TECHNICAL ADVISORY BULLETIN

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

From: Technical Services Department

Subject: Algae Staining On Shingled Roof Surfaces



What Are Those Black Stains On The Roof? How Does A Roof Get Algae?

How Does It Grow?

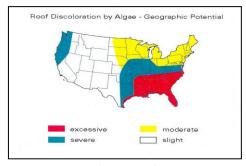
Those black stains are Algae. Algae appear as dark stains on shingles that usually cover more area on the lower section of the roof and taper as they reach the ridge.

Algae spread from one infected roof to another via airborne spores. These spores land randomly on a roof and take root. A protective sheath creates the dark color the algae forms to protect itself from UV rays.

Algae require moisture and proper temperatures to grow. Dew is the primary moisture source. Algae are found predominantly in the Southeast, but it can and will grow nationwide. The algae generally grow on the northern exposures of the roof since this exposure generally receives less sunlight. Algae are well adapted to extreme conditions.



Extensive algae growth



Geographic potenial map

What Solution Do I Have?

- **1. Install Algae Resistant Shingles**, such as GAF shingles which have a specially formulated granule that inhibits algae growth, keeping your roof looking new for years to come.
- 2. If a new roof is not an option, GAF recommends cleaning the roof with a special mixture. That mixture is: 4 gallons of water, 1 gallon of bleach and 1 cup of TSP (Tri-Sodium Phosphate-or acceptable phosphate-free substitute) found at many home centers. Apply this mixture with a garden sprayer, let sit on the roof surface for up to 20 minutes, and rinse with low-pressure water. Be sure to protect any shrubs below. Remember, the roof surface will become slippery when wet... be careful!!!

What NOT to do!

Do not power wash the shingles to clean the shingles. Some roof cleaning companies offer this service. However, it is not recommended as it may dislodge granules, which can lead to premature shingle failure

What GAF-Elk Shingles
Can I Use?

GAF Designer Lifetime Shingles have StainGuard® Protection nationwide. Additionally, Timberline® Natural Shadow™, Timberline® HD™ and Timberline® Ultra HD™ have StainGuard® protection in most areas. Finally, Royal Sovereign® is also available with StainGuard® protection in select areas. All colors have Stain Guard® Protection.

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.

^{*}except west zone