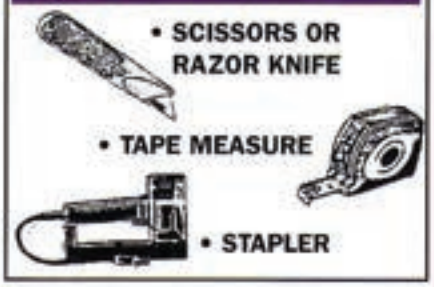
Radiant Barriers

TOOLS YOU WILL NEED



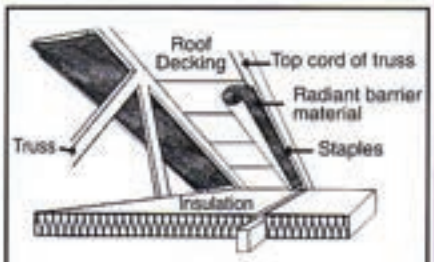


Diagram G
The foil is stapled at opposite ends of the same rafter and then stretched to the other rafter.

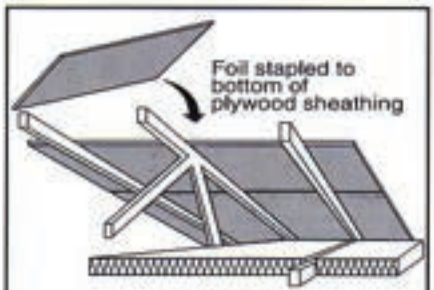


Diagram H
Always use a perforated product when stapling to roof decking.

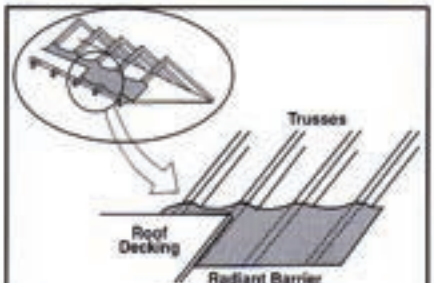


Diagram I
Drape radiant barrier over the trusses with the foil facing down.

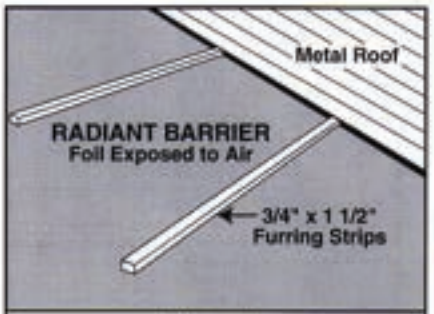


Diagram J
Metal Roof Application

Radiant Barrier Installation Instructions

New Construction

There are four methods of installation for new construction: Stapling to the bottom side of the 4' x 8' sheet of OSB or plywood decking prior to installing the decking; draping the product over the rafters or trusses prior to installing the decking; stapling the product to the underside of the top cord of the truss; or applying to the top surface of the roof decking before installing a metal roof.

Retrofit in Existing Attics

Installing a radiant barrier in existing attics has limitations. Two methods are acceptable: Stapling directly to the roof decking using a perforated product, or stapling to the bottom of the top cord of the roof truss or roof rafter.

Ventilation & Roof Vents

Leave soffits and roof vents open to remove moisture and excess heat. Leave a 3" to 6" opening at the ridge. Cut out any other Roof Vents (off-ridge, square, gable, etc.).

Soffits

Leave a few inches of clearance between the top of the insulation and the bottom of the radiant barrier unless the radiant barrier is used as an insulation baffle.

Stapling

Staple the product approximately every 4" to 8" or as needed.
Draping:

- Single-side foil (foil one side only) should be installed with the foil facing down toward the ceiling.
- The product will work equally well when installed, both foil facing up and down; however, if it is installed foil facing up, over time dust could settle on the top side of the foil and reduce performance.

Stapling a Radiant Barrier to the bottom side of wood decking

A perforated barrier should always be used in this application. The perforations are holes to allow moisture to escape.

Very Important!

A Radiant Barrier should always face an airspace. There must always be an airspace adjacent to the foil side of a radiant barrier for the product to work. A minimal space is required, generally 3/4" is adequate.

Radiant Barriers

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INSTALLATION METHODS

1) **Silver Shield™** – Can be stapled to the bottom of the top cord of the roof truss / rafter. Recommended method is the side-to-face. (Diagram A)
2) **FSK Shield™** – Can be draped over trusses prior to installing roof decking. (Diagram I) Can be stapled to top side of roof decking with foil facing up prior to installing furring strips and metal roof. (Diagram D)
3) **Radiant Shield NT™**– Can be installed to the bottom of the top cord of the roof truss/ rafter. Side-to-side method. (Diagram A). Can be draped over trusses prior to installing roof decking. (Diagram I). Can be stapled to the bottom side of the roof decking (Perforated only). (Diagram H).
4) **Reflective Bubble Insulation™** – Can be stapled to top side of roof decking foil facing up prior to installing furring strips and metal roof. (Diagram D. Can also be draped over trusses or stapled to the bottom of conventionally framed rafters (call factory).

SPECIAL INSTALLATION TIPS

Cathedral/Vaulted Ceilings Application: For Cathedral ceilings or vaulted ceilings where Silver Shield will share the same cavity as mass insulation, recess staple a minimum of 3/4" from the bottom of the decking. Allow at least 3/4" or more between the underside of the product (printed side) and the top of the mass insulation. (See Diagram C)

Hip Roof Application: For Hip Roofs where there is more than 24" width between trusses use 30" wide Silver Shield. Turn one corner back to ventilate air space. (See Diagram F at right).

Using Radiant Barrier as Insulation Baffle: (See Diagram E, Option B).

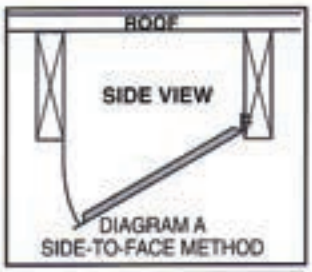

DIAGRAM A
SIDE-TO-FACE METHOD

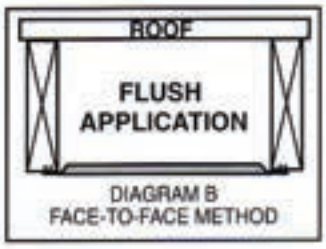

DIAGRAM B
FACE-TO-FACE METHOD

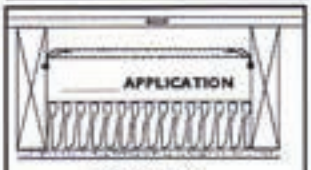

DIAGRAM C
USE WITH MASS SINGLE QUANTITIES

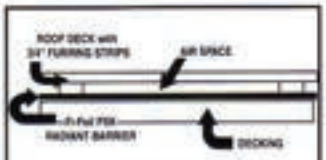
DIAGRAM D
UNDER METAL ROOFS ON TOP OF DECKING

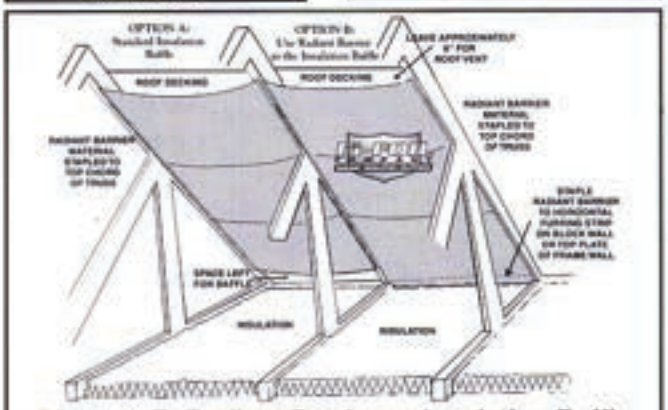
Diagram E- Radiant Barrier as Insulation Baffle

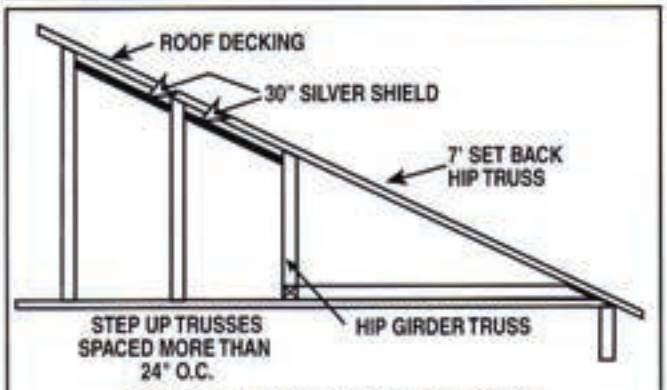

Diagram F- Hip Roof Application

Roof Radiant Barrier Applications

Description	Bottom of Truss/Rafter	Draped Over Wood	Draped Over Metal	Stapled to Decking	Under Metal Roof	Walls	Garage Door
Silver Shield Multi-Layer	★						
FSK / 54" Wide		✓			✓		
Radiant Shield NT 25 1/2"	✓						
Radiant Shield NT 48"		✓				✓	
Radiant Shield NT 51"		★				✓	
Radiant Shield NT Perforated 48"				★		★	
RBI (Single Bubble) 48"			✓		★		
RBI (Double Bubble) 48"			★				★

★ BEST PRODUCT FOR METHOD

(1) Generally FSK Shield™ is not recommended for stapling to the top cord of the roof truss due to the lack of a stapling flange to support the product over time. Extra stapling every 3" is recommended to secure FSK Shield in this application.
(2) Can be installed across conventionally framed roofs. Overlay 1".