Risk Bulletin

2017

Allianz Global Corporate & Specialty®

Water Damage Prevention Solutions

Allianz Risk Consulting

Every property – including hotels/resorts, residential condos, and office buildings – are plumbed with a network of pipes that connect to a water supply. Any one of the fittings, tubes, fixtures, or appliances found within it or connected to it are susceptible to damage or failure. If a failure results, water has nowhere to go but down, wreaking havoc on almost everything in its path; including floors, walls, insulation, furniture, computer & electrical equipment, and document storage areas. In addition to the physical destruction, the resulting property damage can lead to a business interruption loss and possibly create a liability claim by guests, tenants, or other property owners. Fortunately, there are a number of economical products designed to reduce or prevent water issues at their source.

Property-Wide Remote Protection Systems

Shutting off the water at the source is sometimes difficult and time consuming. Remote systems are a simple yet effective way to shut off the water supply after hours or during extended absence with just a touch of a button. The solenoid valve is plumbed into the water supply line after the main shut off valve. A wireless controller is mounted in an accessible location, allowing for water to be conveniently turned on and off. In addition, in the event of a power failure, the solenoid module automatically shuts the water off, thus providing additional peace of mind. A remote system ensures your property will not be flooded from failed plumbing lines, split hoses, or ruptured fixtures when the system is activated. In addition, remote systems can be enhanced by connecting them to an alarm for added protection.

Point-of-Use Detection Systems

Point-of-use water detection devices are an innovative and economical option to assist in the prevention of costly water damage caused by an aged or malfunctioning appliance or an exhausted pipe. These systems can be installed on a variety of appliances and fixtures including residential/commercial water heaters, water softeners,

Allianz Risk Consulting
North America
+ 1.888.527.6872

AGCS_Insurance
www.agcs.allianz.com

Allianz

whole-house filters, washing machines, sinks/basins, dishwashers, and toilets. Point-of-use devices are designed to automatically shut off the water supply to the selected valve to monitor when a leak is detected, whether that leak is caused by a ruptured supply line, overflow, or other supply failure. Point-of-use systems are beneficial for properties that regularly maintain their pipes and are primarily concerned with location-specific failures. The main limitation of these systems is that they can only detect leaks if sensors are positioned in the right place. If the sensor is not located in the right place, then no leak will be detected.

Leak Detection Alarm Systems

A leak detection alarm is an excellent water leak prevention solution that can be applied to one of the aforementioned water stop systems or can be installed on its own. Water stops and water main shut-offs can be connected to an alarm system to minimize leaks that occur after hours or times when the property is vacant. Leak detection alarms contain strategically placed sensors which detect water flow abnormalities, thus signaling a local audible alarm which will notify occupants when the sensor has been activated. For added protection, a monitored alarm system should be considered. A monitored system will send a signal to an offsite monitoring station or notify a designated after hours point of contact. Another option is a Failed Circuit Alarm, which signals an alarm when a circuit has failed. Failed Circuit Alarms are designed for use on any 110v/120v appliance (hot tub, pump, etc.) where it is important to know if the breaker or fuse has blown or there has been a power outage.

Some leaks start small and go unnoticed until significant water damage is finally discovered. Such a leak can continue to collect and then seep between surfaces. The damage often goes unseen until leaks/flooding is extensive, and by that time the damage and cost to replace can be astronomical. Fortunately, the aforementioned water damage prevention solutions can be an excellent safeguard, especially when coupled with an effective preventative maintenance plan. It is recommended that you contact a licensed plumbing professional to evaluate your property's characteristics and water damage prevention needs. A strategic approach to water damage prevention can help ensure that your property remains high and dry in the event of a leak or flood.

Natural Floods

If natural flooding is a major concern or frequent occurrence in your area, then the following solutions are recommended:

- Install backwater valves on sewer lines and drainage pipes to prevent sewage flowing back into the property through the over-worked or clogged municipal sewer lines during rainy seasons. When reversal of flow occurs, the backwater valve closes and cuts off the flow so that wastewater and raw sewage cannot enter the structure. Backwater valves are also indispensable for multi-user sewer systems, whether public or private
- Add floor drains in basements or low-lying areas to mitigate water damage from flooding caused by burst pipes or faulty appliances. Keep in mind that these drains are susceptible to backing up during a natural flood and allowing sewage or other wastewater onto the property
  - To help prevent this, consider installing a flood guard on all basement or low-lying floor drains. Flood guards use check valve technology to seal off the drain opening. If sewer water begins to backup, it will push up the float inside the guard until the float seals off the opening. Once the sewage begins to flow back down the drain again, the float will lower and the drain will operate effectively again. However, it's also important to understand the flood guard's limitations. Flood guards can become blocked by debris, which could allow wastewater to back up into

the property. Additionally, water may not drain as quickly through a drain with a flood guard installed
- Keep appliances like washers and water heaters above the base flood elevation
- Ensure that sump pump systems are properly installed and regularly maintained

Pump Systems & Controllers

Another fairly common cause of water damage (especially for those who live in flood-prone areas), is failure of the sump pump or float switch. In addition, since most primary pump systems run off electricity, there is also the potential for a power outage. Usually these happen right when a pump is needed the most, such as during big storms or other natural phenomena.

One of the best methods for helping to prevent flooding from sump pump failure is to install a secondary or backup sump pump. While you can choose an electrical pump as your backup, it is possible a power outage could affect that pump too in an emergency. Thus, the recommended solution involves using a water-powered backup sump pump or a battery powered emergency sump pump system. If your water is provided by a well and you experience a power outage, then a battery powered backup sump pump will work when water is not available. Neither the water-powered backup up pump or the battery powered backup pumps will be as efficient as your primary electrical pump, but they will keep things flowing in the right direction until the power comes back on or the primary pump can be repaired/replaced.

In addition, pump shut-off switches and alarms can assist in identifying and preventing pump malfunctions. Whether needed to turn the pump on at high level, keep the water level at a certain point, or keep a tank from over-filling, electronic pump switches are designed to help. When choosing an electronic switch, carefully consider the size of the pit, how often it runs, and identify the property's specific water removal needs. Switches are also designed for those who require a very precise level of control.

These enhanced designs will sound an audible alarm if:

- The pump is not plugged in or it cannot turn on the pump
- The pump can't keep up with the water coming in
- The discharge plumbing is blocked
- The motor current of the pump is too high
- Debris is on the sensor