

GUTTERGLOVE INSTALLATION

Here we will cover the basic installation of the 5 foot sections of Gutterglove. **Make sure that the gutters and downspouts are thoroughly cleaned out first. FOR BEST RESULTS Install the Gutterglove at a positive angle in order to effectively shed debris while retaining water penetration. In most cases this will be between 5-25 degrees.**



1. There are a variety of ways to prepare for installing the 5 foot sections of Gutterglove. Here we are laying the sections out and then will insert them later. **DO NOT RUN ON THE ROOF** to install Gutterglove faster. PLEASE remember SAFETY FIRST!

INTERESTING FACTS:

- The mesh on Gutterglove is 316L stainless steel.
- The fine mesh has 8,100 holes per square inch.
- The hardened finish on the aluminum extrusion that supports the mesh is made from an anodizing process.
- The mesh can handle way over 150 inches of hourly rainfall as has been tested in numerous experiments.
- The length of a standard section of Gutterglove is 5 feet and the standard width is 5.75 inches.
- Gutterglove can be used in the high country because extreme cold weather, snow, and ice buildup do not damage it.



2. When installing Gutterglove, remember that the back goes under the shingles and on top of the black felt paper! Do NOT screw down the back of Gutterglove... the roof shingles will hold it down naturally.



3. Here we are installing Gutterglove on an asphalt composition shingle roof; however, Gutterglove can be installed on ANY roof type such as:

- Tile (all types including metal)
- Metal
- Shake
- Flat

Gutterglove will also fit on all gutter styles. Gutter widths greater than 5 inches will require extending the back wing of Gutterglove to fit larger gutters. See installation guidelines on the website for installing Gutterglove on larger gutters.



4. When butting up Gutterglove to an end cap on the gutter, remember to leave a small 1/8th inch gap between the end of a section of Gutterglove and the gutter end cap itself. This can help water not to drip over the edge of the gutter end cap.



5. Next, screw down Gutterglove on the front lip in order for you to screw it down to the front lip of the existing gutter.

Interesting Facts:

- Gutterglove was designed in such a way that when installed, it has a slight angle towards the front lip of the gutter. This helps debris fall off easier so it doesn't tend to sit on top.
- Most of the leaf, pine needle, seed pod and sand granule debris fall off Gutterglove because: The winds help blow it off; the rains help splash it off; the angle of Gutterglove helps the debris to slide off.
- There is no such thing as a "maintenance free" gutter guard!



6. There are a variety of cutting tools to use when trimming Gutterglove to fit a specific length. As seen above from left to right, we have a chop saw, a power circular saw or a reciprocating saw. PLEASE remember again, SAFETY FIRST. Please do not use any of these tools until you are properly trained!



7. Always use safety goggles when using any power tools.



8. Here we are using the back of a work truck to trim off the entire back edge of Gutterglove. Notice we clamped down Gutterglove on both ends of the tail gate.



9. After Gutterglove is screwed down, install the finger fasteners. Please see Finger Installation Guide on how to do this. The finger is used to connect each section of Gutterglove.



10. Its OK if you have a small gap between sections if it cannot be avoided. Try to keep gaps under 1/8th of an inch. Later, apply clear or gray caulking to fill up the gap. **(Leaving a small gap can also help with expansion issues on long runs)**

Interesting Facts:

- Light brown faded dirty streaks are always barely visible on the front of white gutters (these streaks are generally not visible on non-white colored gutters) prior to installing Gutterglove... and most of the time the homeowner is unaware of this! You should always bring this to the attention of the homeowner before installing Gutterglove; otherwise, after you install Gutterglove, the customer may think that Gutterglove caused the streaking.
- If after Gutterglove is installed and a few rains have come down leaving many dark, highly visible streaks on the front of the white gutters (much more visible than before Gutterglove was installed), it is more than likely due to any one or more of the following reasons:
 1. The installer didn't apply the bead of caulking at the base of the metal fastener.
 2. The installer applied the bead of caulking, but didn't put the bead of caulking at the standard height of 1/4 inch.
 3. The installer applied only one inch of a bead of caulking instead of two inches long.

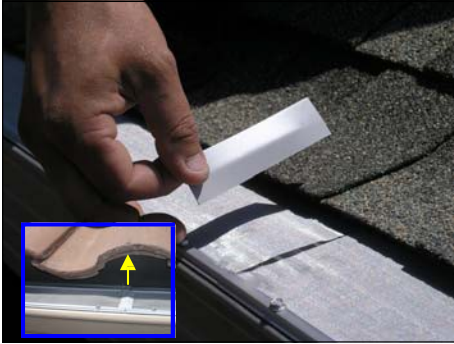


11. The final step here is to apply a bead of caulking at the base of the finger. The bead can be up to 2 inches in width and up to 1/4 inch high. This helps prevent occasional water dripping over the edge of the gutter. For more details on this procedure, please review the Finger Installation guide that is available on our website.

NOTE: Some installers prefer to skip this step as the caulking will change the appearance of the finished installation

FINGER FASTENER INSTALLATION

One of the very unique features of Gutterglove is that we are the only gutter guard in the industry that has an interlocking connector for each five foot section of our gutter guard. This connector is called a “finger” fastener and gives a variety of benefits: It locks together two pieces of Gutterglove; eliminates the possibility of the mesh on the ends from fraying and coming out; channels water back into the mesh; aesthetically looks cleaner; and keeps the two five foot sections of Gutterglove even. Generally, before installing the finger, make sure that the five foot section of Gutterglove is screwed down first as this makes it easier for installing the finger.



1. The finger fastener has a slight ridge to the center. This helps water to flow back into the mesh when coming down the roof. When installing on curved tile or very pronounced metal roofs with high corrugations, the finger **MUST** be installed under the highest ridge points (see yellow arrow on inset photo left) otherwise water can sometimes run off the finger.



2. Firmly hold both ends of the finger.



3. **FIRST BEND:** Carefully bend one end down. This is soft metal so this procedure can be done without tools.



4. Wiggle back and forth the finger into the back groove of Gutterglove. The first bend can even be done after the back finger is in... whichever you feel more comfortable with.



5. The first bend allows the finger to fit into the front groove for interlocking both sections of Gutterglove.



6. Place both fingers on the outside edges of the finger.



7. Gently push down until the front of the finger pushes itself into the front groove. **DO NOT** push from the center or the middle ridge will flatten.



8. A completed installed finger should look like this.



9. Place a bead of caulking (1/8th" to 1/4" high) at the front edge. This helps prevent occasional water dripping over the edge.

END CAP INSTALLATION

Installing the end cap to the end of Gutterglove where it meets the end of the gutter makes a complete system for closing off the entire gutter. This is helpful in keeping insects and birds out. Gutterglove has several colors to closely match the color of the gutter. Gutterglove sells an oversized end cap and all you need to do is trim it down so it fits the style of gutter on which it is installed.



1. End caps come oversized so they can fit pretty much any sized gutter type. Gutterglove does have large sheets of colored aluminum (15"x24") that can fit any larger sized gutter types. Both can be trimmed down to size. By the line on the photo on the right you can clearly see where the cutting needs to take place so it fits.



2. Place the end cap over the end of the gutter. Mark where the end cap needs to be trimmed (on the dotted yellow line).



3. Next trim off the unwanted section.



4. The end cap fits neatly. You can also put the end cap on the inside of the gutter if you don't want to see the excess on the outside.



Front of the end cap slides into the front groove of Gutterglove.

5. The front of the end cap can fit inside the groove of Gutterglove. This isn't absolutely necessary, but looks cleaner.



The back of the end cap sits on top of the back groove and runs wild under the roof.

6. The back of the end cap just runs wild under the shingles past the groove of Gutterglove. The back does NOT have to fit into the groove of Gutterglove. The roof shingles hold it down firmly.

7. Next screw in the end cap. You can use one or two screws if you want. There is no need for caulking the top of the end cap. This makes it easy to come off in the event gutter repairs would ever be needed, Gutterglove comes off easily!



INSIDE MITER INSTALLATION

We will cover the technique of installing an inside miter in two different ways and then show how to install the Gap-Cap. We do NOT use the standard fine mesh when fabricating the inside miter, however, the alloy type of metal used is the same which is 316L. Gutterglove refers to this mesh as the “big mesh” and has a common name of “30 mesh” which has 900 holes per square inch (as compared to the fine mesh which has 8,100 holes per square inch). There are a few reasons we use the big mesh for the inside miter and the simulated miter areas:

1. It can handle higher volumes of water.
2. On asphalt composition shingle roofs, sometimes a fine mesh can clog from the fine oily residues of asphalt shingles in larger area roof valleys. This can NEVER happen in Non-Valley or Non-Simulated areas!
3. The installation company will be called out for a warranty call because the homeowner won't understand why water is dripping off the gutter. The homeowner may think that Gutterglove doesn't work or was installed incorrectly!

The reason the big mesh isn't used throughout the entire gutter system is because the fine mesh keeps out smaller debris particles.

Technique #1



1. Cut a small piece of the big mesh type Gutterglove. The length is around 8 to 10 inches. Do NOT use the fine mesh for the inside miters!



2. Very carefully install the inside miter piece into the corner.



3. Make sure the left side butts up to the back of the gutter. The back of the inside miter section goes under the shingles and on top of the felt.



4. Do NOT cut the inside miter section at 45 degrees. This will just cause water to run off!



5. You will screw down two screws where shown on the two yellow circles on the left.



6. The two screws are more than enough to support the miter piece.

Technique #2



1. Instead of using a piece of big-mesh Gutterglove, just cut the fine mesh out of the section needed and re- place it with a piece of the big mesh itself.



2. After you have the correct length of Gutterglove cut for the desired section, carefully remove it and begin replacing the inside miter section with the big mesh.



3. Mark the section to be cut.



4. Carefully cut along the line with a serrated knife. Be VERY careful not to cut yourself!



5. Once you have cut through the fine mesh from one side to the other, and then pull it out.



6. Carefully pull out the fine mesh. After you pull it out, there may be caulking stuck inside the grooves and you may have to scrape it out before you slide the big mesh in.



7. Slide the big mesh in just like on the photo to the left. After it's in, then caulk the grooves with 791 Dow Corning Caulking.



8. Where the big mesh meets the fine mesh, you will need to install a finger fastener.



9. Install the section of Gutterglove back on the gutter. Now it's time to install the Gap-Cap.

Gap-Cap Installation:



1. Before the Gap-Cap can be installed, you need to install the next piece of Gutterglove up against the inside miter you just installed.



2. The primary function of the Gap-Cap is to keep out debris from entering the gutter through the gap that's highlighted in yellow to the left.



3. Each Gap-Cap will need to be trimmed in order for it to fit.



4. In most cases you will need to trim the back and the bottom edge.



5. Then carefully insert the Gap-Cap into the two grooves of Gutterglove.



6. Do not use any caulking or screws when it's installed, because of its unique design, it will hold itself in place.



7. It looks quite nice when completed.

OUTSIDE MITER INSTALLATION



Gutterglove sells Outside Miter Kits that are pretty handy and quick. They are pre-cut with the 45 degree miter angle and include the "thumb" fastener and 4 screws. The two sections are pre-drilled for easy screwing down of the 4 screws. The Outside Miter Kit is in 5 feet total length. They easily slip in between the composition shingle and black felt paper as can be seen above.



After the two miter sections are installed, then insert the thumb fastener as seen above. The thumb fastener seals the gap, is used to connect each section, and makes it look clean, complete and protects the mesh ends from fraying or tearing.



This photo shows a completed outside miter installed. It looks pretty nice when finished. It's generally recommended to install all the outside miters first before installing all the straight runs of Gutterglove on the remaining gutter.

NOTE: The larger sized mesh is not used for the outside miters, only for the inside and simulated miters.

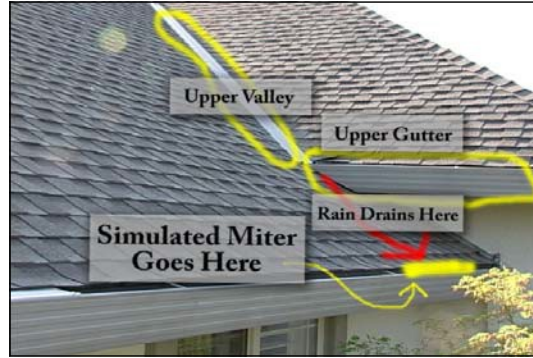
SIMULATED MITER INSTALLATION

A simulated miter is just like an inside miter accept it doesn't look like an inside miter, but it functions in exactly the same way as an inside miter. Examples of simulated miters would include: The location on a gutter beneath an upper valley that drains onto the roof and then into that gutter; and the location on a gutter where water drains from an upper downspout, then into the roof and then into that gutter. The big mesh is used in all simulated applications. Please make sure to see the installation guide on inside miters because they both go hand-in-hand as far as functionality is concerned.

Upper Valley and Upper Gutter Draining Into Lower Gutter:



1. The photo on the left is an example of this miter type.



2. Note where the upper valley and the upper gutter are and how the rain drains into the lower gutter where the miter goes. Make sure to use the big mesh where the water drains.



2. The installer cut out the fine mesh and is installing the big mesh in its place. Make sure to use the finger fasteners to hide the seam where the big and fine mesh meets.



4. The big mesh is inside the yellow circle on the left photo.