again, simply chose the alarm and activation system that is right for your particular application. Most of these devices are not designed for the handy man. Have a licensed contractor check out your home and install these life and property saving devices. Ask your local plumbing professional for further advice. You can also investigate some of these devices at online plumbing stores. Try using the following search words in your favorite Internet search engine:

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| Gas shut off valves | Pump alarms |
| Water detector | Moisture detector |
| Water alarms (high water alarms) | Automatic shut off valves |
| Water sensor | Leak detector |