

General Installation Guide:

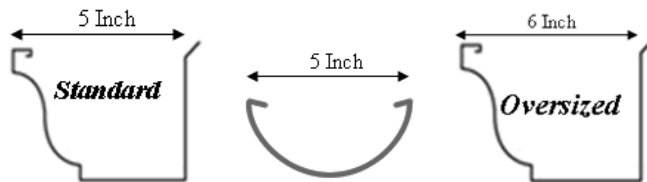
The Micro-Mesh Gutter filtration panel system installation begins with the inspection of the gutters to confirm the amount of material required and also to determine the best method of installation.

Preparation - Before beginning installation, gutters should be cleaned and tested to ensure they are free of clogs, draining correctly and in proper working order. After it is determined that the gutters are ready for the Micro-Mesh gutter filtration panels, measure the length of Gutter to be protected. The Micro-Mesh gutter protection panels may be trimmed with normal sheet metal cutting tools.

Measure your gutter opening from the back of the gutter to the front lip to confirm your gutter size or type:

Common Gutter types

- 5 inch = Residential 5" K & Round
- Screen Room or Pool Cage Super Gutter
- 6 inch = Commercial 6" K



One advantage of the Micro-Mesh gutter filtration panel is the many ways it can be installed. For example, the screen gutter protection system is ideal for screen rooms or pool cages. The type of roof, the pitch, age and other factors may dictate the need for an alternative installation method. The installer must use their best judgment as to the appropriate method of installation for the type of gutter and roof that they are dealing with. Whenever possible, Micro-Mesh gutter filtration panels should be installed with the back edge of the product *under* the roofing material. This will help ensure the best performance in all conditions.

Installation- Typical Gutters

To begin, slip the back edge of the Micro-Mesh gutter filtration panel *underneath* the first shingle of the roof. (Picture) K style gutters are the general standard in the USA. If you have one of the other gutter types, be sure the gutter protection system can be installed to it.

IMPORTANT- Care should always be taken not to damage the roofing material, i.e., shingles, tile, shake, metal, etc. Don't hurry the job. For asphalt shingled roofs (especially old ones), it is best to wait for a warm day and allow the sun to warm the shingles. This way, the aged shingles may be easier to work with. If asphalt shingles have a downward bend at the overhang, just lift gently and slowly using a wide, flat tool, like a paint scraper. Once the Micro-Mesh gutter filtration panels are in place, the shingles will eventually settle and flatten themselves out. Don't force them. Next, adjust the Micro-Mesh gutter filtration panel over the top of the lip of the gutter.

Once in place, secure in place to the gutter lip using min. # 6 x 1/2" **Hex washer head piercing point screws** approximately 1" from each end, and in the middle of the panel.



Installed beneath 1st shingle



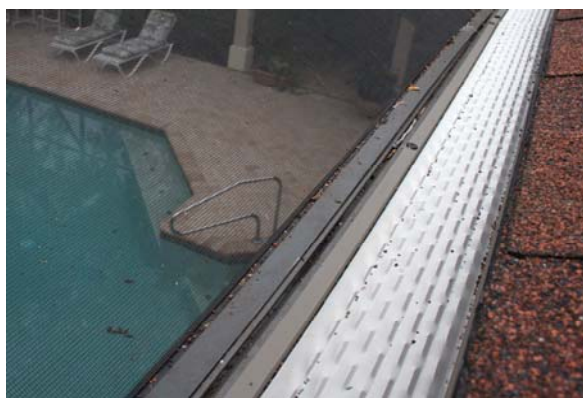
Secure in place to the gutter lip

Installation- Fascia Mount for specialty roofs and pool cages

Fascia-mount installations are best suited for installations on shake, slate, metal, or other specialty roofs.



Fascia mounts for metal roofing



Pool cage application

Measure the distance from the front lip of the gutter to the fascia and use a brake to create a vertical 90° bend along the stiffener rib line for 5" or 6" gutters. The vertical bend along the back of the finished panel will rest flat against the fascia. Install seal tape on the back side of this bend and screw 1" from each end and one in the middle.

End caps- Where end caps are needed, use gutter coil (or something similar) as needed to field manufacture. Keep in mind that there **MUST** be no openings larger than 1/4".



Field fabricate end cap cover

Micro-Mesh proper panel attachment to K-Style Gutters

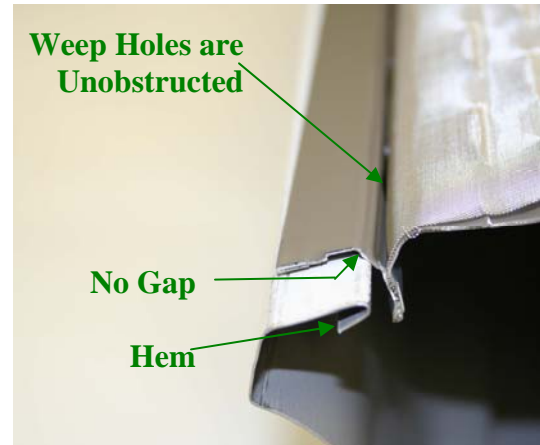
Properly installing and tightening the panel fastener screws is intended to pull the lip of the gutter up to the panel, and not to bend the Micro-Mesh up or down to match the gutter lip. Bending the Micro-Mesh panel may obstruct the weep hole from draining or cause them to drain over the gutter lip beneath the panel.

CORRECT

This application shows a standard K-style gutter on which the gutter lip has a “Hem”.

The hem does NOT obstruct the “Weep Holes” from draining.

Note: Fastener screws should be tight enough to close the gap between Micro-Mesh and Gutter lip



NOT CORRECT

This application shows a standard K-style gutter on a steep pitch roof. In this instance even with a “Hem” the “Weep Holes” will drain over the gutter lip.

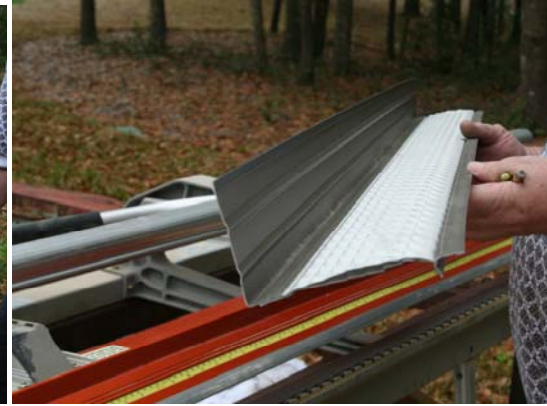


Micro-Mesh Installation Smart Tips

- Always be aware of power line wires!
- Move your ladder into position for each panel installation.
- Do not lean out to either side of the ladder when installing panels.
- Always use a dissimilar metal barrier when installing panels in contact with different metals.
- Always install screws at a 90 degree angle to the panels.
- Never install screws into the roof valley.
- Close all gutter /panel end caps off completely.
- Under-the-shingle installations only require screws in the gutter nose
- Over-the-shingle installations require butyl sealant in addition to 3 roof screws.
- Fascia mounts are ideal for metal and tile roofing, or screen room installations.
- Always maintain a level to positive panel pitch, with no reverse slope.
- Notching the panel vertical leg will allow tighter end butt connections.
- During manufacture and installation, natural oils may adhere to the product surface and cause minor runoff on newly installed systems. This is normal and will stop after 30 days of exposure.
- Care should be taken when installing panels beneath older shingles not to damage roofing material

Micro-Mesh Inside Corner rain volume Valley Controller

Below are two alternate installation examples of ways to increase the rain flow volume control capacity at inside corner valley applications, splash guards may also be utilized.



Field forming for fascia mount applications using a small sheet metal hand brake



Panels may be easily cut-to-fit using sheet metal snips

Technical Bulletin:

Micro-Mesh Gutter Protection for Steep Pitch Roof Applications

Steep pitch roof applications can cause the nose of the panel to bend up, closing the “weep drain gap” resulting in water run over.

When installing on steep pitch roof applications, there are two alternate modifications:

1. **Weep Drain Gap Modification:**

Open the weep drain gap to insure proper drainage by utilizing a putty knife; slightly pry open the drain gap (care should be taken not to break the screen lock)



2. **Panel Break Modification:**

Measure the distance from the front lip of the gutter to the eave and use a “brake” to create a vertical bend along the stiffener rib line for 5” or 6” gutters.

