We protect what matters most™

To: GAF Residential Sales, GAF Contractors, Field Services, AIS, CARE

From: Technical Services

No: TAB-R-124

Radiant Barriers

What Are Radiant Barriers?

Radiant Barriers…

- May be composed of a thin layer of aluminum placed in an air space.
- May consist of small aluminum chips, placed over insulation.
- May be applied to plywood or OSB decking to block radiant heat transfer.

Will Radiant Barriers Harm My GAF Roof?

- Applied directly to wood decks or close to the deck, a radiant barrier may not allow for proper airflow which may damage the decking and the shingles.
- Radiant barriers have little effect on the shingles when installed directly over the attics. insulation, provided that proper ventilation is provided.
- Radiant barriers have little effect on the shingles when perforated (i.e. Guardian Building Products perforated Foil/Foil Residential Solarguard) and installed directly to the inside bottom of the rafter if there is proper soffit to ridge ventilation between the deck and radiant barrier.

More Information About Radiant Barriers…

Using a Radiant Barrier…

- May lead to condensation problems, including deck deterioration and mold growth if installed in the wrong location. Non-perforated aluminum foil is a vapor retarder.
- May lead to condensation problems, including deck deterioration and mold, if adequate ventilation is not provided.
- May lead to damage of fiberglass asphalt shingles when not installed correctly.
- May assist in the energy performance of a home.
- Is more effective in the south, and less in the north.
- May cost more than adding a comparable amount of insulation.

Note: The project designer or engineer should perform dew point calculations to confirm that the type of radiant barrier and the location of the radiant barrier in the attic will not cause condensation.

Does GAF Have Approved Radiant Barrier Decks?

GAF has approved radiant barrier decks for use in conjunction with GAF fiberglass asphalt shingles.

- The decks must use perforated aluminum foil or vapor permeable coatings to allow for moisture migration through the decking.
- Non-perforated foil decks are not approved for use with GAF fiberglass asphalt shingles.

- The deck and shingles must be installed in strict accordance with manufacturer's guidelines.

What About Approved Radiant Barrier Coatings?

Vapor permeable radiant barrier deck coatings can be applied to the bottom (underside) of the deck.

- Prior to application of any roofing materials on a project either a water-based (i.e. Solec LO/MIT II) or solvent-based coating (i.e. Solec LO/MIT I) may be used.
- To avoid possible damage to roofing materials from solvent fumes, when any roofing materials have already been installed on the project, only the water-based coating (i.e. Solec LO/MIT II) can be applied.
- The coatings and shingles must be installed in strict accordance with manufacturer's guidelines.

Note: Solvent based coatings must be completely dry prior to the installation of any roofing materials or damage may occur.

Will Using A Radiant Barrier Void My Warranty?

No, the GAF Limited Warranty for the shingles will remain in effect.

- However, any damage to the shingle attributable to using a radiant barrier system is excluded from GAF's responsibility under the terms of our Limited Warranty.
- GAF does not sell, promote or assume any liability for the use of a radiant barrier system.

Questions?

GAF Technical Services Can Assist You… with these and other questions you may have regarding your new roof installation. Technical Support Services can be contacted at 800-766-3411. The GAF website is a great resource for just about any question you may have or for additional information you may require. Please visit www.gaf.com to find the latest information on our products and their installation.

Important: This document supersedes any prior GAF Technical Advisory Bulletins on this topic. Please always check www.gaf.com to make sure you have the most up to date information.