

Risk Control Bulletin

Safe Work Practices on Snow-Covered Roofs

RISK CONTROL



During the winter months, there may be times when it becomes necessary to have work done on a snow-covered roof. Perhaps you'll need to make emergency roof repairs or service roof-mounted equipment. If snow has accumulated, you may need to remove it to prevent roof collapse. Working atop a snow-covered roof poses significant dangers, including serious falls and exposure to extreme cold.

These guidelines will help ensure that your business has the proper controls in place to help minimize the risks, should the need arise for work on a snow-covered roof.

Planning and Preparation

As you develop a plan for roof work under these special conditions, consider the following questions:

What special tools, equipment, protective devices, clothing, and footwear will be needed? Make sure all the necessary gear is on hand and ready for use.

Do you have a means of safely elevating mechanized snow removal equipment to the roof? Remember that you will be working under adverse weather and ground conditions.

What type of fall protection will you need? On sloped roofs, you may need a personal fall-arrest system for each worker; on flat roofs, you'll probably need a warning line or safety monitor system.

Are there special hazards on the roof that will be hidden from view by the snow? You may need to mark any skylights, vents, or other hazards or obstructions so that workers will be able to see and avoid them.

How will workers get on the roof? Develop a plan for keeping all roof access points clear of snow.

Do you know the maximum load limits of the roof?

Roof Access

- If access is from the interior, such as through a penthouse door or hatch, snow build-up may make the route impassable or lead to injuries when workers attempt to force it open. Plan alternative methods of roof access.
- If access is from a fixed ladder on the building exterior, recent snow and ice may have built up on ladder rungs, creating a serious fall hazard. The first person up the ladder should observe the rung conditions, clear off snow, and use a hammer to knock any ice off the rungs.
- If access is from portable ladders, they should be set on stable footing, at the proper angle to the building (the horizontal distance between the base of the ladder and the building should equal one-quarter of the vertical height of the ladder). Ladders should be secured at the top and base to prevent movement, and should extend at least three feet above the roof.
- Regardless of the ladder type, workers should be instructed to use the "Three-Point System," keeping two hands and one foot, or two feet and one hand, in contact with the ladder at all times.
- A hoist rope should be used to raise tools or shovels to the roof. Workers should not be allowed to carry them up the ladder.

Exposure to Cold

- Workers should be educated on the warning signs of over-exposure and hypothermia.



- Regular temperature and wind chill checks should be performed to prevent workers from being exposed to the cold for too long.
- Workers should be rotated to reduce their individual exposures to cold and to back injuries from shoveling snow.

Mechanized Equipment Use

- Read, understand, and follow all manufacturers' instructions for the safe use of snow blowers and similar mechanical equipment.
- A spotter should be used to make sure neither the equipment nor the operator gets too close to the edge of the building.
- Equipment back-up alarms should be checked to ensure they are in operating condition.
- Workers should be instructed to operate equipment at reduced speeds because of the slippery conditions.

In conclusion, work can be performed safely on snow covered roofs through proper training of workers, use of protection, and maintenance of equipment, and, of course, a healthy respect for the elements.