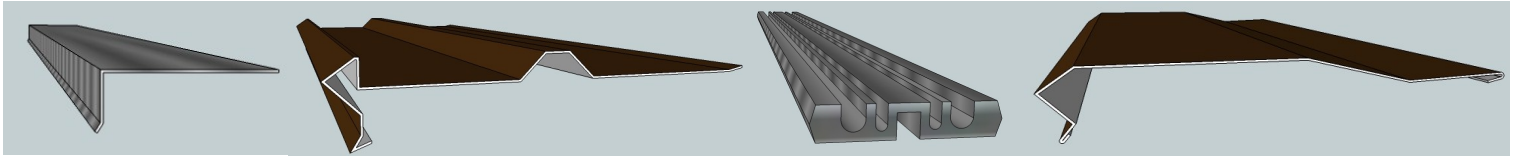




Installing the SnoFree™ Panel Eave System for New Roofs



SFP– CLEAT

SFP– BASE

SFP– EXTRUSION

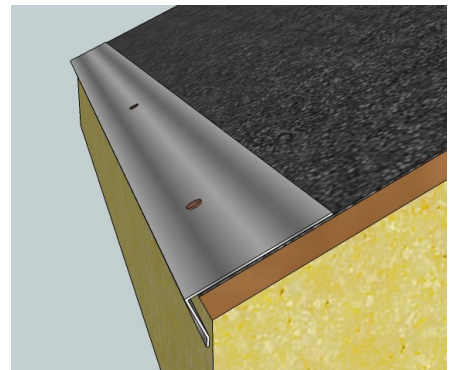
SFP– TOP COVER

Step # 1 Placing the Cleat

Install Ice and Water Shield as per code to the edge of sheeting.

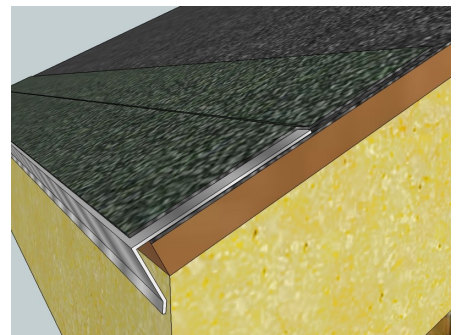
Install the supplied 4' Long cleat to the surface on top of the Ice and Water Shield layer. Attach with pan headed screws or flat roofing nails a minimum of 18" O.C.

NOTE: Align the cleat level and square for the entire eave. Any variation will affect the installation of the remaining steps and may result in an unsatisfactory finished product.



Step # 2 Install Ice and Water Shield Strip

Install 6" or 12" Strip of Ice and Water Shield over the installed cleat to ensure proper protection. Ensure that the protective layer is properly attached to the upper protective layer with minimal wrinkles or gaps.

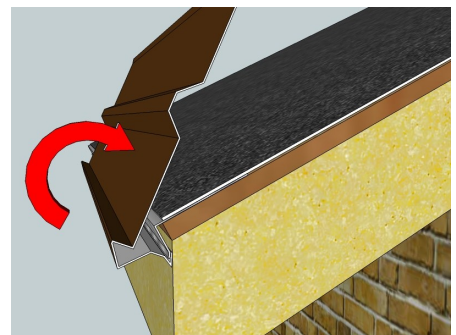


Step # 3 Install SFP – Base

Hook the lower open hem with the installed cleat and rotate properly until the base is resting on the roofing deck.

End Cap Installation—Refer to Page 5

All ends of a panel run must have an end cap. We recommend that end caps should be installed prior to the base piece. The end cap will ensure that the conductive oven effect inside the panel system will stay effective and will also protect the panel from wind.





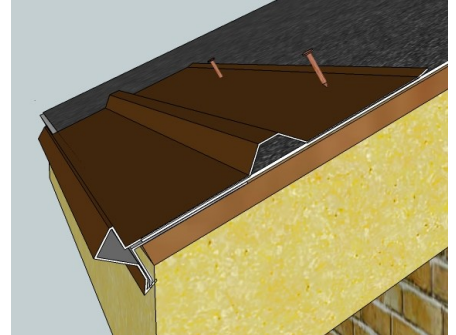
Installing the SnoFree™ Panel Eave System

Step # 4 Attaching the Base Panel to the Roof

Once base is firmly on the roof, Attach lower base with pan headed screws or flat headed nails between 2" and 3" from the back of the base to ensure that penetrations are protected once the cover is installed. Seal all penetrations.

Remove any protective plastic from the panel prior to the next step.

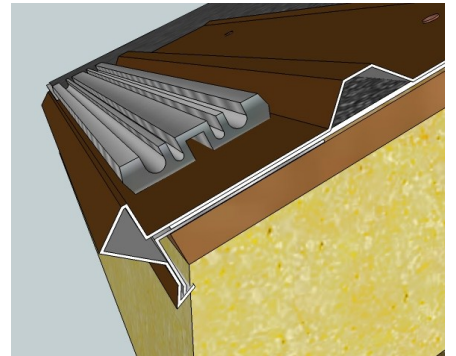
If you are installing the **SFP 36** or the **SFP 48**. You will need to attach both base pieces with screws. If desired, you can attach the upper base to the lower base with small self tapping screws through the side of the connecting rib.



Step # 5 Insert the SFP - 4X or SFP - 6X Extrusion

Set the extrusion into the corresponding channel. Leave adequate space between the end of the extrusion and any End caps or End Walls for the heating cable to pass through to the next chamber or to bend around to start the second pass of cable in the extrusion.

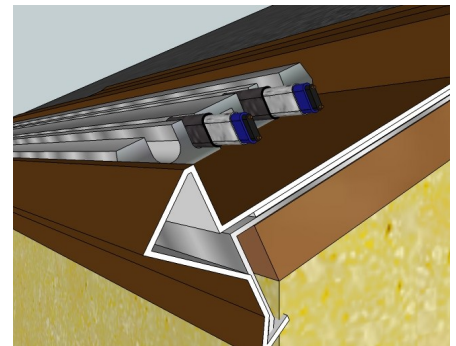
OPTIONAL: If you would like to adhere the extrusion in the bottom of the tray. You may use any form of adhesive that will work properly on all metal or Kynar surfaces.



Step # 6 Install heating cable or Hydronic Tubing

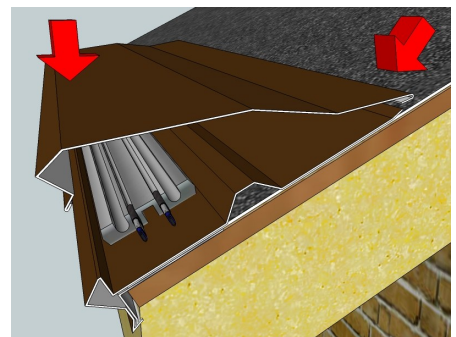
Insert heating cable in extrusion channels. Inspect all edges of extrusions and make sure that all edges are free of rough cuts or metal cutting burrs. Any obstruction that can cause harm to the tubing or the jacket of the cable can cause damage to the working capability of the system.

Do not try to force any splices or end seals into the extrusion.



Step # 7 Install SFP – Top Cover

Once all connections within the panel system are finished. Attach the cover by hooking the back open hem into the base lip, pulling towards the front of the eave panel. Once there is a proper continuous connection made, Push downward on the top edge of the cover to snap the cover over the base panel.





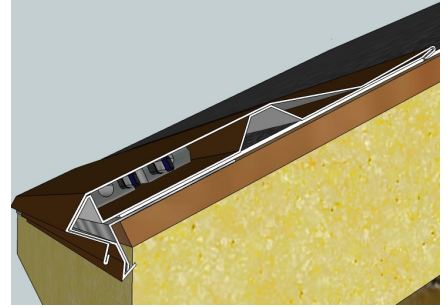
Installing the SnoFree™ Panel Eave System

Step # 8 Finalizing the Cover Installation

Firmly install the SNAP2LOCK Cover by putting downward force onto the nose of the cover. Ensure the cover is properly seated onto the base piece.

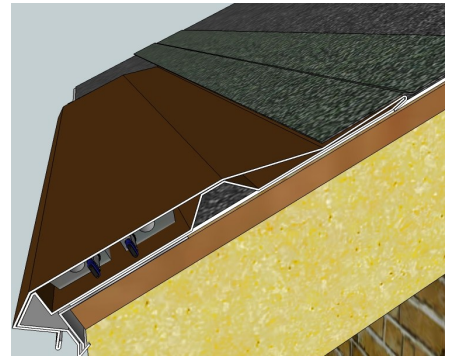
Remove any protective plastic from the panel prior to the next step.

Install all SFP-XJ expansion joint covers during this stage of the process. Apply adequate sealant on the bottom of the expansion joint cover on both sides to ensure that no water can enter into the base system below.



Step # 9 Attach the 2nd Layer of Moisture Barrier

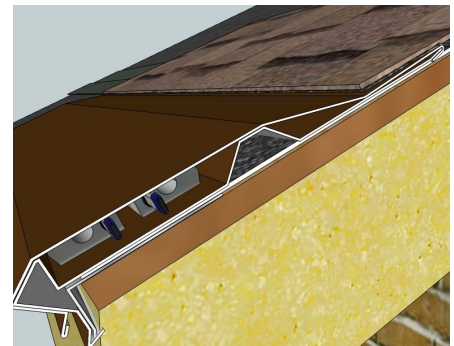
Attach the last strip of Ice and Water Shield Moisture barrier. Install the barrier over the cover from the first bend in the metal to a minimum of 4" above the system onto the existing barrier installed prior to Step # 1.



Step # 10 Finish your Roofing Material

Finish all roofing material (Ex. Shingles, Shakes, Standing Seam Panels, Etc.)

We recommend installing all roofing material to cover the last ice and water shield strip previously installed. Any rigid form of material is not recommended to be installed past the last upper bend on the cover to ensure easy access to the cable and extrusion.



End Cap installation: Proceed to next page

End caps for all rake or gabled edges to be explained in the next section of instructions.

This step may require stronger understanding of working with sheet metal and a professional may be needed to ensure a seamless look.

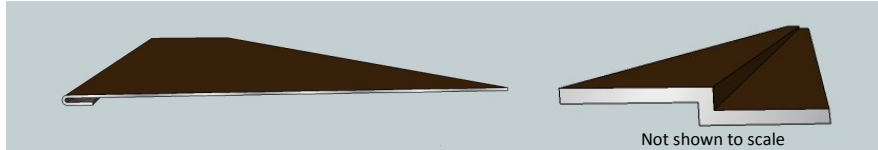
Ridge Cap Installation

Ridge caps are used for any outside corner connections of eave panels. If your project needs a ridge cap for a clean, finished look. Simply cut the ridge cap to the necessary length and ensure that the ridge cap covers all entrances into the panel system. Gasket based screws or rivets will work best to attach the ridge cap to the SFP cover.

This step may require stronger understanding of working with sheet metal and a professional may be needed to ensure a desirable finished look.



Installing the SnoFree™ Panel Eave System on Existing Roofs



SFP- TRANSITION *

SFP- Z METAL *

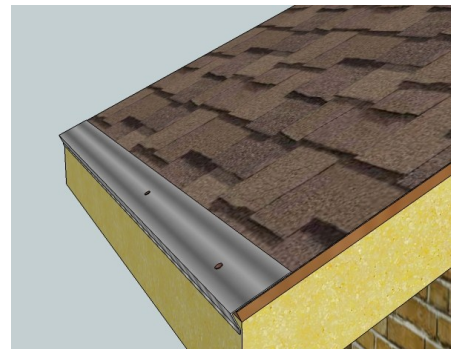
* IN ADDITION TO THE REQUIRED PARTS OF THE EAVE PANEL SYSTEM

Step # 1 Placing the Cleat

Install the supplied 4' Long cleat to the surface on top of the existing asphalt shingle roof. Attach with pan headed screws or flat roofing nails a minimum of 18" O.C.

Seal all Penetrations properly.

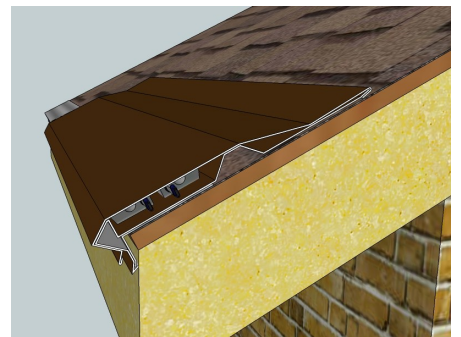
NOTE: Align the cleat level and square for the entire eave. Any variation will affect the installation of the remaining steps and may result in an unsatisfactory finished look.



Step # 2 Refer to page 1 of "Installing Eave System"

Follow steps #2 through #8 in the section of "Installing the SnoFree™ Panel Eave System for New Roofs"

We recommend a bead of sealant along the back side of the panel system to ensure no water is seeping into the fasteners under the cover and base.

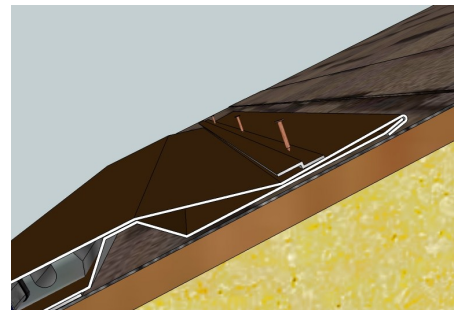


Step # 3 Install SFP – Z Metal

Install the Z Metal along the tail of the system.

We recommend a bead of sealant underneath the "Z Metal".

Attach with small screws or metal rivets that will hold firmly into the metal top cover and base.



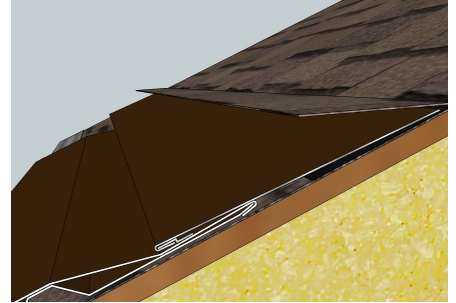


Installing the SnoFree™ Panel Eave System for Existing Roofs

Step # 4 **Install the Transition Flashing**

Lift up the next available course of shingles. Insert the open hem of the transition piece into the corresponding lip of the recently installed Z Metal, while the tail of the transition piece should extend up underneath the course of shingle until it reaches the shingle fasteners.

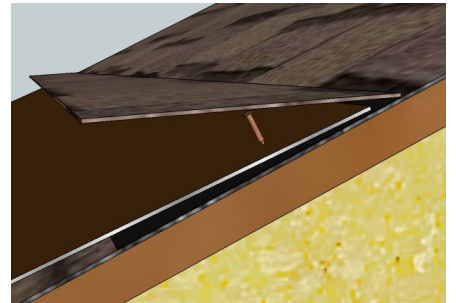
HINT: If the transition is too wide to fit between the Z metal and the fasteners. Trim the transition piece to fit, trimming the side without the hem.



Step # 5 **Attach Transition**

Attach the Transition pieces into the roof deck with small screws or roofing nails.

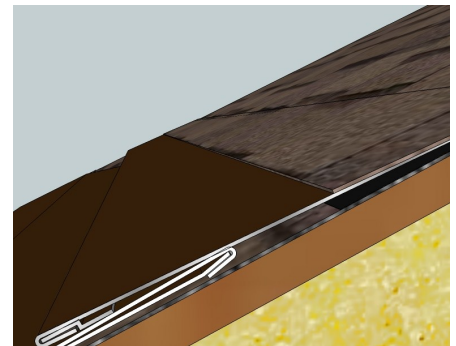
CAUTION: When installing this system on older roofs, be careful to not harm the affected shingle course. Shingles can become brittle over time and can be damaged if not careful.



Step # 6 **Lay Shingles Flat**

Re-apply shingle course to the transition piece. If shingles are not laying flat, new sealant may be needed to adhere the asphalt shingle to the transition piece.

Ensure that all fasteners are sealed underneath sealant or the shingle course.

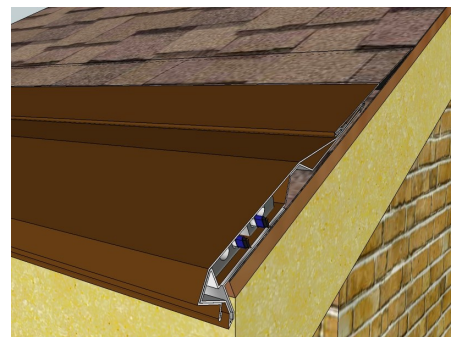


Step # 7 **Finished**

Your SFP Heated Eave Panel system for existing roofs is finished.

Follow all other instructions for any other connection that you may need or consult a sheet metal professional for any questions regarding bending or onsite fabrication.

Picture shown without End Cap installed. Refer to Page 5 for end cap installation.





Tools Needed:

- **1)** Radial arm saw or “chop saw” to cut the aluminum extrusions. A 100 tooth carbide tipped saw blade is suggested. **2)** Metal shears or “tin-snips”. **3)** Use the appropriate metal cutting blade to trim the cladding (sheet metal) as needed. **4)** Hand and/or powered screwdriver(s) with the appropriate tip(s) for the attachment screws to be used. All screws should be the flush head type (Pan Headed) for best results. **5)** A folding bar to create or modify any bends. **6)** Safety Glasses and/or any other safety equipment needed. **7)** Use all ladders in a safe & responsible manner and avoid overhead power lines.

LEGAL DISCLAIMER:

- This installation manual shows the best known method of installation at the time of the writing of this document. Heat Trace Specialists recommends all parties that install these systems to use their best judgment on common roofing and sheet metal installation methods. We only guarantee the product material supplied by Heat Trace Specialists.
- Heat Trace Specialists designed this system for certified and qualified contractors and any other licensed construction professionals. Any professional installer of these products understands that any property damage from water that entered through any penetration from the system will not hold Heat Trace Specialists or any affiliate liable for expenses or damages. All penetrations into the deck of the roof must be properly sealed and covered.
- All installers of Heat Trace Specialists’ products are legally required to install all products according to local, state and federal laws and codes.
- While installing Heat Trace Specialists’ products use all protective gear and proper tools that are recommended in electrical installation and in the construction industry. Heat Trace Specialists is not liable for any product that is installed incorrectly or damaged during the installation process.
- Because roofs and buildings are all different, Heat Trace Specialists recommends you use your best judgment when installing our products to achieve the best possible results for appearance, safety, and effective operation.
- Heat Trace Specialists does not offer instructions for every aspect of the installation process, we only offer the basics and we rely on the common knowledge and ability of the final installer to find the proper method of installation within their own industry and according to their local codes. Any installer should be trained in working with sheet metal and capable of finishing all parts and connections with the best of their ability and workmanship capabilities. Heat Trace Specialists does not warranty any workmanship of said installers and hereby is exempt from all liability.
- If any panel is being installed in an area with high winds. A few self-tapping screws can be installed on the nose of the system per section and end caps to ensure minimal damage does occur.
- Heat Trace Specialists products must be installed, operated and maintained in accordance with Heat Trace Specialists instructions. Heat Trace Specialists is not liable for damage or unsatisfactory performance of products resulting from accident, negligence, alteration, unauthorized repair, improper application or installation of the products. Heat Trace Specialists is not liable for any incidental or consequential damages.
- SELLER WILL IN NO EVENT BE LIABLE FOR ANY DIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF USE OF PURCHASER’S FACILITIES, LOSS OF REVENUE, LOSS OF PROFITS AND CLAIMS OF ANY CUSTOMERS OF PURCHASER, AND SELLERS LIABILITY UNDER NO CIRCUMSTANCES WILL EXCEED THE CONTRACT PRICE FOR THE GOODS FOR WHICH LIABILITY IS CLAIMED.