

Skylights that leak.

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One of my sarcastic comments about Canadian houses has always been that skylights should have stayed in California. A year after we shot this show, I am having to change my tune as manufacturers, like Velux to give them credit, are creating products and installer training that can solve these problems. Condensation and leaking problems related to skylights are generally caused by planning or workmanship that does not take into account our cold weather or our snow loads. Many skylights run through a heavily insulated attic section only to have the top several inches of the skylight well totally un-insulated -- and often wet or dripping from condensation. Many installers don't understand how flashing works.

One of our biggest problems is that we all want a skylight to be small and discrete on the roof like in the first photo. This skylight is on a very steep roof and there is not much snow accumulation to create problems. The problem with skylights on a low sloped roof is that they quickly get covered in snow and ice like in the second photo. The ice will form where the heat is escaping, and that can easily back water up and into skylights that are not properly flashed. In my mind, the curb on which the skylight is placed should be built relative to the snow load on your roof, which means taking into account both your weather patterns and the slope of your roof. What you want is that the skylight itself is rarely buried in the snow. For much of Canada, that excludes those roof hugging discrete skylights. The third picture shows a good skylight for the Toronto area, although most in Toronto resemble the first two photos. The next photo shows a skylight on a flat roof that collects a lot of snow. This particular one will not have any problems, but it is lucky that this unsightly structure it is hidden up on that flat roof.

Yes I am saying that there is a contradiction between what we want on the roof from an aesthetic point of view and what we should put on the roof from a functional point of view. If you follow pure looks, you will most likely have to deal with condensation and or leakage. If you live in snow country and are willing to use a curb to raise up the skylight, then you have a chance. And finally, Velux, one of the largest of the skylight companies has come out with an insulated curb and flashing system that can meet the demands of a snow laden roof, as you can see in the last photo. For more details check out Skylights That Don't Leak.

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