



Metal Roofing Maintenance

How Do I Maintain My Metal Roof System?

There are many different types of roof systems used on homes and buildings. Some are considered more traditional and commonplace such as asphalt shingles. In some areas of the United States, such as the New England and Mid-Atlantic regions, natural slate is a common roofing material. Each roof type has a unique set of characteristics that affect the life expectancy of the roof system and how each roof system type should be maintained.

One type of roof system that has a very long life expectancy and has been used for centuries to provide homes and buildings with a sound roof system is metal. Metal roof systems provide a long life expectancy if they are properly installed and subsequently maintained after their installation. As with all types of roof systems, the key to a long service life is periodic maintenance and repairs. Without the proper maintenance any roof system will begin to fail. There are several key characteristics of metal roof systems that must be determined prior to implementing an effective maintenance program.

Architectural versus Structural

Metal roof systems are grouped into two primary system types. These system types are important to understand so that the maintenance program and necessary repairs can be properly designed to help extend the life of the roof system.

The first type of metal roof system is an architectural metal roof. Architectural metal roof systems are metal roofs that are used to provide the waterproofing layer to the roof system of the structure. In addition to providing the protective waterproof layer, they normally can provide an aesthetic appearance to the structure as well.

The second type of metal roof system is a structural metal roof. Structural metal roof systems are metal roofs that act as both the roof deck as well as the waterproofing layer for the building. An example of this type of roof can be found on a barn where the underside of the metal roof may be visible from the interior of the structure. Some commercial buildings also use a structural metal roof system as part of their building envelope.

It is important to consider this characteristic before you address the maintenance for your roof system. There are several reasons; however an important reason to consider this feature is associated with safety. If the structural metal roof system shows signs of deterioration this may be a safety hazard for someone attempting to gain access to the roof. Since the roof system acts as the roof deck, any deterioration that has occurred to the roof system can lead to a compromised roof deck and create a hazard for someone accessing the roof.

Metal Type

It is not only important to consider whether you have a structural metal roof system or an architectural metal roof system, but also you must consider what type of metal has been used to construct your roof system. There are many different types of metal used to manufacture metal roof systems. These can include steel, aluminum, copper and tin. There are other unique metal types including zinc and lead coated copper.

It is important to determine the type of metal used as part of your roof system because the type of metal determines the proper methods of repair and maintenance to your roof. For example, if you have a metal

roof system that was installed using copper, the proper method of repair may be to use solder to repair the roof system.

Methods used to maintain your roof system are also determined by the type of metal used to install the roof system. Some metal roof systems are comprised of steel panels. Steel is prone to rusting and oxidation. As a result, if your metal roof system is steel it is recommended that the roof system is reviewed routinely for rust and any rusting conditions be addressed as soon as they are discovered. In addition, rusting and oxidation on steel must be treated with a rust inhibitor before they are coated to prevent the rust from spreading.

System Design

The final characteristic that should be considered is the system design. There are multiple configurations of metal roof systems. Each configuration has different methods of repair and maintenance. Metal roof systems may be installed using flat seam panels, metal roof shingles, standing seam metal or interlocking panels.

The system design impacts how the roof system is repaired and maintained. If damages occur to a metal roof system, the configuration of the system will impact how the homeowner or professional roofing contractor will repair that system.

The system design also impacts how the roof system is maintained. Maintenance of metal roof systems may incorporate cleaning the roof system prior to repair or a maintenance coating. Flat seamed metal roof panels with soldered seams may be able to pressure washed before they are coated, but a metal roof system that incorporates metal roof shingles cannot be pressure washed because they are designed to shed water.

Closing

As the old saying goes, "The Devil is in the details". This saying is a great reminder with regards to metal roof systems. If you overlook the details of your metal roof system, the choices that are made regarding how to maintain or repair the roof system can cause more damage to the roof system than what you are attempting to repair. It is important to consider these characteristics in advance so that you can plan the maintenance and repairs for your roof and maximize the life expectancy of your roof.