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4 ways to prevent water damage to homes and other properties

By HSB in Equipment Care, Flood, Home, IoT

HSB, a Munich Re company, is a technology-driven company built on a foundation of specialty insurance, engineering, and technology, all working together to drive innovation in a modern world.

According to the Insurance Information Institute, one in 50 homes has a claim due to water damage each year. Appropriate measures can be taken to help mitigate this potential damage and loss. Home and property owners need to make sure that their buildings and properties are ready to handle any water that develops.

1. Yard debris removal

One step that property and homeowners can take is to ensure that all debris such as leaves, sticks, and other materials are cleared away from foundations, drainage ditches, and pipes. Keeping these areas clear will allow water to shed away from the structure. Often, drainage pipes can become clogged from leaves left over from fall or from animals using them as a source of refuge. If obstructions keep water against foundations, the risk of water entering the structure greatly increases.

2. Sump pump care and maintenance

In the battle to keep water at bay in basements, one of the property owner's greatest assets is the sump pump. Sump pumps come in two main styles: submersible and pedestal. Both offer the same water removal capability, but there are pros and cons to each type. Submersible pumps can move water much faster and tend to run quieter than pedestals. However, pedestal pumps are easier to maintain than submersible pumps and generally last longer as they are not continually submerged in water. Typically, sump pumps have a life span ranging from five to 15 years based on how often they are running and the style. Submersible pumps will need to be replaced more frequently as prolonged exposure to water will degrade the pump.

No matter which style of sump pump is being used, scheduled maintenance is critical to ensuring proper operation when the time comes. Sump pumps should typically be inspected by the property owner or operator and serviced every three to four months. Maintenance of sump pumps includes, but is not limited to:

– Inspecting the electrical cord for the pump for any wearing, breaks, and to make sure it is plugged in.
– Cleaning the inlet screen and clearing any obstructions.
– Replacing backup batteries if applicable.

Testing the pumps is as simple as taking a bucket of water and dumping it into the sump pit. The pump should kick on once the float reaches its designated level and the water should be quickly evacuated.

3. Fix foundation issues

Water ingress is not limited to water coming through the floors of basements. Foundation walls develop cracks that water can get through. Often, cracks of this nature can require a professional to properly fix. If water is seeping through the walls of the foundation and there are no visible cracks, proper drainage on the outside perimeter of the foundation can help stop the water. Installing what is known as a French drain or trench drain can help water seep away from the foundation. French drains consist of a trench filled with gravel and a perforated pipe. Water can pass through the gravel and enter the pipe where it can then be redirected to an area where it will not cause any harm. If water is common in a basement, these drains can also be installed along the interior perimeter of the basement.

4. IoT integration

Many aspects of homes and businesses can now be integrated with IoT to make them "smart." Devices are on the market that can monitor electrical outlets and devices to determine if they are powered and operating correctly. Using a connected outlet in conjunction with a sump pump can help monitor the health and current status of the sump pump. Too much power draw can be a predictor of pump failure or obstruction. Remember to always use GFCI protection when using electronics around water.

Water detection devices are also available to property owners and operators. Placing a remote water sensor near the sump pump can help alert the property owner if the water is outside the pump pit. With advance warning, action can be taken to mitigate any damage from water.

Direct water damage is not the only threat that properties face. When water is introduced into basements and neither detected nor rectified, the risk for mold growth increases significantly. Mold can lead to extensive remediation efforts which are often costly. Utilizing a simple remote temperature and humidity sensor can help the property owner determine if dehumidifiers or other water and humidity control devices are needed in the basement space.

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2021-120 (4/21)