Thermal Break

Description:
To reduce thermal bridging at the connections of RoofScreen Base Supports to roof structures, RoofScreen provides thermal break materials designed to work with all types of roof configurations. With the use of our custom fabricated thermal break installed between the RoofScreen Base Support and the roof structure, point transmittance (heat flow) can be reduced by as much as 80%, increasing the effective R value of the roof assembly.

Material Characteristics:
- High-strength polyurethane.
- Closed cell – does not absorb water or moisture.
- Flame resistant and does not melt.
- Thickness: 2” (other thicknesses available on request).
- Size: Project specific. Provided pre-cut and drilled in most cases.

Technical Specs:
- Compressive Strength:  ASTM D1621, 1,131 psi.
- Compressive Modulus:  ASTM D1621, 29,000 psi.
- Shear Strength:  ASTM C273, 257 psi.
- Thermal Conductivity:  ASTM C518, 0.40 BTU in/ hr sf degree F.
- Coefficient of Thermal Expansion:  ASTM E831, 25 x 10e-6 in/in/degree F.
- Thermal Resistance (R value):  ASTM C518, 2.5 hr sf degree F/ BTU.
Application:
On projects where thermal bridging is a concern, each roof penetration should have a thermal break between the RoofScreen Base Support and the roof structure. The image below illustrates a typical square Base Support over steel decking supported by open web joists. The thermal break material is between the Base Support and steel decking. The size, shape and hole pattern of the thermal break material is customized by project to achieve optimal structural integrity while reducing thermal bridging.

Installation:
Installing thermal breaks with the RoofScreen system is simple. The thermal break material is placed under each Base Support and sandwiched in place with the Base Support fasteners, which pass through the pre-drilled holes in the thermal break material.

Warranty:
When RoofScreen provides project design and engineering calculations, a 20 year limited warranty is included.