

Metal Roofing in Snow Country

Designing a System to Withstand Winter Weather

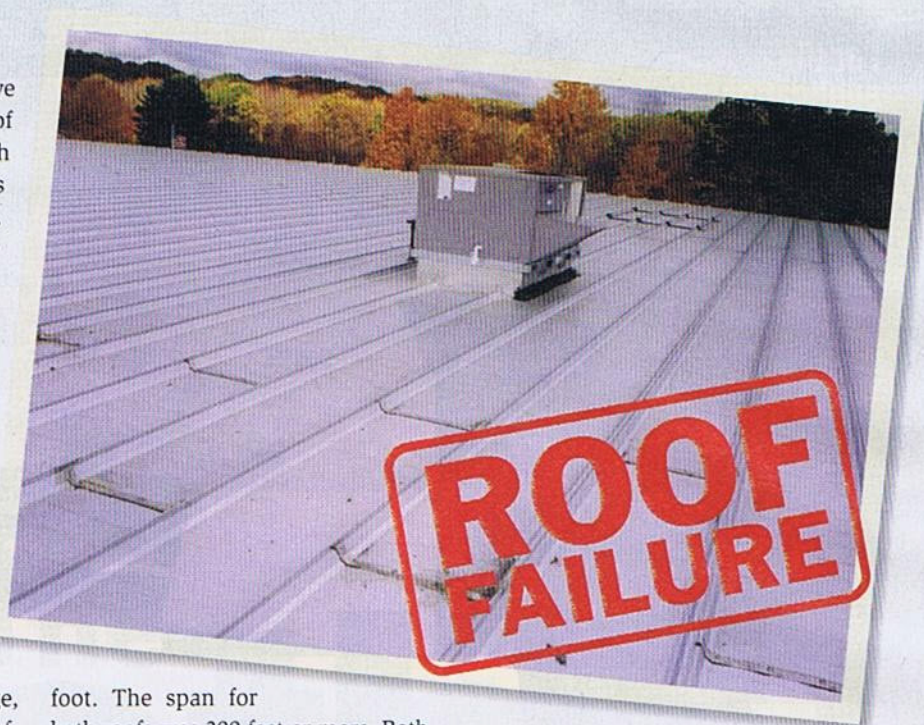
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Metal roofing systems have a good track record of performance in harsh winter environments, as long as they are properly designed. The key factors are usually snow loading requirements, adequate slope, and the use of snow guards when needed. If these issues are addressed during the design stage and the roofing contractor does his job, these systems will almost always perform as intended.

However, of the hundred or so metal roofing projects we have consulted on, a good percentage suffered from the design flaws mentioned above. If these inadequacies are not corrected during the design stage, there are a number of solutions roofing contractors can take advantage of when retrofitting these structures.

Low-Slope Standing Seam Roofs

Presently, we are consulting on a couple of metal roofs where the architect designed a slope of $\frac{1}{4}$ inch per



foot. The span for both roofs was 200 feet or more. Both are located in Southern New England — not serious snow country for a Mainer like myself — but problems developed nonetheless.

It was February and the building owners didn't like the drips all over the floors. One building was an ice hockey rink and the other was an

electronics warehouse. We counted 90 stalagmites on the surface of the ice rink from drips coming from the leaking roof.

When the snow piled up on the roof, melting occurred and ice dams resulted in water ponding 3 inches deep. Metal roofs leak under these circumstances.

