

Ask Jon Eakes

A rain gutter leaf filter that works.

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We all hate climbing up and cleaning out rain gutters, but we hate that clogged downspout even more -- or that neat row of maple trees growing on the edge of your roof. Rain gutters have the additional problem in that they fall between the cracks of the trades -- roofers don't really like working with them and will rarely come out for maintenance, general contractors find them too small a job to bother with and handymen often just don't know about a lot of critical elements like size, slope and Drip Edges.

Many Gutter Covers Available

So we buy into any of a variety of DIY gutter covers or inserts designed to keep the leaves out, and discover that they just don't work. I have come across some metal covers that use the properties of surface tension of the water to dump the leaves but collect the water and you can read about them by following these links to Helmets and Guards. The problem is that they are relatively expensive, one is not readily available and the other is rather intrusive to the roof shingles.

So I set about testing rain gutter inserts. It turns out that either they just let the small stuff through until everything is clogged up, or they hold onto the leaves and end up sending the water right over the top of the rain gutter onto the ground below - as if you didn't have any rain gutters at all. One even brags that it traps the leaves to let them rot and then flush away????

My Choice

I finally found one that does it right. It is called GutterFilter, but as often happens with successful products, many copy cats have shown up. In Montreal you will find the product that I actually tested and recommend at Adam's Eaves and nowhere else -- or simply follow the web site links at the bottom of this entry for the right guys in Montreal, elsewhere in Canada and in the US. At first I didn't really know why it works so well, I just witnessed that it worked where others had failed.

Of course I had the company discription: GutterFilter is an open weave mesh that looks like a foam pad, it works much like the shingles on your roof, but lets the water through. Water goes through like it wasn't there but it is strong enough to keep its form. It sits high in the rain gutter totally covering all entry into the rain gutter. The lower portion is cut away in a triangular shape to give it strength supporting it from the bottom of the rain gutter while giving a free flow path for the water to the downspout as you can see in the first photo above. There are various sizes and shapes to match your gutters.

Then I spent two years taking a closer look. Watch the video above to see it working -- this is my roof with a photo taken every daylight hour for 24 days in the Fall of 2010. In the first half of the video you see normal coming and going of leafs, and just when the wind totally cleaned it all off the oak tree dumped most of its leaves in a single day and then I even got snow covered leaves. But before winter really set in, the wind blew my gutters clean and ready for the spring. This is how I test things like this to see if they really work, and to understand why.

Why the original GutterFilter works better than all other gutter covers

It took me a while to figure this all out, but watching video frame by frame taught me a lot about leaves on roofs and on various gutter covers.

Filtering

The fine weave of the sponge like mesh is small enough to block all the fine debris that land on a roof, yet open enough for free flow of the water flowing down the roof to run right into the gutter. That is actually a great balancing act, small enough to block things yet large enough to not stop the water. A metal grill or screen must do both of those in one single layer, always a compromise. The Gutter Filter does that with the top 1/8" or so of its labyrinth of its fibres, without a compromise. So single layer gutter covers either catch debris, like stems of leafs (and hence the whole leaf) in the holes, or seriously slow down the water passage.

Strength to hold a level barrier at the top of the rain gutter

Most metal or screen like material use a curved up shape to give it the strength of a dome, a curve that can trap leaves next to the roof. Gutter Filter uses a strong fibre for its foam and reaches into the bottom of the rain gutter on the back side supporting the top surface from the bottom of the rain gutter. This lower support allows for slitting of the foam at every gutter attachment -- which allows the filter to be brought up flush to the lip of the gutter all the way along. This provides a flat or even sloped forward surface with no valleys or indentations to trap debris. Most other foam type inserts are more elastic and tend to get placed with a bit of stretch, which eventually pulls back and leaves the gutter wide open at the ends or joints. Many foam inserts are too thin to allow slitting at the supports and the foam simply forms debris traps at each attachment, others simply sag down with time.

Wet leaves sticking

Surface tension of water can "glue" leaves down to smooth surfaces while they are wet, causing leaves to pile up and compact. Roofing shingles have small granules of rock on the surface which, amongst other things, causes there to be very small surface contact between the leaf and the roof. As soon as the water flows away, long before it is actually dry, the bond between the leaf and the roof shingle is broken and the leaf is free to blow away. Many gutter covers have a great deal of flat smooth surface, especially metal grids that need strength. This actually holds wet leaves, and with some dust before the rain storm, can even end up gluing them down. The foam filters have the advantage of almost no surface contact with the leaves, like the roof shingles only better as the water drains away almost instantly. Leaves are quickly freed up to blow away right after a rain storm.

Warranty

With time the sun turns the top of the filter grey but it keeps on working, as evidenced by their lifetime warranty against clogs when it is installed correctly. Some similar filters are showing up in big retain chains. I really invite you to take a good look at them and take a good look at the photos of GutterFilter. The imitations are smaller, less dense and have to be pulled under the brackets or nails that hold the gutters leaving the top completely flat or under the front lip -- trapping leaves. The DIY products tend to stretch as they are installed, and eventually shrink back leaving gaps. And notice that their warranties cover less and less as time goes on. I really appreciate that GutterFilter dares to put a lifetime warranty on their product. Quality and durability is why it does cost more up front but less over the long run.

Why GutterFilter is not a DIY product

GutterFilter is not available as a DIY item in the stores because part of what makes it work is being installed properly, like slitting the material and bringing it up around brackets and nails. (The cheap stuff is not thick enough to do that.) The fellows at GutterFilter know that if there are already problems with the gutters themselves, their filter won't work either. So they specialize in gutter maintenance, repair and installing their quality filters. Finally someone took up rain gutter maintenance as a trade! This is what I have on my house. www.GutterFilter.ca for Canada, www.AdamsEaves.com for Montreal and www.GutterFilter.com for the US.

Keywords:

Cleaning, Downspouts, Filters, Foam, Leaves, Maintenance, Products, Quality, Rain Gutters, Roof, Trees, Warranty, Water