

Tips for Winter Property Safety

November 05, 2021

Vermont's winters impose some special risks on man-made structures, motivating PACIF's loss control staff to suggest several important ways to head off damage before it happens. Think of risk prevention as enlightened self-interest. When all PACIF members work to reduce their potential for claims, fewer claims occur, which directly influences future property coverage rates.

Snow and Ice on Roofs

Excessively deep or heavy snow on a roof can weaken the underlying structure or develop into an ice dam – or both. It's a good idea to monitor the depth of snow on roofs throughout the winter and to notice the weather conditions that contribute to the snow load, because they can affect how dense and heavy the snow becomes. For example, rain on top of snow can add to the snow's weight significantly. The best winter safety tip for roofs is to pay attention to the snow load and, when the snow becomes excessively deep or heavy, to hire a properly insured contractor to remove it.

Certain building types or characteristics pose a higher-than-average risk of roof collapse, including:

- any building more than 50 years old
- buildings with wood “bowstring” trusses
- unoccupied buildings (because they are not routinely monitored)
- buildings with a flat or low-pitch roof
- “L” or “T” shaped buildings

Ice dams develop when snow builds up on a roof, melts partially (usually because of heat loss from inside the building), and refreezes. After an ice dam has formed, water easily backs up into roofing materials above the dam and seeps into the structure, causing water damage that can lead to mold and rot. If you have a building that has a history of developing ice dams,

regularly remove snow four to eight feet back from the drip line to prevent ice buildup in the first place. Roof overhangs are particularly vulnerable to ice build-ups. While snow removal does control the issue, the best long-term solution is to identify and solve the building's heat loss issue(s). "[Dealing with and preventing ice dams](#)," from the University of Minnesota Extension, is especially informative.

Freezing Pipes and Staying Warm

During cold spells, heating systems often struggle to heat all areas of a building adequately. Particularly in Vermont's older buildings, there are minimally heated crawl spaces as well as nooks and crannies that may contain potable water and sprinkler lines. These pipes are particularly vulnerable to freezing on very cold nights.

To help prevent heating problems

- Make sure the heating system is inspected and cleaned every 12 months by a qualified technician. If this is overdue, please address it ASAP!
- Never store combustible materials within six feet of a heating appliance. Ideally, remove all combustible materials and liquids from the area.
- Make sure to keep all furnace room fire doors closed.

To help keep pipes from freezing during extremely cold weather, especially overnight:

- Increase the building temperature.
- Open doors to cabinets, closets, crawl spaces, and other places where water pipes or sprinkler lines are located so heat from the general building heat can warm them. If necessary, use small fans to push heated air into the coldest of these locations.
- Let hot and cold water faucets trickle overnight.

It may be tempting to do so, but never use an open flame device to thaw a frozen pipe. Instead, turn the faucet on, increase the temperature in the area, and use a blow dryer on the affected line. Or hire a contractor – properly insured for both workers' compensation and general liability, of course – to do the job.

Some PACIF Property Damage Claims That Resulted from Winter Snow and Cold

- Situations where sprinkler lines froze and then burst, creating significant water damage at multiple levels within the buildings. One such incident resulted in a claim to repair more than \$300,000 in damage.
- Roof collapses from the weight of snow, though these are typically limited to smaller shed buildings.
- Vehicle damage caused by snow and ice falling from buildings during freeze/thaw cycles. You can avoid these incidents by posting signs that clearly warn drivers of the falling ice/snow hazard. Some high hazard locations might warrant placing barricades to restrict access.
- Using heavy equipment to remove ice and snow buildup from a roof. One PACIF claim of roof and structural damage caused by heavy equipment involved more than \$80,000 of repairs. Here again, given the fall hazard, the best solution would have been to transfer the risks by contracting with a properly insured vendor to perform these services. Never allow an employee to remove snow while working from a raised bucket, unless they are working from a personnel basket designed for the purpose and are using appropriate fall restraints.

As always, if you have any questions, please contact your loss control consultant at losscontrol@vlct.org or 800-649-7915.