

**Ask Jon Eakes**

# Shields for Rain Gutters

Last Updated: Wednesday, April 19th, 2017, Created: Monday, September 8th, 2008

One of the most successful, but most expensive ways to keep leaves out of rain gutters is to place a solid shield over the top.

Using the principle of surface tension of water, the water flows over the shield and wraps around its outside curve. That curve extends out over the rain gutter itself so any debris moving with the water will simply fall to the ground, while the water clings to the metal, wraps back under and falls into the rain gutter – a rather amazing and effective way to separate out the debris from the water. Actually, most leaves just sit stuck to the roof during a rain and once dry they blow away – but the shield is covering the rain gutter so they blow off the roof. Totally covering the rain gutter, sliding snow cannot lock into the rain gutter and pull it away from the wall, or off the roof. If a roof has icicle problems, this will not change the problem, but just move it to the outer edge of the rain gutter.

## DRIP EDGE

It is still important that water cannot flow back between the rain gutter and the fascia so the Shield type of gutter protector is either built with a lip that goes up under the Drip Edge, or the sheet metal is actually inserted over the drip edge and under the first or second shingle, leading water away from the fascia. Yes you still need a Drip Edge placed first on the roof, under the elastomeric membrane, to keep water from reaching the roof decking edge, or the fascia.

## MAINTENANCE

Aside from these being about the most expensive solutions for rain gutters, they do have one important maintenance task – to keep that front rolled edge clean, the little green spot in the photo above. As it accumulates grime with time, it will lose the adhesion of the water to the metal as a rough surface will break the surface tension of water. So an annual or bi-annual cleaning of that roll-over is important to keep the water flowing into the gutter.

## SYSTEMS

It is a proven technology but considered too expensive for most budgets. Here are just two of the products currently on the market.

## LEAF GUARD

The Leaf Guard system is actually cold rolled right on site. A truck with a large roll of aluminum and a whole forming machine parked right in front of your house just spits out your new rain gutter in any length you need – no joints on the long runs. The shield is actually part of the gutter.

The convenience of no joints and a really strong gutter is off-set by the fact that there is really no way to open the thing up if something goes wrong inside. This is only available in areas that have a Leaf Guard dealer with the forming truck. The only dealers in Canada (2017) are in Ontario and BC.

## GUTTER HELMET

The Gutter Helmet is a formed piece of aluminum that slides under the second row of shingles and positioned to perfectly cover an existing rain gutter. It has a ripple design in its profile to help the flow of water to hang onto that outside roll over edge and dump into the gutter.

It has a larger metal exposure so some object to the metal roof look on the bottom of a shingled roof, and some say that the ice and snow tends to slide off the roof more. As it ships in a box just like siding panels, it is available in more regions and is less expensive than the Leaf Guard, although always installed by dealers and you will have to contact the US company to get their Canadian contacts.

## ALTERNATIVES

For those who don't have the budget, or have no installers in your area for the solid SHIELD style of rain gutter protection; follow this link for an OVERVIEW of all rain gutter leaf and debris protection.

### **Keywords:**

Ice Dams, Sheet Metal, Downspouts, Rain Gutters, Aluminum, Icicles, Trees, Drip Edge, Leaves, Cleaning, Products, Protection, Eaves Troughs, Alternative, Ice, Snow, Water, Shingle, Maintenance, Roof

**Article 1358**

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