



We protect what matters most™

To: GAF Residential Sales, GAF Contractors, Field Services, AIS, CARE  
From: Technical Services  
No: TAB-R-102

## Algae Staining On Shingled Roof Surfaces

### What Are Those Black Stains On The Roof?

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.

### How Does A Roof Get Algae?

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.

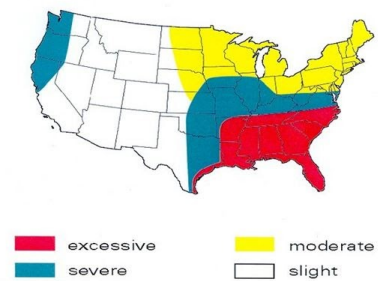
### How Does It Grow?

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

Roof Discoloration by Algae - Geographic Potential



Geographic Potential 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 (18.2 L) of water, 1 gallon (4.5 L) of bleach and 1 cup (236 mL) 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 Shingles Can I Use?*

**GAF Shingles With Advanced StainGuard Plus™ Protection Available Nationwide:**

- Timberline Ultra HD®

**GAF Shingles With StainGuard® Protection Available Nationwide:**

- All GAF Lifetime Designer Shingles except Grand Sequoia®
- Timberline Cool Series®
- Grand Sequoia® ArmorShield™
- Timberline® ArmorShield II™
- Timberline® American Harvest®

**GAF Shingles With StainGuard® Protection Available In Select Areas:**

- Grand Sequoia®
- Timberline HD®
- Timberline® HDZ™
- Timberline® Natural Shadow®
- Royal Sovereign®

**Note:** StainGuard® protection applies only to shingles with StainGuard®-labeled packaging. StainGuard Plus™ protection applies only to shingles with StainGuard Plus™-labeled packaging. See GAF Shingle & Accessory Ltd. Warranty for complete coverage and restrictions.

*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](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.