

# TECHNICAL ADVISORY BULLETIN

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

From: Technical Services Department

**Subject: Full-Deck Coverage With Leak Barrier**



Quality You Can Trust...  
From North America's  
Largest Roofing Manufacturer!™

Issued Date: 05/06/2011

Revised Date: 06/01/2016

No: TAB-R 2011-111

## **Full Deck Coverage!**

**Full-deck coverage with a leak barrier under fiberglass asphalt shingles** provides an advantage in protecting the roof and building in severe wind and hail events.

## **Pros!**

**Fewer Leaks.** Since self-adhering leak barriers are solidly adhered to the roof deck and seal around nails, leak vulnerability is reduced.

## **Cons!**

**Leak barriers are vapor retarders.** They prevent the migration of moisture-laden air that reaches the attic from traveling through the otherwise permeable roof system. Full-deck coverage may result in moisture related problems within an attic if certain, critical precautions are not taken.

## **What Precautions Need To Be Taken?**

**Proper ventilation is the key.** In designing a proper moisture control system, many factors including building use and moisture sources, as well as expected interior and exterior temperatures and relative humidity's must be taken into consideration. A design professional must address the potential for moisture entrapment, excessive moisture build-up and condensation.

## **Why Is Proper Ventilation So Important?**

**Allowing the moist air to have an escape route from the attic is crucial** to a properly installed roof system, especially one that has a leak barrier installed over the entire roof deck. A balanced ventilation system will not allow that moist air to build-up and cause potentially significant damage to the roof deck, structural supports or insulation.

## **Other Product Considerations!**

**There are new synthetic products on the market** that are advertised as shingle underlayment (replacing #15 & #30 felts) that are considered to be a vapor barrier as well. These products are generally impermeable and, as such, must be installed with the same ventilation considerations as other leak barriers. If you are considering a synthetic underlayment, be sure to check for one that is breathable and always check with local building code for product compliance.

## **Where Can I Get More Information?**

**GAF Technical Services Can Assist You...** with these and other questions you may have regarding your new roof installation. GAF Technical Services can be contacted at **800-ROOF-411** (800-766-3411). Also, 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](http://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](http://www.gaf.com) to make sure you have the most up to date information.