Heavy snow and ice avalanching off metal roofs will almost always damage or destroy external gutter systems. Most gutters cannot bear the weight of freezing water, let alone the force of shedding ice and snow. Contractors’ and building owners’ awareness must be focused on the importance of installing a snow retention system at the beginning of the project to prevent such damage. The Upson Co., Caldwell, Idaho, became clearly aware of this while working on Cascade High School in Cascade, Idaho.

While most building owners are uninformed of how much harm sliding ice and snow can cause, Upson Co. asked LMCurbs, Longview, Texas, to assist in solving an ongoing snow retention problem. Cascade High School is located in a mountainous region of Idaho where 2 to 3 feet (0.6 to 0.9 m) of snow regularly can accumulate on the roof. With this tremendous snow load, even with heavy-gauge steel gutters, failure was inevitable.

“We realized after gutter systems began failing at Cascade High School that we needed to take a closer look at installing a continuous snow retention system,” stated Rocky Thompson, manager of the maintenance and repair division of the Upson Co. “We selected the ColorGard system and have not only eliminated the problem on this project, but it will allow us to address projects like this in the future properly and avoid the costs associated with snow and ice damage.”

The real cost of not installing the ColorGard snow retention system on this roof—and similar projects—needs to be examined closer.

Clearly Understand the Real Costs
The Upson Co.’s experience emphasizes a very simple fact—reinstalling damaged gutters is not profitable for any party involved. LMCurbs focuses on educating customers about the real cost of not installing ColorGard during the initial construction, which can only be clearly explained in monetary terms. Just to name a few, gutter reinstall costs and adding ColorGard after the fact includes:

- Boom lift/equipment rental
- Labor
- Landscaping repair
- Travel time
- Higher insurance premiums
- Lost time on current projects
- Lost goodwill

Ken Buchinger, vice president of corporate business development and R&D at MBCI, Houston, stated in an October 2005 Metal Construction News article that “gutters are designed for one purpose—to channel the water to a downspout. They do not serve a secondary function as a snow retention device.” With Buchinger’s statement clearly describing the role gutters serve and do not serve and with the list detailed above, there’s no surprise LMCurbs receives phone calls with statements such as, “Gutters were torn from the eave of the building, need to be replaced, and ColorGard is needed as a long-term solution to the snow and ice that caused the problem.”

Gutters, Just Getting Started
Gutters are without a doubt the most common area effected on buildings not protected with a continuous snow retention system. Furthermore, plumbing stacks, vent pipes and antennas can be torn off the roof by migrating snow, possibly leaving the building interior exposed to the elements. The damage does not stop with roof-attached accessories. Once snow and ice escapes off metal roofs, next in its path are landscaping, vehicles and people.

The Solution
LMCurbs’ solution for customers is the S-5! ColorGard system. Again, the original cost of installing this system is far less than the long-term costs associated with reinstalls and replacements, such as the ones previously mentioned. ColorGard dramatically reduces the risks associated with rooftop avalanches and maintains the clean, colorful appearance of the roof with color and finish matching, which lasts as long as the roof itself. ColorGard not only offers cost savings in the long-term but also in the short-term—installation costs can be very low. Because the system mechanically attaches to the roof panel, it can be installed at any time of year at approximately 18 to 24 feet (5 to 7 m) per man hour.

LMCurbs’ primary focus is that each conversation is spent meticulously educating customers on short-term and long-term costs of each project as it relates to snow retention.