







## Damage to buildings from snow and cold weather

Did you know a 1cm thick covering of freshly fallen snow at 4°C covering a 10m x 10m area weighs approximately 100kg. As it compresses and ices it can weigh more. Snow and ice are really quite unexpectedly heavy.

Snow and ice causes many issues for buildings such as:

- on a roof it creates vertical and horizontal forces through the structure that can cause the roof, walls and canopies to deflect, bow or even collapse
- it can impair louvered ventilation systems and roof lights
- it can totally compromise explosion relief and normal venting systems as ice can seal them shut and the weight of snow can stop explosion relief vents from opening

- exposed fluid filled services or equipment and sprinkler piping can be impacted due to freezing
- unheated buildings are vulnerable as they might freeze
- roof drainage systems can be blocked/plugged
- melting snow combined with any rainfall can easily overwhelm building drainage systems and local drainage systems in the area which can result in localised flooding.

Have you considered how a heavy snowfall might affect your property or services?

Or freezing temperatures?

Or both with a strong wind chill?













