Universal PV Flash Installation Guidelines

Installing the Universal PV Flash on a composition shingle roof

PV Flash can be attached to the roof without removing any shingles; however, the rafters must be located as the PV Flash attaches to the rafters.

These guidelines begin after the rafters have been located and marked for each PV Flash to be installed. For questions about layout, see Power Rail Design Guidelines.

Each PV Flash kit includes the following items. If any items are missing, call us toll free at 800-260-3792.

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>8&quot; x 12&quot; PV Flash with rubber bushing pre-installed</td>
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<tr>
<td>1</td>
<td>Aluminum universal attachment block</td>
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<tr>
<td>1</td>
<td>5/16&quot; x 6&quot; Stainless steel hanger bolt (1-1/2&quot; machine, 3&quot; lag)</td>
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<tr>
<td>1</td>
<td>5/16&quot; x 3/4&quot; Neoprene bonded stainless steel washer</td>
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<tr>
<td>1</td>
<td>5/16&quot;-18 Stainless steel hex nuts</td>
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<td>1</td>
<td>5/16&quot; Flange Nut</td>
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</table>

CAUTION: Be careful not to damage the rubber bushing while drilling. If necessary, mark the hole location and remove the PV Flash before drilling.

Step 1: Position PV Flash and Drill Pilot Hole

A. Position the PV Flash under the upper row of shingles. Be sure the long-portion (opposite the rubber bushing) is under the shingles. (See Figure 1-1)

B. Center the PV Flash rubber bushing over the rafter and drill a 3/16" pilot hole using the rubber bushing as a locator.

Figure 1-1: Positioning the PV Flash and Drilling Pilot Hole
Step 2: Assemble the Hanger Bolt

A. Thread one 5/16" hex nut onto the machine threads of hanger bolt. Thread the nut down to the bottom of the machine threads. (See Figure 2-1)

B. With the rubber side of the washer opposite the nut installed in the previous step, install one 5/16" x 3/4" neoprene bonded washer onto the lag bolt end of the hanger bolt. Position the washer against the 5/16" hex nut.

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**Figure 2-1: Assembling the Hanger Bolt**

Step 3: Secure the Universal PV Flash to the Roof

A. Place the Universal attachment block onto the rubber bushing of the PV Flash. (See Figure 3-1)

B. Using one of the prepared hanger bolts, drive and secure the universal attachment block and PV Flash to rafter tightening securely.

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**Figure 3-1: Securing the Universal PV Flash to Roof**