

Roof Cleaning for Property Managers

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Experienced Property Managers in Florida are familiar with the effects of repeated Roof Cleaning and know that using high pressure or harsh chemicals can greatly accelerate the aging of a roof. As the concept of Roof Cleaning becomes more common throughout the US, many Property Managers will undoubtedly learn this “the hard way”.

BACKGROUND

Proper maintenance is obviously important to a community’s image, protection of property values, and Homeowner enjoyment of the community. It is also essential for controlling both short and long-term costs. Property Managers and Board Members taking on the responsibility of evaluating and planning the long-term direction and finances of a community should always be aware of what the long-term effects of maintenance, or lack of it, will be on the long-term costs to the community.

Operating (Annual) Budgets and Reserve Budgets (5-30 Year Projections) are combined to determine the overall assessment to Homeowners. Quite often, Operating Budgets are focused on intensely while Reserve Budgets are not given a fraction of the thought. In an effort to keep assessments increases low, focus on the long-term cost is sometimes lost. As a result, many Property Managers and Board Members have found themselves at odds with Homeowners because major replacement items were not properly planned for (or properly maintained) and the result is usually unexpected expenses and assessments.

Roofs are a prime example. If properly installed and maintained, a quality roof should be expected to last at least 25-30 years – and in some cases, up to 50 years. Unfortunately, many roofs here in South Florida are in need of replacement after ONLY 12-15 years – or roughly 50% of the expected life of the roof!

Why? This usually happens when there is no plan of regularly scheduled inspection and maintenance to find and fix small problems before they become much bigger problems. Another reason is repeated cleaning using high pressure and/or harsh chemicals. While effective if done correctly, repeated use of these methods will damage the roof surface and, more importantly, can cause extensive damage to the underlying weatherproofing.

With each cleaning, the chances of broken tiles, shingle damage, roof leaks, and premature replacement of the roof are increased. While the reasons for cleaning are important: aesthetics, property values, energy efficiency, and increased longevity of the roof – not much is gained if the roofs are being damaged during the cleaning process. Whatever the reason for cleaning, if it is going to be done, it is in your best interest to know what choices are available and how these will affect the roofs in order to make the best choice as to how to approach it properly.

Algae Danger Zone Map



THE PROBLEM

The black streaking typically found on homes in areas where moisture settles on shingles is not really caused by dirt, mold, mildew, or fungus; it's primarily **roof algae**. Mold, mildew, and fungus are terms that most homeowners have come to associate with the discoloration of the roof and so they have now become a much-abused description of what is actually occurring on the roof. Scientists at 3M have

identified the most common form of roof algae as *Gloeocapsa Magma*. These algae spores are carried by the wind, which is why so many houses in the same neighborhood end up with this problem. During the last 20 years, this particular algae strain has become hardier and so has been able to migrate to less humid environments than it has in the past. And in areas where it traditionally has been found, the staining is showing up earlier, is more severe and settles on a greater number of roofs. This is a “growing” problem throughout the United States.

HOW CAN IT BE CLEANED?

Typical roof cleaning methods involve either pressure cleaning or chemicals treatments such as Chlorine Bleach or Sodium Hydroxide.

Each method has its advantages and disadvantages.

A chlorine and water solution can be used followed by a thorough rinse. Of course, since chlorine can be toxic to people and plants, proper care should be taken to protect employees and the surrounding property from overspray and runoff. The benefits to using chlorine include a much faster cleaning process and minimal rinsing as compared to other methods. This translates into much less wear & tear on the roof - particularly asphalt shingle roofs.

Sodium Hydroxide based cleaners are generally advertised as safer for the landscaping, but sodium hydroxide is caustic, very toxic, and care should always be used to protect employees and surrounding property. Sodium hydroxide is also a very effective degreaser. So high levels of sodium hydroxide in a cleaning product can cause damage to an asphalt shingle roof that can be irreversible. These products generally require much more rinsing than the chlorine method. The rinsing process is not only time consuming, but it can also be potentially damaging to the roof if not done correctly. A quality sodium hydroxide based product should not require any more than 100 psi to effectively rinse an asphalt shingle roof and even then, some granule loss should be expected.

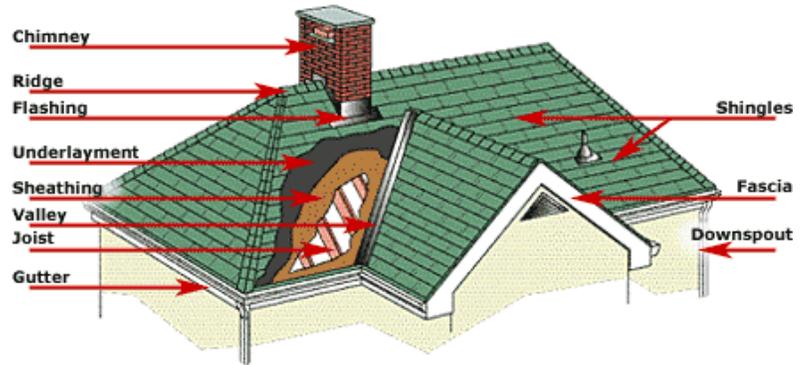
Pressure cleaning is an option that should only be used on a concrete, barrel tile, or metal roofs. Pressure cleaning has the advantage of not requiring chemicals, which eliminates most of the landscaping and chemical exposure concerns. The down side to pressure cleaning is that it is very time consuming and it exerts tremendous force on a surface that is not really designed to handle it. In addition, repeated pressure cleaning can wear away the surface of some tiles that are only covered by a thin layer of coloring. When this happens, the grey concrete color starts to show through and the roof must be stained or painted.

THESE METHODS ARE NOT A LONG-TERM SOLUTION

While these methods are relatively safe and effective when done properly, repeated cleaning with these methods will lead to premature aging of the roof. The natural erosion that occurs over time

from the basic forces of heat, cold, wind, and rain alone are enough to bring most roofs to the point where annual inspections and minor repairs are a necessity to prevent significant repair costs. **But when the roof is repeatedly subjected to high pressures or harsh chemicals, the aging of the roof is greatly accelerated.**

With repeated cleaning, concrete tiles are more likely to shift, slip, or break and asphalt shingles are more likely to become brittle and crack. When this happens, there is a greater chance of damaging the roof simply by walking on it. And once gaps are created, by natural means or otherwise, and subsequent pressure cleaning or chemical cleaning is administered to a roof, these gaps provide water or the



caustic solutions with a path to the protective roof underlayment, moisture barriers, metal valley underlining, and flashings - increasing the chance of roof leaks and costly repairs.

WHAT IS THE BEST ALTERNATIVE?

The most effective long-term strategies will minimize the use of high pressures and harsh chemicals by stressing prevention from the start. These strategies should include periodic roof inspections / maintenance and regular applications of algaecide protection to prevent algae discoloration before it begins – and the subsequent need for cleaning.

A proper program of preventative maintenance and algaecide protection will eliminate the need for future cleaning and the potential for damage that comes along with it – giving the homeowner or community an aesthetically pleasing roof for the life of the roof. Most quality cleaning programs have expected results lasting approximately 6-12 months. Obviously, the longer the time frame, the better your chances are of minimizing any unnecessary damage to the roof.

Roof-A-Cide is the Industry Leader with our Unconditional 2-Year Warranty!

Over the last decade, Roof-A-Cide has been working with Property Managers and Boards of Directors to help eliminate the problems associated with Roof Cleaning. Property Managers that have implemented The Roof-A-Cide® Process are maintaining the aesthetics and property values of their communities more cost-effectively, freeing up limited resources that can (and should) be put to better uses — thereby providing a more valuable service to their Communities.

The Roof-A-Cide® process has been used on over 150,000 roofs by Authorized Roof-A-Cide® Applicators in Arkansas, Connecticut, Florida, Georgia, Kentucky, Louisiana, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, and Tennessee.

For more information on how we can help Your Communities, please contact us today!

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