

## Winter Weather Can Damage County Property

After the recent winter storm that covered much of Colorado, county maintenance staff should examine county buildings for areas that could be damaged by freezing temperatures and snowy weather, such as roofs, gutters, and pipes.

### ICE DAMS

Ice dams occur when water freezes near the edge of a roof or around drains and prevents melting snow from draining properly. The water can back up and leak into a building causing damage to roofs and walls. To prevent ice dams, keep drains, gutters, and downspouts free of debris. You may also increase ceiling insulation or add self-regulating heating cables to problem areas.

### ROOF DAMAGE

Snow and ice can build up on roofs causing structural damage. According to the Insurance Institute for Business & Home Safety, 10 - 12 inches of fresh snow or 3-5 inches of packed snow is equal to one inch of water or about 5 lbs per sq. ft. of roof space. An inch of ice equals about a foot of fresh snow. Snow and ice buildup can stress the limits of roofs, even those designed for winter weather. Know the snow load of your buildings, something that can be determined by a structural engineer, and take steps such as snow removal before snow levels reach those limits.

### FROZEN PIPES

Frozen and burst pipes are a significant source of property damage during winter weather. Pipes freeze when the heat in the water flowing through the pipes is transferred to below-freezing air. The best way to prevent this from happening is to ensure that pipes are placed in heated spaces and kept out of attics, crawl spaces, and outside walls. Of course, this is not always possible, especially in existing structures, so pipes at risk of exposure to freezing temperatures should be well insulated. Insulation sleeves or wrapping, usually made of foam rubber or fiberglass, can be placed around pipes to slow heat transfer. Check that there are no gaps in the coverage.

Also, check building foundations for cracks or holes near water pipes. Use caulk to seal these areas and keep cold wind out. Closed cabinet doors in bathrooms and kitchens can block warm air from reaching pipes. During a cold spell, open the doors and let the faucet drip. A dripping faucet will not prevent a pipe from freezing, but it can relieve the pressure buildup when ice blocks a pipe to keep it from bursting.



### WHAT THIS MEANS FOR COUNTIES

Prepare county buildings for winter weather by evaluating vulnerable areas such as roofs, gutters, and exposed pipes. Take proactive steps to prevent damage. For more information about preparing buildings for winter weather, contact CTSI at 303 861 0507.