"The name trusted in roofing since 1906"



# **Care and Maintenance Overview**

#### **Overview**

Following are some recommendations on how to care for your roof to help ensure a long useful service life. The manufacturer's warranty is not a maintenance program or agreement. There are various items associated with your roof system that are not covered under the warranty. It is the responsibility of the Building Owner to regularly maintain the roof.

## Inspect your roof on a regular basis

All roofs require periodic maintenance and inspections in order to perform as designed and to provide a long useful service life. Mule-Hide recommends that your roofing system be inspected at least twice a year (once in the spring and once in the fall) and after every major storm. These inspections should be performed by a Mule-Hide Warranty Eligible Applicator or by someone specially trained in single-ply and modified bitumen roofing installations. The Owner should maintain a log of maintenance procedures and people accessing the roof. This log can aid the building owner in determining the source of any damage to the roof.

Roof top inspections should concentrate on high-risk areas such as roof hatches, drains and around all rooftop equipment as well as general inspection of the entire roof. The inspector should be looking for membrane damage (cuts and tears), oil or Freon leaks, chemical spills, or water infiltration into the roofing System.

Such inspections are needed because problems stemming from neglect, abuse, contamination, accidents, or storm damage can result in extensive and costly repairs if not detected and repaired promptly.

Regular inspection and maintenance is also critical to sustaining the roof Warranty in force. Your Warranty could be compromised if the roof fails due to lack of basic maintenance on the part of the building owner. Therefore, it is critical that the owner understands and follows our maintenance requirements.

#### Drainage

Ponding water is a source of potential damage for all roofing systems. A small puncture or cut in a well-drained roofing system may result in limited damage. However, a significant amount of damage may occur to the roof insulation, roof deck, and building interior if the same puncture or cut occurs in an area of ponding water. Good roofing practice suggests that water not be allowed to remain on the roof for more than 48 hours after a rainfall. Roof drainage should be evaluated by the specifier in accordance with all applicable codes.

The roof surface must be kept clean of debris that can impede drainage. This is especially important at drainage areas to avoid clogging. Such areas include roof drains, wall scuppers, gutters and downspouts.

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#### **Chemicals & Petroleum Products**

Even though our membranes provide outstanding resistance to natural weather, exposure to chemical and petroleum products (acids, chemicals, solvents, greases, oils or any liquids containing petroleum products) may affect their durability. How a membrane is affected depends upon the membrane's composition. An adverse reaction to a substance typically results in membrane splitting, cracking, and swelling.

Periodic inspections can help assure that such damage is quickly identified and addressed. If swelling occurs, contact Mule-Hide immediately.

Some common sources of potential problems include:

Air Conditioner Compressors - Oil may be spilled during maintenance of the compressor or it may leak oil.

Kitchen Exhaust Fans - Grease from cooking exhausts can accumulate on the roofing surface, especially if the units are not serviced frequently.

#### **Animal Fats**

Do not exhaust kitchen wastes (vegetable oils) or other animal fats directly onto the roofing surface. If incidental contact is likely, contact Mule-Hide for recommendations on preventative measures.

#### Animal Fats - TPO & PVC Membranes

TPO and PVC membranes may be used for restaurant roofs but must have a rooftop maintenance program in-place to ensure that accumulations of animal fats/grease are regularly removed and the membrane surface is cleaned periodically. The roof membrane can be cleaned with a mixture of warm soap and water and/or by other approved cleaning methods (see Cleaning below).

## <u>Cleaning</u>

General cleaning of the field membrane can be accomplished with detergent and water. Mule-Hide recommends a detergent such as trisodium phosphate (TSP), a granular detergent that is available at most paint stores. Use of TSP is preferred as it does not leave a 'film' on the membrane that may inhibit seaming or patching.

Mix the TSP with water as per directions and brush wash the affected area by hand with a stiff bristled brush. Thoroughly rinse with clean water and repeat as necessary.

For more aggressive cleaning, a polypropylene scouring pad can be used in conjunction with the TSP detergent.

A light power wash can also be used, however, care must be taken to not damage the membrane, flashings, or field seams.

Before seaming or repairs are attempted, ensure that the surface of the field membrane is clean, has been thoroughly rinsed to remove all detergent and contaminates, and that the membrane has been allowed to dry completely.

To maximize reflectivity, white membrane(s) should be cleaned once every two years.

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#### Foot Traffic

Mule-Hide membranes are designed to be part of a roofing system and are not a traffic-bearing component of the building. However, virtually all roofs are subjected to some amount of roof traffic, such as that required to service roof top units.

Walkways must be provided if regular rooftop traffic is required, such as servicing of rooftop equipment on a regular basis. If a unit on the roof has a monthly maintenance schedule, walkways to and around the unit are recommended.

When it is necessary for workers to be on the roof to service rooftop equipment, e.g., HVAC units, antennas, etc., workers should be cautioned to use walkways and to exercise care with their tools and equipment to avoid puncturing the roofing membrane. Mule-Hide recommends that the building owner or property manager keep a "Roof-Top Maintenance and Activity Log" to track dates and activities by personnel or other trades.

Exercise caution when not walking on walkways, especially on white membranes (White-on-Black EPDM, Elastomeric Acrylic Coatings, TPO and PVC) since ice or frost build-up may not be visible. All membranes are slippery when wet.

#### Maintenance Items

Moisture can enter your roofing system in many different ways. Not all leaks are the result of issues with the roofing system. Moisture can also enter the roofing system and building through building walls, parapets, roof top units, skylights, and variety of other items. Maintaining these in a watertight condition will help to prevent damage to your roofing system. In addition, leaking that occurs from any of these items is not covered under the Mule-Hide warranty.

Keep roof maintenance items, such as counterflashings, metal curbs, metal ducts, etc., sealed watertight at all times. All exposed mastics and sealants, regardless of the purpose or function, are required maintenance items to be remediated by the Building Owner, including but not limited to pitch pan and metal flashing sealants.

Loss of granules from mineral surfaced membranes is typical and not a manufacturing defect. In cases of granule loss that becomes more noticeable, additional surfacing should be applied as directed by Mule-Hide.

Protective elastomeric coating systems will oxidize and weather, losing overall dry film thickness. This is normal and not a defect in the material. Warranties that include an elastomeric coating as a protective surfacing of a membrane may require periodic recoating at specified intervals to maintain the warranty coverage. The Building Owner is responsible for all costs to perform any specified recoating.

#### Leaks

If you have a leak, check for the obvious such as clogged roof drains, broken skylights, loose counterflashings, broken water pipes, leaking roof units, and storm damage. Note when the leaking occurs. Items such as heavy or light rain, wind direction, temperature and time of day are important clues for tracking suspected leaks. Does the leak start and stop with the rain, or does leaking continue after the rain has ceased?

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## **Leaks** (continued)

If you believe that the leak is covered under the Mule-Hide warranty, please notify Mule-Hide's Warranty Department at (800) 786-1492 as soon as possible, and follow up with written notification in accordance with the warranty terms.

Leaks resulting from the deterioration or failure of building components or physical damage are not covered by the Warranty. The building owner must pay the investigation and repair cost if the problem is found to be outside the scope of the Warranty.

#### **Temporary Repairs**

If your roof becomes damaged, prompt action can limit damage to our roofing system. Small cuts and tears can be repaired with a one-part urethane sealant. Remember, these are only temporary repairs to the Mule-Hide membrane. Contact Mule-Hide for additional information.

#### **Roof Cement**

**Do not use Any Asphalt Product** to make repairs on single ply membranes (EPDM, TPO, or PVC) as it **WILL** degrade the membrane. If any asphalt product is used on the roofing membrane, that area will have to be removed and replaced at the Owner's expense.

#### Changes to Roof

Notify Mule-Hide of any changes made to the roofing system. This includes replacement of existing roof top equipment, installation of new roof top equipment, TV Antennas, tie-ins to new roofing systems, etc. Contact Mule-Hide before any changes are made to the roofing system so that the proper procedure can be followed and the change authorized by Mule-Hide. Unauthorized changes to your roofing system can compromise your Mule-Hide warranty.

This overview represents the applicable information available at the time of publication. Please visit the Mule-Hide website at www.mulehide.com, or contact either Mule-Hide or your Mule-Hide Territory Manager for information that may be more current.

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