FreeFlow

INSTALLATION MANUAL

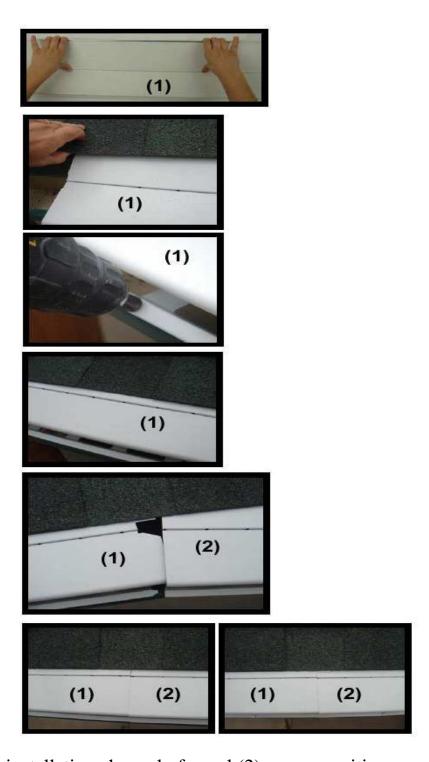


FreeFlow **panels** are made from heavy-duty aluminum which can be installed simply and quickly.

FreeFlow **HWF panels** are used in roof locations where high water flow is present. HWF panels can also be used next to the Inside Miter to absorb more water.

Inside Miters ease installation of the system ending the timely process of creating an Inside Miter and Diverter by hand.

FreeFlow **Endcaps** complete and enclose the system so that birds and animals can not build nests.



FIRST, do a good job cleaning the gutters and downspouts. To assure the downspouts are clear of debris, run water from a hose into the gutter and check the water flow at the bottom of all downspouts. The water should flow out without backup in the gutter. Also check for leaks and damage to the gutter. Optimal gutter height is 1 –2 ½inches from drip edge.

Adjust panel (1) to appropriate roof pitch using hand-pressure or a siding. FreeFlow should be installed with a small downward slope, 5 –15 degrees. Slide back edge of panel (1) under the first row of shingles.

Position panel (1) on top of gutter lip.

Each panel is secured to the gutter with two zip screws. Using zip screws supplied, attach the left side of panel (1) to the gutter.

Before attaching the right side of panel (1) with zip screw, bend and position panel (2). Insert the tab on the installation channel into the

installation channel of panel (2) as you position panel (2). After you have positioned panel (2) in place, zip screw the panel (1) with it's second zip screw and the first zip screw of panel (2). DO NOT OVERTIGHTEN.

Continue the installation by repeating the steps outlined above.

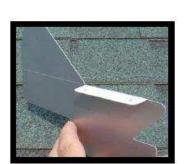
Endcap Installation



Position Endcap



Endcaps are pre-made to fix 6" gutters. Mark and trim excess material for tight fit inside of 5" gutters.



Using hand break, bend Installation flange 90 degree.



Position Endcap and mark bend line on upper flange.



Using hand break, bend upper flange using hand break.



Position Endcap and secure with zip screws through the pilot holes.

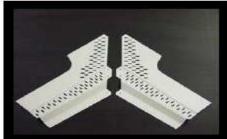


It is **IMPORTANT** to keep birds and animal from entering the closed system. Use scrap metal, to close off any open areas.

Inside Miter Installation



Position panels next to each other as shown. Secure panels with zip screws.



Attach two-piece miter together using the three pre-made holes.



Position miter on top of panels. Secure miter to left and right panel with zip screws.

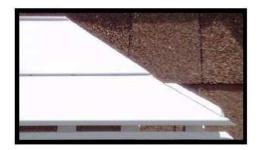


In valleys where there is **high water flow**, use HWF panels in addition to the miter for more water absorption.



A diverter can be added in valleys with a **very large amount of water**. Use HWF panels and a diverter to absorb additional water.

Outside Miter Installation



1. Cut first panel to 45 degrees; leave 2 ½x ½inch tab.



2. Trim area so that panel does not hit nails in the roof crown.



- 3. Position first panel and secure to the gutter.
- 4. Cut second panel to 45-degree angle.
- **5**. Trim area so that panel does not hit nails in the roof crown.



6. Position second panel, align with outside corner, over the top of tab on first panel, and then secure second panel to the first panel with two zip screws through second panel into the tab on the first panel.