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# Nature can cause big headaches

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You can call it the "rules of the universe" or "rules of science," but the bottom line is that we can't escape them. These rules are sometimes more of a harsh reality than others. Winter would be one of those times that the rules can give us lots of heartaches.

Some of these rules of the universe that matter most in winter weather are:

- Water goes downhill.
- When water freezes, it takes up 10% more space, even in closed areas like pipes.
- When a warm gas like water vapor gets to a cold enough surface, it will condense.
- Where there is wood or drywall and water, mold will grow
- If it smells bad, it is not healthy or us.
- Everything can deteriorate with water.

# Gutter and Roof Leaks Through Walls

This happens when snow and ice build up on the roof. When the sun warms a little, snow melts and builds up in the gutter. The warmer house side of the ice dam melts and runs under the ice and into the house walls. One solution to the problem is heat tape in the gutters. The best long-term solution starts when installing a new roof. Install a sticky membrane like "Ice and Water Shield" on the roof surface. This is generally a membrane that goes up the roof three feet and keeps the water from leaking through the roof for that distance.

## Frozen Pipes

When water freezes, it gets 10% bigger. If it is doing that expansion in a confined area such as a pipe or plumbing fixture, the pipe or fixture breaks. The best solutions are draining the pipes or adding heat to cold areas. Some tricks include heat tape, opening vanity doors and tub accesses or adding a heater to garages or other areas that have pipes in danger of freezing.



Frozen gutters can be the cause of a variety of winter home problems.

#### **Condensation and Mold**

Put a glass of ice water on a table on a hot and humid 4th of July. Condensation will collect on the outside of the glass. If there are ten ice cubes in it instead of three in the glass, there will be more condensation. In the same way, if it is very cold outside, more condensation collects where heated areas meet cold surfaces. This is when mold will grow in attics, closets located on outside walls, crawl spaces and garages. You can dehumidify the entire house to have less moisture available for condensation or add heat to the very cold areas so there is less of a temperature difference.

#### **How to Avoid Problems**

• Adding a combination thermostat and humidistat for areas that can become either too cold or too wet is a great idea. This device can be placed in areas such as crawl spaces, garages or cold bathrooms. If you purchase one designed to tell you the outside weather re-

motely, you can place that remote in the area you want to monitor and have the main part of the device in the living space, where you can read the temperature and humidity. These generally cost less than \$30.

- When you leave a home for an extended time, turn off the main water valve. If you are leaving in freezing weather, turn off the water at the meter and then open spigots to drain some of the water out of the pipes.
- If you are going to be away during freezing weather, add a remote thermometer connected to an alarm system. These can call you if the temperature in a home goes below 41 degrees Fahrenheit. For systems such as SimpliSafe Security systems, you can purchase the device for \$30 and add this to the system in less than 30 minutes.

## On Homeowner's Insurance Claims

Policies are written to replace

means that there would not be an improvement to the construction methods or materials, even if it would prevent reoccurrence of the insurance loss.

As an example, imagine that your claim is water damage because ice dams at the gutters. The actual interior plaster damage would be corrected. The roof and gutter condition that allowed the leak would not be corrected as a part of the claim.

Mold is often the result of winter leak issues. Many homeowner's insurance policies have exclusions or limits on mold claims. In other instances, the mold is not discovered until the insurance claim repairs are completed.

Most insurance policies that have limitations on mold will still cover mold "consequential to a covered claim." What that means to the homeowner is that if a leak occurs, the leak should be reported. If those repairs are covered, and mold occurs as a result of the leak, the mold would be covered.

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On the other hand, if you have a

leak, but do not report it because the repair costs less to fix than the deductible and mold does occur, you will not be covered for the expensive mold cleanup.

# What's Next When Winter Damage Occurs?

The first responsibility you have under your homeowner's insurance policy is to do everything reasonable to limit the damage. If there is a broken pipe leaking through the wall, turn off the water at the main valve. If water has leaked across a floor, clean the water up. If sewage is backing up from the floor, don't flush the commode.

Take any needed action to prevent injury to others. If a barrier needs set up, put it in place. If lighting or warning notes need placed, do so.

The loss needs to be reported as soon as possible. Disaster recovery contractors need access to stabilize conditions and dry out the home to reduce the chance of mold.

Homeowners should document conditions for handling the claim. Take photographs of all conditions and repairs. Document phone conversations. Include times and subjects discussed and arrangements that are made.

The bottom line is that homeowners should do everything possible to avoid winter damage. If you have a winter weather problem, fix the conditions that allowed it to occur.

Go to www.Envirospect.info/ WinterProblems for more information and links to important references on the topic of winter weather problems.

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