Chester
Building Official
Code Enforcement

Thom Roy
84 Chester Street
Chester, N.H. 03036
(603) 887-5552
(603) 887-4404 (Fax)
chesterbi@gsinet.net

NOTICE

SNOW AND ICE ACCUMULATIONS ON ROOFS

Generally we don't gather a snow accumulation that causes all that much concern for roof snow loading; however with the recent onslaught of total accumulations without much relief over such a short period, it might be time to consider the effects that all of this snow might have on your roof structure.

There are lots of numbers out there that can be gathered on the weight of snow. Fresh snowfall, for 1 foot of snow, can weigh between 3 lbs. per square foot for light, dry snow to 21 lbs. per square foot for wet, heavy snow. Overtime this weight is always changing. Because the variables are seemingly endless, it is all but impossible to simply state that the snow weight is 10 lbs. per square foot or 30 lbs. per square foot or whatever. The weight and characteristics of the accumulated snow and ice, not the depth alone, is what causes the concerns when assessing a roof's vulnerability. Light fluffy snow has one weight but the water content of snow can vary from as little as 3% for dry snow, to 30% for wet, heavy snow, and can approach 100% for ice built up. It is this wet and ice packed snow that is most concerning. An inch of water depth weighs ~ 5.2 lbs. per square foot; wherein a roof with a foot of ice might approach a concentration of over 50 lbs. per square foot.

This total snow accumulation can begin to warm and melt, rain could quickly add to the weight, or additional snow accumulations can keep piling up. The design load of your roof is an important factor in assessing any snow loading; but equal attention needs to be given to flat or low-sloped roofs, visible accumulation of snow and ice, large open stance areas, any severe roof leaks, and the effects of wind drifting. These factors contribute greatly to damage from snow and ice buildup and the potential for roof collapse. As well, attention should also be given to your unoccupied buildings as well.

So if you're looking up at ice dams, frozen and clogged roof drains, wind-blown snow depths, or just otherwise a large accumulation of ice and snow on your roof – it is better to work to prevent damage to structure components than risk roof collapse.

Clear roofs of excessive snow and ice buildup - better safe than sorry – have your roof assessed.