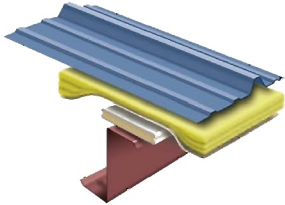


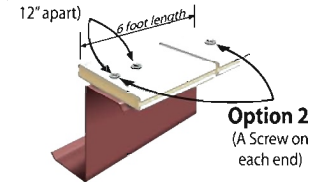
Instructional Guidelines for a Single Layer Screwdown Roof & Wall System

Thermal Block

Our SNS® Thermal Block "The Performer" can be installed on the go (option 1) as insulation and roof sheets are installed or they can be installed all at once (option 2) with a man basket, either way, works great.



Option 1
(Screws about 12" apart)



Each thermal block comes in six-foot lengths which are the standard widths of two roof sheet panels and the typical width of a metal building insulation roll, making the thermal block easy to handle and install.

Each thermal block comes with two flat-head screws to hold the six-foot thermal block in place. (210 flat screws will be provided for 100 thermal blocks).

Suggestions:

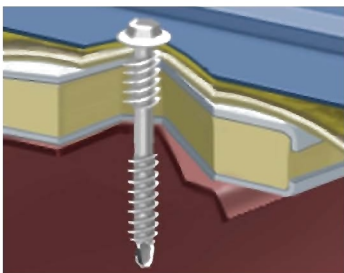
- When installing the thermal blocks, center it over the flange of the purlin
- Butt the thermal blocks end to end without added pressure
- Consider the placement of the flat-head screws through the thermal block, so that the SNS® panel fasteners do not conflict with the flathead screws
- When installing the insulation blankets, install to industry standards to allow for full expansion of fiberglass

Step 1: Install SNS® Purlin Struts between purlins. (See instructional guidelines for more information)

Step 2: Thermal blocks are placed over the tops of the purlins and are attached by two flat head screws. (*Option 1*) screw the first flathead screw at the end and the second screw around 12 inches from the first. (*Option 2*) screw the flathead screw at each ends.

Fasteners:

Our SNS® Panel Fastener has been specifically designed to be used with SNS®, Thermal Block "The Performer". **Use of this fastener is mandatory as it is key to the performance of the Sealed "N" Safe® Continuous Insulation System.** If pre-drilling the sheeting, **use a 1/8" drill bit** to maintain the design and the performance of the fastener. (700 SNS® Panel Fasteners will be provided for 100 thermal blocks, one for every linear foot plus about 15%). Do not use any other fastener. Use of any other fastener will void all warranties.



Suggestions:

- If your roof sheet requires more SNS® Panel fasteners than are provided, additional fasteners are available at SNS®
- A 6 amp 2500 rpm electric screw-gun will be needed with a depth locating nosepiece. (See fasteners installation instructions)

Step 3: Once the installation blanket and the roof sheets are placed over the thermal block. SNS® Panel Fasteners are placed through the roof sheet, insulation, and thermal block into the purlin below. The design of the panel fastener creates a "stitch-type" joint, between the roof sheet and the thermal blocks, creating a water-tight seal, while fastening the whole assembly tightly to the purlins. If pre-drilling the roof sheet, **use a 1/8" drill bit.**

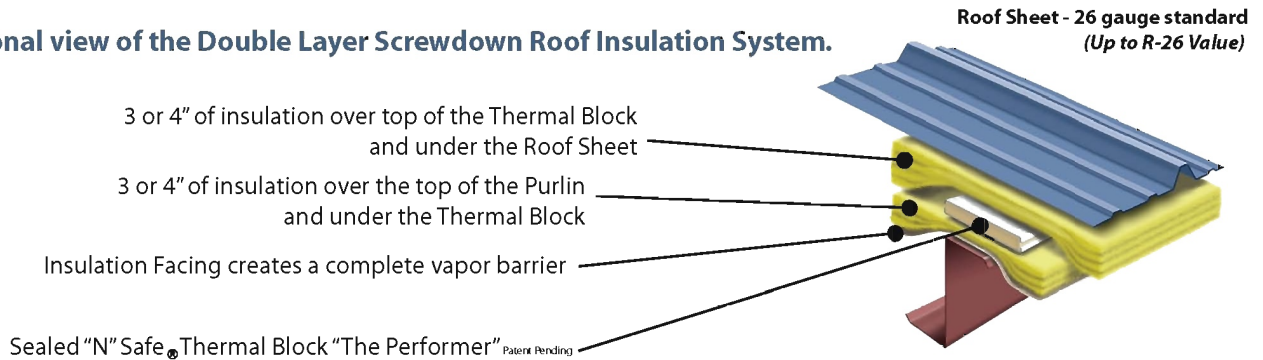
The fastening process works much like a typical screw-down roof. The only additional step is to set the thermal block in place with two flat head-screws and the use of the SNS® Panel Fastener to screw down the roof sheeting. (Seven SNS® Panel Fasteners are provided for every six feet of thermal block)

(see installation Video Clip at www.sealednsafe.com look under downloads) **Call 888-340-4(SNS)-4767**

Instructional Guidelines for a Double Layer Screwdown Roof & Wall System

The only difference between the double layer and the single layer system, is the additional insulation between the purlins and the thermal block. When attaching the thermal block to the purlin, be sure to apply pressure to the thermal block, so that the thermal block is snug-tight to the purlin, using the flat-head screws. Do not compress or dimple the thermal block.

Cross-sectional view of the Double Layer Screwdown Roof Insulation System.



For **Step 1 and 2** of the double layer system, refer to the single layer system, on the other side of this page, and do steps 1 and 2. (When installing the Insulation Blankets, offset the upper and lower insulation side joints from each other to increase efficiency)

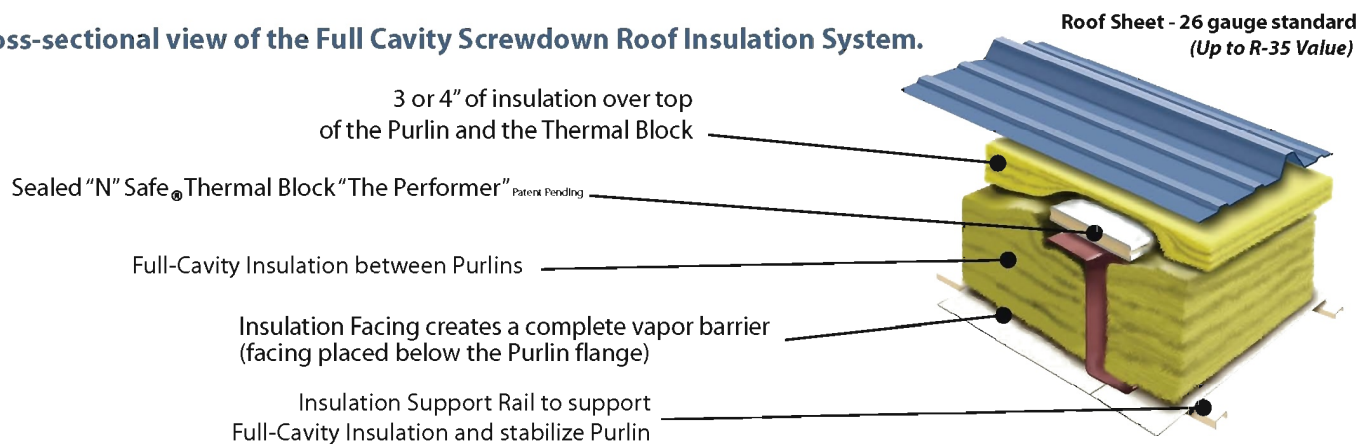
Instructional Guidelines for a Full Cavity Screwdown Roof System

Insulation Rail

Our Insulation Rail is 26ga, painted Steel Rail, which is fastened to the bottom of the purlin using #12 X 3/4" SD Screws. It is a very attractive means of not only supporting the added insulation but also supports the bottom flange of the purlin. It does not induce the tension conditions that are inherent when using banding or strapping to support the insulation. Our insulation support rails are produced in 10 & 12 foot lengths.

Step 1: Fasten the insulation rail to bottom of each purlin using a #12 X 3/4" SD Screws and spaced no more than at 2' - 6" apart as noted in the picture below. Correct purlin straightness, if needed to fit the insulation blanket width.

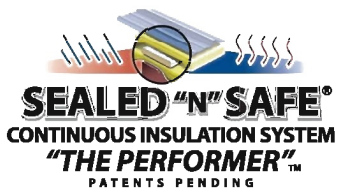
Cross-sectional view of the Full Cavity Screwdown Roof Insulation System.



For **Step 2 and 3** of the full cavity insulation, refer to the single layer system, on the other side of this page, and do steps 1 and 2.



call today:
888-340-4767 www.sealednsafe.com



Instructional Guidelines for a Suspended Full Cavity Screwdown Roof (Patents Pending)

SNS® Full Cavity Screwdown Roof System

Before beginning installation of the SNS Suspended Full Cavity Insulation System, consider the following items to determine which works best for you.

1. Layout for Clips on the ground while purlins are in a bundle (Saves Time)
2. Layout for Clips after purlins are in place on the roof (Requires more time)
3. Have your building supplier pre-punch holes according to the layout you need (May cost more)
4. Install Clips on the ground before purlins are lifted in place. Remember to avoid interference at purlin laps. (Saves time but requires careful handling of purlins one at a time to lift in place)
5. Install Clips from a man basket after purlins are in place (Requires more time. Can be done as insulation rails are installed)

Conditions on your jobsite may dictate which of the above options above you wish to engage. Please note that SNS suggests you place an SNS Insulation Rail about 4 to 6” from frame web at bay ends to support a clean neat termination. Be sure to consider that in your layout. Also, maximum spacing of SNS Insulation Rails is 30” OC

Suspended System

- Step 1:** Layout and install the SNS Support Clips and purlins. If any other trades are involved in your project, have them install any other bracketry for HVAC, lighting, etc. before the insulation is installed.
- Step 2:** If purlins are straight, install the insulation rails. Rotate the rail with web in vertical position, slide it up into the clip, rotate it 90 degrees to point flanges downward, and pull down into position toward the bottom of the clip. At joints in the support rail, nest the ends together and install together.
- Step 3:** Place the lower faced blanket (from the roof top) through the purlin cavity down onto the support rails only in the purlin spaces that will receive the SNS Purlin Strut. (If the SNS Purlin Struts are not used, go ahead and install all of the lower blankets.)
- Step 4:** Install the SNS Purlin Struts over top of the lower insulation blanket, place and tighten all bolts.
- Step 5:** Install the remainder of the lower insulation blanket. At bay ends, cut away the insulation evenly the frame, leaving the facing to lay around the end of the blanket and up over the frame flange. The cavity fill blankets will lay over top of the facing. This will make a neat clean termination and should not require further process.
- Step 6:** Install the rest of the insulation between the purlins. Add thickness layers as needed.
- Step 7:** Install the SNS Thermal Blocks.
- Step 8:** Install the top 3 or 4 “ unfaced layer over top of the SNS Thermal Block and install the roof system as you go.

Installation Notes

In most cases, the insulation joints parallel to the purlins need to be sealed off and air tight, especially in cold or humid climates. We suggest these methods to accomplish that.

1. Have your insulation supplier apply "Double Face Tape" to the outside of 1 tab only. Ask for a heavier or stronger protective layer to prevent tearing during its removal. Install with the facing tabs upward. Keep tabs as short as possible (2" Max) to maintain the best insulation performance. During installation, you will want the "taped" side of the insulation roll to be on the downslope edge of the insulation blanket. This will eliminate interference with purlin flanges, clips and other bracketry while removing the tapes protective layer.

Don't forget to remove the tapes protective layer. Be careful while removing to insure a neat clean appearance from below. You may want to do this as you install the insulation so you can reach across the blanket. If you are really good, you could remove the paper before you install the blanket. Keep the tabs upward for best performance.

2. Once the entire roof is completed, use a low bodied caulk to seal between the facing vertical joints. Most silicone based caulks are light bodied. Make sure the caulking is compatible with the insulation facing.
3. Pull the taps downward, roll them together, and staple together. This option may not have as neat an appearance as option 1 and 2.
4. You may an idea of your own. The goal is to seal the joints.

Cross-sectional view of the Suspended Full Cavity Screwdown Roof Insulation System.

