



How much does snow weigh?

It depends on the percentages of air & water that are involved.

Air content – Fresh snow typically includes 80-95% trapped air. Cold & dry snow tends to have more air than warmer & wetter snow. Correspondingly, the SWE (snow-weight-equivalent) is lightest for new dry snow.

The weight of freshly fallen snow can range from 4lbs to 12lbs/cubic foot. Or from 1/3rdlb to 1lb/per 1”/per square foot.

Water content –snow absorbs water as it fills the air spaces and the SWE increases rapidly as the snow begins to compact from wind and the addition of absorbed water.

As the snow accumulates over time its weight will increase from 25lbs to 50+lbs/cubic foot. Or from 2lbs to more than 4lbs/1”/per square foot.

Because roof snow loading can change so dramatically - Facility managers & property owners need to regularly monitor the roof during the winter.

SRS automatic monitoring systems provide real-time visibility

Avoid repeat trips on the roof during the winter. Save time, reduce risk, & save money every winter with Safe Roof Systems.

Air & water content change over time

