



## Installation Examples



**Gutter  
Protection  
Products** by Crane Plastics

For assistance call 877-280-9027 M-F from 9am to 5pm EST or  
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# Straight Runs: New Gutter Hanging



Sections of Perma Flow guard are angled and snapped into position on the gutter.



Screw anchors are put into position every 24" using the factory pilot holes.



Working together, the installers anchor one end of the gutter assembly.



Gutter drainage angle is checked prior to anchoring the gutter.



The gutter is hung correctly with the drip edge in front of the Perma Flow guard.



The neoprene washer used on the factory supplied ceramic coated anchor screws pulls the back wall securely against the fascia board.

# Straight Runs: Retrofit



In the event rigid shingles limit the amount of space above the gutter hangers consider hand crimping the back wall to achieve a flatter guard profile.



Each end of Perma Flow is engineered with an overlap edge for a secure butt joint.



Pilot holes along the front edge speed up installation.



For butt joints that occur between the hangers, consider using an anchor screw to secure the guard to the fascia.



This short section of gutter empties onto the roof. Notice the splash guard that is fastened on top of the Perma Flow guard.



# Straight Runs: Retrofit



For some retrofit installations it may be desirable to flatten the angled front flange. Use a piece of 2 x 4 to quickly crimp the aluminum.



This close-up shows a crimped front edge which does not affect the drainage performance.



Working together, the installers anchor the Perma Flow guard.



The Perma Flow guard rests on top of the spike and ferrules.



Overlap joints are secured using two zip screws along the front gutter edge.



Gutter ends are protected by the guard overlap.

# Constructing Inside Corners: Retrofit



The installer is hand crimping a length of guard due to the tight working area.



To fabricate a corner, a notch is cut from the guard up to the back wall.



The two ends are folded at 90 degrees to create the corner section.



The corner assembly is tucked into position.



Zip screws secure the front edge of the guard to the gutter.



Notice the corner splash deflector is secured on top of the Perma Flow guard to assure good drainage.



# Construction Inside Corners & Piece Work



Using hand shears, the installer makes two cuts to the back wall. One is at 45 degrees and the other at 90 degrees.



Two ends are folded together to create a 90 degree corner section.



The installer uses the strength of the guard to move the assembly into position.



Installers find Perma Flow guard very easy to cut with shears.



Installers can create an overlap joint simply by notch cutting the material.



This is a close-up view of guard that has been notch cut.

# Constructing Outside Corners: Retrofit



The installer is hand cutting a 45 degree miter angle.



The first piece of guard is secured to the gutter front edge.



Screw fasteners secure the corner section in place.



Close up view of finished outside corner.



Another close-up view showing two pieces using a 45 degree miter cut overlap.



The installer used an anchor screw in the back wall to help support the corner.



# Straight Runs: Retrofit



A before view of the existing wire guard and the amount of debris that has collected.



Perma Flow guard section installed on top of a spike and ferrule gutter.



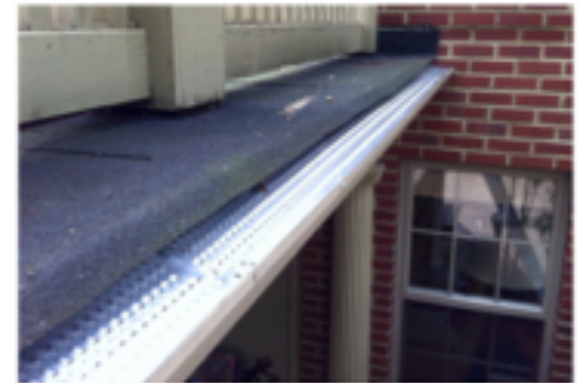
A view of the finished run.



Securing the guard using 1/2" zip screws.



For tight spaces, the back wall may be folded down to create a flatter profile.



Piece work is very easy and achieves a clean appearance for gutters visible from a second story or balcony.