



Technical Bulletin

Cleaning & Treatment of Shingle Roofing Systems.

Issue:

Dark streaks covering roofing materials usually on the north and west elevations of the roof.

Cause:

Fungal, Algae and Bacteria microbes colonizing the roof and creating dark unsightly streaks eventually covering the entire shingle roofing surface on all elevations.

Potential Damages:

It has been documented that when left unchecked these micro organisms will decompose the shingle roofing surface. Though once thought as merely an esthetics problem, the proliferation of these organisms on shingle roofing surfaces will cause the roofing system to prematurely age reducing the designed service life of the shingle roof. Roof top algae, fungus and bacteria break down roofs decomposing them with their filament root system and their appetite for the limestone filler in the shingles aggregate. Another condition that has been widely documented is the deterioration of the shingle due to heat buildup as the roofing surface darkens. As the shingle roof darkens from algae, fungal and bacteria stains it loses its reflective value of uv rays from the sun and like a black solar collector raises the on roof and under roof temperatures causing the shingles to bake and prematurely fail.

Solution:

Recently many agricultural style spraying systems have become available for spraying cleaning chemicals on roofs. These delivery systems utilize low pressure pumps to project cleaning and sanitizing solutions onto the roofs surface. These systems are in no way pressure washers. In fact the use of a pressure washer will in most cases constitute a violation of your roofing manufacturer's warranty. Property owners should be weary of the use of any gasoline powered equipment on their roof. It is easy to identify a system that utilizes non-pressure roof cleaning in that the chemical not the machine cleans the roof. The mechanical system should only be responsible for the delivery of the chemical.

Cleaning solutions treat the issue of roof staining topically. The chemicals are applied, the chemicals remove the stain and in many cases the chemicals protect against further staining. Chemicals that are safe for roof stain removal are, but are not limited to, sodium hypochlorite (bleach), calcium hypochlorite (powder bleach) and sodium percarbonate (powder hydrogen peroxide). These are bleaching agents that clean the roof and sanitize the surface. The roof owner should note that some states and local authorities have outlawed the use of traditional chemicals like tri sodium phosphate (TSP) and many soaps that contain phosphates.

It is noteworthy that property owners hire a professional for the removal of these roof top destroyers. Every year hundreds of people fall from their own roofs sustaining serious injuries and in many cases suffering death. This is not a do-it-yourself home improvement project! It is our best recommendation to hire a licensed, insured, certified professional to clean your shingle roofing system.

Many roofing manufacturers have their own technical articles addressing this growing problem. This is not a condition or service to be taken lightly and deserves your full due diligence in research before possible damaging the most costly surface on your home.