

JUSTIFY ROOF DECISIONS. KNOW YOUR OPTIONS. | MAY 2024

Before making the right roofing decision, you must know what best suits your roof and building. That means you must get technical about its current condition—membrane, tensile strength, and surfacing, to name a few, because these technicalities can drastically affect the cost of any planned roof work. Replacing a neglected roof is an expensive undertaking. A roof should be treated as a piece of capital equipment that must be kept functioning and, therefore, requires regular inspections, maintenance, and repairs.

There are multiple ways to assess your existing roof. Usually, the first assessment is visual. Visual inspections should be done at least twice a year – in early spring to assess the damage caused by severe winter weather and again in the fall to prepare the roof for another onslaught of harsh conditions. It is also prudent to inspect your facility's roofs following extreme weather events such as a hailstorm or severe wind event.



Your roof expert is looking for openings in the field membrane, assessing the seams between field laps, the connectivity between components – such as a tie-in area from a roof drain and the field membrane, or the connectivity between a wall and the roof. Non-destructive moisture-detection surveys such as capacitance meters and infrared scans have made it possible to accurately locate wet insulation without affecting the surfacing to provide early insight into the presence of water.

Benefits of non-destructive moisture detection¹

Accurate detection and location of roof areas containing wet insulation can alert the owner to the need for remedial action to avert the following problems:

- Leakage fed by water-soaked insulation
- Cooling- and heating-energy waste
- Decay of roof-system materials and potential for mold growth
- Every-increasing expansion of the area of wet insulation

Know your real roofing options

Following the initial visual and non-destructive testing, further analysis may be required. Again, multiple options are available to the owner depending on the type of roof, facility requirements, or planned replacement systems.

Having a sample of your roof analyzed in a laboratory provides data on the construction, composition, and condition of any built-up roofing system. An experienced lab technician performing tests using ASTM testing methods will provide valuable and accurate analysis of your existing roof system. At Tremco, 14 tests are carried out at our NVLAP (National Voluntary Laboratory Accreditation Program) accredited research center to reveal all the important facts about your roof.



Some of the analyses include:

- Tensile strength of roofing membranes
- Machine direction
- Cross-machine direction
- Bitumen analysis of both interply and surfacing: Type and Quantity
- Softening point
- Penetration Felts Type and Quantity

Once these tests have been completed, you will have the information needed to justify the need for roof restoration or replacement and allow you to best assess the cost of your roofing decisions.

Together, with the help of your Tremco Field Advisor, you will be able to verify the causes of premature roof failure, such as improper installation, and ensure these issues are corrected or addressed accordingly. Understanding roof performance to date, whether it is

poor, satisfactory, or superior will help you address tenant concerns to provide a facility best suited to the needs of the building and those working or living below the roof systems.

While roof failure can be due to several factors, the lack of clear plans, roles and responsibilities and communication more often results in roof failure. Using various continuous improvement tools, your field advisor will work with you to manage the roofing process for greater efficiency, lower costs, and fewer problems during each phase of the roofing project. Thousands of building owners have benefited from the data resulting from testing before the next steps are taken, whether it be maintenance, restoration, or replacement. The process starts with a commitment to understanding the needs vital to you, your building and your tenants.

Find out more about Tremco's capabilities!

¹Manual of Low-Slope Roof Systems – C.W. Griffin and R.L. Fricklas