

The Facet Factory An Introduction to Snow Metamorphism



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From the time snow crystals fall from the sky to time they melt in the spring, the shape and structure of each crystal never stops changing. This is known as snow metamorphism.

Snow metamorphism determines if individual snow crystals are rounding (becoming stronger) or faceting (becoming weaker). The relationship between snow crystals ultimately dictates what kind of layer, strong or weak, is formed. The interaction between individual layers determines snowpack stability.

Three main variables drive change within the snowpack; temperature gradient, temperature, and pore space size. Of these three, temperature gradient is the most influential in determining crystal formation in an alpine snowpack (Avalanche Handbook, McClung/Schaerer).

[Snow Metamorphism Final.pdf](#)

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