



## Snow and Ice Roof Loads

Bothell's Emergency Preparedness Division warns that recent weather conditions in the region resulting in abnormally heavy snowfalls may result in excessive roof loads on buildings due to the accumulation of snow and ice.

The series of snow storms that have hit the state have left several inches of snow and ice on roofs, which have added to the total weight that trusses and rafters must support. A cubic foot of snow can weigh from seven pounds for snow that is new and dry up to 30 pounds for old, compacted snow. Rain falling on accumulated snow will add even more weight. The combination of these factors and the recent forecast which calls for more snow and rain over the next couple of days may cause an excess of snow loading on many roofs.

### **Watch for Early Warning Signs of Overloading**

Be on the watch for these warning signs:

- Severe roof leaks, indicating torn roof membranes.
- Ripples or bends in metal supports.
- Loud popping noises emanating from the building structure.
- Water ponds in areas where it never accumulated before.
- Obvious deformities in the roof.



### **What to do if you Suspect Overloading**

When snow removal is necessary, it should be remembered that unsafe procedures may cause a collapse and injuries. Anyone working on a roof must have adequate fall protection and keep in mind that workers and others nearby can be injured by snow being dumped from a roof.

Once it has been determined that the snow must be removed, there are several options for snow removal.

Most roofing contractors are equipped to handle snow removal from the roof of your home and buildings.

Another option is to remove the snow yourself. The best way to do this is to get up on your roof and push the snow off with a broom or shovel. It is important to use ladders, safety ropes and take necessary precautions.

Snow rakes also can be used to remove snow. When using a snow rake, use extreme caution when working near overhead electrical power lines. Also, avoid excessive scraping on the roof or trying to chip off any ice.

