SECTION 2

MULE-HIDE PRODUCTS CO., INC.

PVC SYSTEM WARRANTY INFORMATION

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PLEASE CONSULT THE MULE-HIDE WEBSITE FOR THE MOST CURRENT INFORMATION

"The name trusted in roofing since 1906"

MULE - HIDE PRODUCTS CO., INC.

1195 Prince Hall Drive
Beloit, WI 53511-3964

Phone (608)365-3111
Fax (608)365-7852

P.O. Box 1057
Beloit, WI 53512-1057

www.mulehide.com

Warranty Program

OVERVIEW

Overview

Mule-Hide Products Co., Inc. ("Mule-Hide") offers several types of warranties ranging from material warranties to System warranties. These warranties are available in 10, 15, and 20 year durations. A Mule-Hide warranty is a guarantee by Mule-Hide to repair or replace deficiencies with Mule-Hide materials or roof systems. Mule-Hide presently offers three types of warranties for our single-ply membranes/systems and our SAMB membranes/systems:

Roofing Membrane Limited Warranties
Standard System Warranties
Premium System Warranties

A Membrane Only warranty may be combined with select Standard or Premium warranties. Available selections are as follows;

Standard-10 or Premium-10 + Membrane-15 OR Membrane-20
Standard-15 or Premium-15 + Membrane-20

Mule-Hide also offers material/system warranties for our coatings:

Coatings Material Only Warranties
Coatings System Warranties.

Fees are required for all System warranties. System Warranties must be obtained through a Mule-Hide Warranty Eligible Applicator. System warranties are not available for residential projects. Membrane and material warranties do not require the applicator to be Mule-Hide Warranty Eligible, but certain membrane/material warranties do require fees.

Coatings Material Only Warranty

This warranty, subject to the terms and conditions stated in the warranty, warrants to the building owner that the materials are free of manufacturing defects and will not prematurely deteriorate to the point of failure because of weathering. Workmanship is not covered by this warranty. Mule-Hide does not perform inspections of the installation before issuing the Coatings Material Only Warranty. Distributor invoices showing purchase of Mule-Hide materials are required and are to be submitted to Mule-Hide with the Mule-Hide Warranty Application.

Coatings System Warranty (Over Metal Roofs Only)

This warranty, subject to the terms and conditions stated in the warranty, covers leaks due to defects in the Mule-Hide materials or workmanship of the Mule-Hide Warranty Eligible Applicator in installing same. A Mule-Hide Warranty Eligible Applicator must submit a Warranty Application and the appropriate fee to Mule-Hide. Coatings System warranties require inspections by a Mule-Hide representative. Mule-Hide recommends that Warranty Applications be submitted for review prior to project start. Distributor invoices showing purchase of Mule-Hide materials are required and are to be submitted to Mule-Hide with the Mule-Hide Warranty Application.

Roofing Membrane Limited Warranty

This warranty covers only the Mule-Hide membrane (or portion thereof) determined by Mule-Hide to be defective and resulting in roof leaks. This Warranty does not cover workmanship or

other components not supplied by Mule-Hide. Mule-Hide does not perform inspections of the installation before issuing the Roofing Membrane Limited Warranty. A Mule-Hide Warranty Application must be submitted to Mule-Hide to obtain this warranty (check with Mule-Hide for those programs that may not require submittal of a Warranty Application). Certain warranties may require fees and proof of purchase. Mule-Hide recommends that Warranty Applications be submitted for review prior to project start.

Note: *Projects requesting a 20-year Roofing Membrane Limited Warranty require specific membranes and design enhancements. Contact Mule-Hide for additional information.*

Standard System Warranty

The Standard System warranty is a "No Dollar Limit" labor and material warranty. It covers the Mule-Hide labeled membrane and other components supplied by Mule-Hide and must be installed by a Mule-Hide Warranty Eligible Applicator. The Standard System warranty does not cover the roof insulation, attachment of the roof insulation, or metal flashing components (unless Mule-Hide Metal Accessories are purchased from Mule-Hide). A Mule-Hide Warranty Eligible Applicator must submit a Warranty Application and the appropriate fee to Mule-Hide. Standard System warranties require inspections by a Mule-Hide representative. Mule-Hide recommends that Warranty Applications be submitted for review prior to project start.

Note: *Projects requesting a 20-year Standard System Warranty require specific membranes and design enhancements. Contact Mule-Hide for additional information.*

Premium System Warranty

The Premium System warranty is a "No Dollar Limit", labor and material warranty. It covers the Mule-Hide labeled membrane, insulation, other components supplied by Mule-Hide, as well as approved products (such as metal flashing, insulation adhesive and other pre-approved accessories) installed by a Mule-Hide Warranty Eligible Applicator. The Warranty Application and the appropriate fee must be submitted to Mule-Hide by a Mule-Hide Warranty Eligible Applicator. Premium System warranties require inspections by a Mule-Hide representative. Distributor invoices showing purchase of Mule-Hide materials are required and are to be submitted to Mule-Hide before the warranty can be issued. Mule-Hide recommends that Warranty Applications be submitted for review prior to project start. *Premium System Warranties require the use of Mule-Hide Polyisocyanurate Insulation.*

Note: *Projects requesting a 20-year Premium Warranty require specific membranes and design enhancements. Contact Mule-Hide for additional information.*

Terms and Conditions of Warranties

Mule-Hide's obligations under these warranties are limited to the specific terms and conditions of the respective Warranty. Sample copies of the Mule-Hide Warranties are available from Mule-Hide upon request for review of the actual terms, conditions and limitations. Mule-Hide warranties are not issued until the warranty fee has been paid and any required Distributor invoices have been received by Mule-Hide.

Mule-Hide Warranty Program Overview - Continued

Mule-Hide Warranty Eligible Applicator Program

Those contractors wishing to become Mule-Hide Warranty Eligible Applicators for the purpose of offering System Warranties should contact their local Mule-Hide Territory Manager. Please call Mule-Hide at 800-786-1492 or check the Mule-Hide web site (www.mulehide.com) to obtain the name and phone number of your local Mule-Hide Territory Manager.

Mule-Hide Warranty Types

Refer to the appropriate product pages for listings of available warranty types by product line. Mule-Hide reserves the right to change this information at any time. Contact Mule-Hide or check the Mule-Hide web site ((www.mulehide.com) for the latest updates regarding changes or modifications to this document or the Mule-Hide Warranty Program.

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WARRANTY OFFERINGS

HEAT-WELD

TPO and PVC

Warranty Type	Warranty Fees Cost/SF	Min $
Membrane Only - 10 Years	$0.00	$25.00
Membrane Only - 15 Years [4]	$0.01	$100.00
Membrane Only - 20 Years [4,6]	$0.02	$200.00
Standard - 10 Years [3,4]	$0.05	$400.00
Standard - 15 Years [3,4]	$0.08	$525.00
Standard - 20 Years [2,3,4,6]	$0.11	$800.00
Standard -10 + Membrane -15 [3,4,5]	$0.06	$500.00
Standard -10 + Membrane -20 [3,4,5]	$0.07	$600.00
Standard -15 + Membrane -20 [3,4,5,6]	$0.10	$725.00
Premium - 10 Years [1,3,4]	$0.04	$350.00
Premium - 15 Years [1,3,4]	$0.07	$475.00
Premium - 20 Years [1,2,3,4,6]	$0.10	$750.00
Premium-10 + Membrane-15 [1,3,4,5]	$0.05	$450.00
Premium-10 + Membrane-20 [1,3,4,5,6]	$0.06	$550.00
Premium-15 + Membrane-20 [1,3,4,5,6]	$0.09	$675.00

Important Warranty Notes:

Current Warranty fee schedules are as listed. Please contact Mule-Hide for pre-approval when applying for any non-published Warranty timeframes.

[1] Mule-Hide Premium Warranties are offered only on new construction and total tear-off systems, or for recover (retrofit) systems when an independent company has performed a moisture survey. Accepted survey types are nuclear, infrared and conductive. The moisture survey must be submitted with the Warranty application for recover applications. All wet roofing materials found in the survey must be removed.

[2] Refer to 20-Year Design Enhancement Documents

[3] These warranties are only available to Mule-Hide Warranty Eligible Applicators.

[4] Commercial projects only. Standard and Premium System Warranties are not available for residential projects.

[5] Upon expiration of the Standard or Premium warranty component the terms and conditions of the membrane only warranty apply.

[6] Requires Min. 60 mil reinforced TPO or Min. 60 mil reinforced PVC.

Mule-Hide Limited Membrane and NDL System Warranties are only valid when components are installed according to manufacturers' specifications. Always refer to Mule-Hide Application Guidelines for additional information.

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Care and Maintenance

OVERVIEW

Overview

Following are some recommendations on how to care for your roof to help ensure a long useful service life.

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

Care and Maintenance Information Continued…….

Chemicals & Petroleum Products

Even though our membranes provide outstanding resistance to natural weather, exposure to organic substances such as oils, fats, and organic solvents 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 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 – EPDM & Self-Adhering Mod Bit Membranes

EPDM and Self-Adhered Modified Bitumen Membranes are susceptible to damage from kitchen wastes (vegetable oils) or other animal fats that are vented directly onto the roof surface. If incidental contact is likely, contact Mule-Hide for recommendations on preventative measures.

Animal Fats – TPO & PVC Membranes

The use of TPO and PVC membranes for restaurant rooftops will not void the Warranty. However, a rooftop maintenance program must be in-place to ensure that accumulations of animal fats/grease are regularly removed and the membrane surface cleaned with a mixture of warm soap and water and/or by other approved cleaning methods (see Cleaning below).

Cleaning

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.

Care and Maintenance Information Continued…….

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.

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.

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. 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.

Metal Work

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.

Leaks – Standard & Premium Warranties

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?

Leaks resulting from the deterioration or failure of building components or physical damage are not covered by the Warranty. If you believe that the leak is related to 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. 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.

Care and Maintenance Information Continued…….

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. Un-authorized 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 Representative for information that may be more current.

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Contractor Warranty Eligibility

PROGRAM

Contractors wishing to become Warranty Eligible, should obtain a **Contractor Warranty Eligibility Application** form from their Mule-Hide Field Territory Manager. You can find the contact information for your Mule-Hide Territory Manager by checking the Mule-Hide website at www.mulehide.com or by calling (800) 786-1492 and asking for the Warranty Program Coordinator.

The Contractor Warranty Eligibility Application form shall be filled out completely and signed by an officer of the company. Forward the completed application to the Mule-Hide National Support Center, marked to the attention of the Warranty Program Coordinator. Submission of the Contractor Warranty Eligibility Application form does not guarantee or imply acceptance by Mule-Hide.

Upon receipt of the application, the Mule-Hide Territory Manager will be advised of the application submittal and will contact the contractor to evaluate his qualifications and training needs. Training requirements may include attendance at a training seminar and a commitment to a training session for the contractor's crew(s). A review of the Contractor's workmanship on completed roofing projects will be requested and documented by the Mule-Hide Territory Manager.

Only Warranty Eligible Contractors are able to apply for Mule-Hide's Standard or Premium System (labor and material) Warranties and Coatings System Warranties. **It is the contractor's responsibility to contact Mule-Hide should they wish to be able to obtain System Warranties**.

EFFECTIVE JULY 2013

E-Z SINGLE-PLY WARRANTY APPLICATION

Mule-Hide Products Co., Inc. | 800-786-1492 | Fax: 888-218-7838 | mulehidewarranties@mulehide.com
National Support Center, 1195 Prince Hall Drive, Beloit, WI 53511

PROJECT NAME:

Building Name_____

Street_____

City_____ State_____ Zip_____

County_____

Architect/Specifier_____

Phone_____

BUILDING OWNER:

Name_____

Contact Name_____

Phone_____

CONTRACTOR NAME:

Name_____

Street_____

City_____ State_____ Zip_____

Phone_____ Fax_____

Mule-Hide Applicator Number_____

Person filling out application_____

Email Address_____

DISTRIBUTOR INFORMATION:

Distributor Name_____

City_____ State_____

Salesman_____

WARRANTY FEE SELECTION	PRICE/S.F.		SIZE (S.F.)		COST
Membrane Only - 10 Years	N/A	x		=	$25.00 flat fee
Membrane Only - 15 Years [1]	$.01	x		=	(MIN $100.00)
Membrane Only - 20 Years [1,2]	$.02	x		=	(MIN $200.00)

Important Warranty Notes:

1 Commercial projects only. **2 Minimum of 60-mil membrane is required for 20-year warranties**

PROJECT INFORMATION

Mule-Hide Limited Membrane are only valid when components are installed according to manufacturers' specifications. Always refer to Mule-Hide Application Guidelines for additional information. If specifications were written for this project, please submit one copy with this application

ROOF MEMBRANE - ***A minimum of 60-mil membrane is required for 20-year warranties***

☐ BLACK EPDM ☐ 45 ☐ 60 ☐ 90	☐ TPO ☐ 45 ☐ 60 ☐ 80
☐ REINFORCED BLACK EPDM ☐ 45 ☐ 60	☐ PVC ☐ 50 ☐ 60 ☐ 80
☐ WHITE ON BLACK EPDM ☐ 60	

SYSTEM TYPE ☐Fully Adhered ☐Ballasted ☐Mechanically Attached

ROOF SYSTEM ☐New Roof ☐Re-Roof (Tear Off) ☐Recover (Over Existing)

BUILDING TYPE ☐Commercial ☐Public/Government ☐School ☐Worship ☐Healthcare

☐Institutional ☐Industrial ☐Funeral ☐Residential (10 year Membrane Only Warranty ONLY)

BUILDING USE:_____ **BUILDING HEIGHT:** _____**ft. NUMBER OF LEVELS:**_____

PARAPET HEIGHTS: North ____ft. South ____ft. East ____ft. West ____ft. (show on roof plan)

PROJECT START DATE: _____ **PROJECTED/ACTUAL COMPLETION DATE:**_____

Warranty applications and pre-job survey form must be sent in for approval before the start of the project. Warranties must be executed within 90 days of roof completion. Any warranty issued by Mule-Hide Products Co., Inc. will be based upon the accuracy and completeness of the information contained in this warranty application, roof drawing and pre-job survey.

ELIGIBLE CONTRACTOR SIGNATURE (MUST BE AN OFFICER OF THE COMPANY)

By_____ **Title**_____ **Date**_____

ROOF DRAWING

ALL PROJECTS REQUIRE A SUBMITTAL OF A ROOF DRAWING AND DIMENSIONS. SUBMISSION OF SHOP DRAWINGS ARE ACCEPTABLE ONLY IF DIMENSIONS ARE PRESENT.

PLEASE INDICATE IF PROJECT HAS MULTIPLE DECK TYPES OR SYSTEM TYPES

EFFECTIVE JULY 2013

HEAT-WELD WARRANTY APPLICATION

Mule-Hide Products Co., Inc. | 800-786-1492 | Fax: 888-218-7838 | mulehidewarranties@mulehide.com
National Support Center, 1195 Prince Hall Drive, Beloit, WI 53511

PROJECT NAME:

Building Name_____

Street_____

City_____ State_____ Zip_____

County_____

Architect/Specifier_____

Phone_____

CONTRACTOR NAME:

Name_____

Street_____

City_____ State_____ Zip_____

Phone_____ Fax_____

Mule-Hide Applicator Number_____

Person filling out application_____

BUILDING OWNER:

Name_____

Contact Name_____

Phone_____

DISTRIBUTOR INFORMATION:

Distributor Name_____

City_____ State_____

Salesman_____

WARRANTY FEE SELECTION	PRICE/S.F.		SIZE (S.F.)		COST
Membrane Only - 10 Years	N/A	x		=	$25.00 flat fee
Membrane Only - 15 Years [4]	$.01	x		=	(MIN $100.00)
Membrane Only - 20 Years [4,6]	$.02	x		=	(MIN $200.00)
Standard - 10 Years [3,4]	$.05	x		=	(MIN $400.00)
Standard - 10 Years and 15 Membrane Only [3,4,5]	$.06	x		=	(MIN $500.00)
Standard - 10 Years and 20 Membrane Only [3,4,5,6]	$.07	x		=	(MIN $600.00)
Standard - 15 Years [3,4]	$.08	x		=	(MIN $525.00)
Standard - 15 Years and 20 Membrane Only [3,4,5,6]	$.10	x		=	(MIN $725.00)
Standard - 20 Years [2,3,4,6]	$.11	x		=	(MIN $800.00)
Premium- 10 Years [1,3,4]	$.04	x		=	(MIN $350.00)
Premium - 10 Years and 15 Membrane Only [1,3,4,5]	$.05	x		=	(MIN $450.00)
Premium - 10 Years and 20 Membrane Only [1,3,4,5,6]	$.06	x		=	(MIN $550.00)
Premium - 15 Years [1,3,4]	$.07	x		=	(MIN $475.00)
Premium - 15 Years and 20 Membrane Only [1,3,4,5,6]	$.09	x		=	(MIN $675.00)
Premium - 20 Years [1,2,3,4,6]	$.10	x		=	(MIN $750.00)

Important Warranty Notes:

Current Warranty fee schedules are as listed. Please contact Mule-Hide for pre-approval when applying for any non-published Warranty timeframes or any other non-standard considerations..

1 Mule-Hide Premium Warranties are offered only on new construction and total tear-off systems, or for recover (retrofit) systems when an independent company has performed a moisture survey. Accepted survey types are nuclear, infrared and conductive. The moisture survey must be submitted with the Warranty application for recover applications. All wet roofing materials found in the survey must be removed. Requires use of Mule-Hide insulation.

2 Refer to 20-Year Design Enhancement Documents

3 These warranties are only available to Mule-Hide Warranty Eligible Applicators

4 Commercial projects only. Standard and Premium System Warranties are not available for residential projects.

5 Upon expiration of the Standard or Premium warranty component the terms and conditions of the membrane only warranty apply.

6 Requires .060 Reinforced TPO or PVC

Warranty applications and pre-job survey form must be sent in for approval before the start of the project. Requests for final inspection must be received within 30 days of roof completion. Warranties must be executed within 90 days of roof completion. Any warranty issued by Mule-Hide Products Co., Inc. will be based upon the accuracy and completeness of the information contained in this warranty application, roof drawing and pre-job survey.

ELIGIBLE CONTRACTOR SIGNATURE (MUST BE AN OFFICER OF THE COMPANY)

By_____ **Title**_____ **Date**_____

ROOF DRAWING

ALL PROJECTS REQUIRE A SUBMITTAL OF A ROOF DRAWING AND DIMENSIONS. SUBMISSION OF SHOP DRAWINGS ARE ACCEPTABLE ONLY IF DIMENSIONS ARE PRESENT.

PLEASE INDICATE IF PROJECT HAS MULTIPLE DECK TYPES OR SYSTEM TYPES

PRE-JOB SURVEY

Mule-Hide Limited Membrane and NDL System Warranties are only valid when components are installed according to manufacturers' specifications. Always refer to Mule-Hide Application Guidelines for additional information. If specifications were written for this project, please submit one copy with this application

ROOF MEMBRANE ☐TPO ☐ 45 ☐ 60 ☐ 80 Minimum of 60-mil membrane is
☐PVC ☐ 50 ☐ 60 ☐ 80 required for 20-year warranties

SYSTEM TYPE ☐Fully Adhered ☐Ballasted ☐Mechanically Attached

ROOF SYSTEM ☐New Roof ☐Re-Roof (Tear Off) ☐Recover (Over Existing)

BUILDING TYPE ☐Commercial ☐Public/Government ☐School ☐Worship ☐Healthcare

☐☐☐☐☐☐☐☐☐☐☐☐☐Institutional ☐Industrial ☐Funeral ☐Residential (10 year Membrane Only War-

BUILDING HEIGHT: _____ft. NUMBER OF LEVELS:_____

PARAPET HEIGHTS: North ____ft. South ____ft. East ____ft. West ____ft. (show on roof plan)

PROJECT START DATE: _____ PROJECTED/ACTUAL COMPLETION DATE:_____

STOP

If you are completing this application for a "membrane" warranty, please stop here. For all other types of warranties, please continue.

STOP

DRAINAGE: Slope per ft.:_____ Positive Drainage? ☐ Yes ☐ No

EXISTING ROOF: (Check All Appropriate) Skip if New Construction or Roof Membrane is removed

Roof Type: ☐Asphalt ☐Modified ☐Cold Process ☐Spray Foam (Must be removed)

☐Coal Tar Pitch Age of CTP: _____ Resaturated within last 10 years? ☐Y ☐N

☐TPO ☐PVC ☐EPDM ☐Other _____

Surface: ☐Smooth ☐Stone ☐Granules ☐Gravel ☐ Was the Roof Gravel Broomed?

EXISTING INSULATION: Skip if New Construction or Roof Insulation is removed

Was a Moisture Survey Performed? ☐ Yes ☐ No Type of Survey: _____

Core Samples Taken? ☐ Yes ☐ No ***ALL WET INSULATION MUST BE REMOVED FOR WARRANTY***

ROOF INSULATION: Indicate type, thickness, and whether insulation is new or is being re-used.

Overlayment/Cover Board: Size: ☐ 4' x 4' ☐ 4' x 8'

HDFB - Dens Deck - Other: _____ Thickness_____" Manufacturer_____

Insulation: ☐ New ☐ Existing Type: ☐ Flat ☐ Tapered Size: ☐ 4' x 4' ☐ 4' x 8'

HDFB - ISO - EPS - Other: _____ Thickness:_____" Manufacturer:_____

Insulation: ☐ New ☐ Existing Type: ☐ Flat ☐ Tapered Size ☐ 4' x 4' ☐ 4' x 8'

HDFB - ISO - EPS - Other: _____ Thickness:_____" Manufacturer:_____

Vapor Barrier Type:_____ Thermal Barrier:_____

SlipSheet: ☐ HP-Protection Mat ☐ Other: _____

PRE-JOB SURVEY

ROOF DECK TYPE: (List Thickness or Gauge) **Fastener tests are required for all Non-FM deck types**

Steel: _____ Gauge Wood Planking: _____ ”Thick Concrete: _____ ”Thick

Plywood:_____ ”Thick Gypsum:_____ ”Thick Tectum:_____ ”Thick

Insulating Concrete installed over: ☐ Steel _____ Gauge ☐ Concrete ☐ Other _____

Oriented Strand Board: ____”Thick Other: _____

INSULATION ATTACHMENT

Fasteners: ☐DP-12 ☐HD-14 ☐HD-15 **Brand:** ☐Mule-Hide ☐Other: _____

Fasteners installed per board - Board Size: ☐4’ x 4’ ☐4’ x 8’

Field:_____ Perimeter: _____ Corner: _____

INSTA STIK Adhesive

☐ Contractor confirms that the crew using INSTA STIK Quik Set on this project is properly trained in handling, storage, and use. DOW Applicator # _____

☐ Contractor requires job start-up assistance and training on the proper use of INSTA STIK Quik Set before this project starts.

☐ Project or roof has been damaged by high winds - Attach explaination

Project distance from Coast Line ☐> 50 Miles ☐ _____ Miles

Adhesive Pattern ☐ Field— 12” oc Perimeter— 12” oc Corner —— 9” oc

☐ Field— 12” oc Perimeter—— 9” oc Corner —— 6” oc

Other ☐ Field -___” oc Perimeter - ___” oc Corner - ___” oc

MEMBRANE FASTENERS *(MECHANICALLY ATTACHED SYSTEMS ONLY)*

ALL MECHANICALLY ATTACHED SYSTEMS REQUIRE THE USE MULE-HIDE HEAVY DUTY, #14 FASTENERS AS A MINIMUM. HEAVY DUTY, #15 FASTENERS ARE REQUIRED FOR FLORIDA AND FM APPROVALS.

Fastener Type: ☐HD-14 ☐HD-15 Fastener Length:_____

TPO Sheet Width: ☐6’ ☐8’ ☐10’ ☐12’ Half Sheets: ☐ -1 ☐ - 2 ☐ - ____

PVC Sheet Width: ☐80” Half Sheets: ☐ -1 ☐ - 2 ☐ - ____

Fastener Spacing in Seam: ☐6” ☐12”

FASTENER / ADHESIVE PULL TESTS

Was a pull out test conducted? ☐ Yes ☐ No **Submit copy of test to Mule-Hide**

Fastener Tested: ☐DP-12 ☐HD-14 ☐HD-15 ☐Other _____

If yes, number of test pulls: _____ High Value: _____ Low Value: _____

Adhesive Tested: ☐INSTA STIK ☐Other _____

If yes, number of test pulls: _____ High Value: _____ Low Value: _____

MEMBRANE ADHESIVES *(FULLY ADHERED SYSTEMS ONLY)*

What Type of Adhesive was used for the field sheets: ☐ Solvent Based ☐ Water Based

APPROVALS

Does this project require compliance with Factory Mutual (FM) ☐ Yes ☐ No
If “yes”, which requirement: ☐ FM 1-90 ☐ Other _____

Does this project require compliance with Underwriters Laboratory (UL)? ☐ Yes ☐ No
If “yes”, please select the appropriate rated needed ☐ Class A ☐ Class B ☐ Class C

Does this project require compliance with Florida NOA? ☐ Yes ☐ No

MULE-HIDE PRODUCTS CO., INC
10 or 15 Year Warranty Design Summary
With Standard 55-MPH Wind Speed Coverage
For Fully Adhered PVC

PVC Systems

All products specified for this roofing system must be manufactured or approved by Mule-Hide Products Co. This criteria is limited to buildings of 100' in height or less.

Membrane / Adhesive Type / Other

1. 0.050" or 0.060" or 0.080" thick Mule-Hide Reinforced PVC
2. Mule-Hide PVC Bonding Adhesive - Solvent Based

Deck Type / Typical Fastener - Refer to Specifications for minimum pullout criteria.

Standard Roof Deck (4)	**Insulation Fastener** (1)	**Insulation Plate**
Steel (22 gauge or heavier)	Mule-Hide DP #12	Mule-Hide 3" Metal Stress Plates
Structural Concrete (3,000 psi)	Mule-Hide HD-14 (2)	Mule-Hide 3" Metal Stress Plates
Plywood (Min 15/32" thick)	Mule-Hide DP #12	Mule-Hide 3" Metal Stress Plates
Wood Plank (Min 1-1/2" thick)	Mule-Hide DP #12	Mule-Hide 3" Metal Stress Plates
Fibrous Cement & Gypsum (2)(3)	TL Fasteners by Tru-Fast	3" Galvalume Insulation Plate by Tru-Fast

Notes:

1. Heavier gauge fasteners may be required to meet Factory Mutual or code requirements.
2. Other fasteners may be considered, submit request to Mule-Hide prior to bidding.
3. Pullout testing is required, must exceed 360 pounds with TL Fastener.
4. Contact Mule-Hide Technical Department for other roof decks or non-standard roof decks.

Slope Requirement/Drainage

1. Positive drainage required (no ponding 48 hours after a rain)
2. 1/4" per horizontal foot preferred
3. 1/8" slope with sufficient number of drains and crickets/saddles may be considered

Construction Type

1. New Construction
2. Reroof - with full tear-off
3. Recover - all wet materials removed

Insulation/Overlayment - Mechanical Attachment into Standard Roof Decks*

	Fasteners per 4' x 8' board		
Insulation Type or Overlay	**Field**	**Perimeter**	**Corner**
Approved Polyisocyanurate - Min 2" thick (top layer)	8	12	16
Approved Polyisocyanurate - Min 1.5" up to 2" thick	12	18	24
HD Fiberboard - Min 1/2" thick- Installed over Approved Insulation	16	24	32
Dens Deck Prime - Min 1/4" thick - Installed over Approved Insulation	12	18	24
OSB - Min 7/16" thick - Installed over Approved Insulation	17	25	32
Approved OSB/Polyisocyanurate Composite - Min 2" thick	17	25	32

***NOTES:**

1. Thicknesses stated are for single layer of material.
2. Consult Specification Manual for list of approved insulations for use under overlayment.
3. Polyisocyanurate less than 1.5" in thickness requires approved overlayment.
4. Insulation fastening density shall not be less than 1 per 2 square feet on fibrous cement and gypsum decks.
5. Certain codes may require additional fastening requirements.

6. Factory Mutual defines perimeter areas as the lesser of 0.1 times the building width or 0.4 times the building height. Corners areas are the intersections of the perimeter areas.

Insulation/Overlayment - Adhesive Attachment

1. Insta-Stik by Dow Chemical Company - Warranty Application must include a copy of the manufacturers letter of acceptance for the project, including application rates for that specific project. Other Manufactures may be considered, submit prior to bidding.

Metal Accessories

1. All Metal copings, gravel stops, fascia, and drip aprons must be installed according to Mule-Hide approved details.
2. Conventional metal edge details that require flanges to be 'stripped in' must be construction from PVC coated sheet metal and stripped in with PVC membrane. All seams are to be heat-welded.
3. All Metal Scuppers must have welded (soldered) seams.

Other Requirements

1. No 'As-Built' projects. All projects are to be reviewed and approved prior to installation.
2. Shop drawings must include all pertinent details.
3. Contact Mule-Hide Technical Department for specific code requirements such as Florida NOA, Factory Mutual (FM) or Underwriters Laboratory (UL).

NOTES:

1. **This is a summary of the Mule-Hide PVC Fully Adhered System Specification, as written in the Mule-Hide TPO Specification Manual. Refer to Mule-Hide PVC Specification Manual for complete specification and details.**

2. **The information contained in this document is general information. Requirements may be different for each specific job based on the conditions of each building. Always contact Mule-Hide Technical Department to review the specific job conditions prior to bidding the project.**

MULE-HIDE PRODUCTS CO., INC
10 or 15 Year Warranty Design Summary
With Standard 55-MPH Wind Speed Coverage
For Mechanically Attached PVC

PVC Systems

All products specified for this roofing system must be manufactured or approved by Mule-Hide Products Co. This criteria is limited to buildings of 100' in height or less, located in urban or suburban exposure areas. Not applicable for coastal or high wind areas.

Membrane

1. 0.050" or 0.060" or 0.080" thick Mule-Hide Reinforced PVC

Deck Type / Typical Fastener - Refer to Mule-Hide Specifications for minimum pullout criteria.

Standard Roof Deck (3)	**Max Sheet Width**	**Max Fastener Spacing**	**Fastener** (1)	**Seam Plate** (1)
Steel - Min 22 ga.	81"	12" OC	HD-14	2.4"
Wood Plank - Min 2x or Plywood - Min 23/32"	81"	12" OC	HD-14	2.4"
Plywood - Min 15/32"	81"	6" OC	HD-14	2.4"
Structural Concrete - Min 3,000 psi	81"	12" OC	HD-14 (2)	2.4"

Notes:

1. Heavier gauge fasteners may be required to meet Factory Mutual or code requirements.
2. Other fasteners may be considered, submit request to Mule-Hide prior to bidding.
3. Contact Mule-Hide Technical Department for other roof decks or non-standard roof decks.

Slope Requirement/Drainage

1. Positive drainage required (no ponding 48 hours after a rain)
2. 1/4" per horizontal foot preferred
3. 1/8" slope with sufficient number of drains and crickets/saddles may be considered

Construction Type

1. New Construction
2. Reroof - with full tear-off
3. Recover - all wet materials removed

Insulation/Overlayment - Mechanical Attachment into Standard Roof Decks*

	Board Size	
Insulation Type or Overlay	**4' x 4'**	**4' x 8'**
Approved Polyisocyanurate - Min 1.0" thick (top layer) - Min 20 psi	4	6
Extruded Polystyrene - Min 1.0" thick - Min 25 psi	4	6
HD Fiberboard - Min 1/2" thick- Installed over Approved Insulation	4	8
Dens Deck Prime - Min 1/4" thick - Installed over Approved Insulation	4	8

***NOTES:**

1. Gypsum board or suitable base sheet may be approved as needed to meet required fire code.
2. Consult Specification Manual for list of approved insulations for use under overlayment.
3. Contact Mule-Hide Technical Department for Polyisocyanurate less than 1.5" in thickness.
4. Certain codes may require additional fastening requirements.

MULE-HIDE PRODUCTS CO., INC.
10 or 15-Year Warranty Design Summary
With Standard 55-MPH Wind Speed Coverage
For Mechanically Attached PVC

Insulation/Overlayment - Adhesive Attachment

1. Insta-Stik by Dow Chemical Company - Other Manufactures may be considered, submit prior to bidding.

Metal Accessories

1. All Metal copings, gravel stops, fascia, and drip aprons must be installed according to Mule-Hide approved details.
2. Conventional metal edge details that require flanges to be 'stripped in' must be construction from PVC coated sheet metal and stripped in with PVC membrane. All seams are to be heat-welded.
3. All Metal Scuppers must have welded (soldered) seams.

Other Requirements

1. No 'As-Built' projects. All projects are to be reviewed and approved prior to installation.
2. Shop drawings must include all pertinent details.
3. Contact Mule-Hide Technical Department for specific code requirements such as Florida NOA, Factory Mutual (FM) or Underwriters Laboratory (UL).

Perimeter Half Sheets - Number Required

Building Height	Perimeter Sheets
0 to 69 feet	Minimum of two (2) perimeter sheets
Over 70 feet	Contact Mule-Hide Technical Department

Perimeter Half Sheets - Width

Width of Field Sheet	Width of Perimeter Sheets
81"	40.5"

NOTES:

1. **This is a summary of the Mule-Hide TPO Mechanically Attached System Specification, as written in the Mule-Hide PVC Specification Manual. Refer to Mule-Hide PVC Specification Manual for complete specification and details.**

2. **The information contained in this document is general information. Requirements may be different for each specific job based on the conditions of each building. Always contact Mule-Hide Technical Department to review the specific job conditions prior to bidding the project.**

MULE-HIDE PRODUCTS CO., INC
10 or 15 Year ***Premium*** Warranty Upgrade Requirements With Standard 55-MPH Wind Speed Coverage

ALL Systems

All products specified for this roofing system must be manufactured or approved by Mule-Hide Products Co. These are upgrades to Mule-Hide's Standard Specifications that are required for either a 10 or 15 Year *Premium* Warranty.

INSULATION/OVERLAYMENT

A 10 or 15 Year *Premium* Warranty requires the use of Mule-Hide Polyisocyanurate insulation.

Insulation Type or Overlay
Mule-Hide Polyisocyanurate (1) (2)
Approved Overlay - Installed over Mule-Hide Polyisocyanurate

NOTES:
1. Minimum 1" thickness for Ballasted or Mechanically Attached Systems.
2. Minimum 1.5" Thickness for Fully Adhered Systems.
3. Contractor to provide proof of purchase of Mule-Hide Insulation.

INSULATION ATTACHMENT

Mechanical Attachment - Must use Mule-Hide Insulation plates and fasteners. Fastener density and placement must be as per Mule-Hide Specifications and recommendations. Contact Mule-Hide Technical Department for job specific attachment requirements.

Insulation Adhesive - Insta-Stik by Dow Chemical Company - Warranty Application must include a copy of the manufacturer's letter of acceptance for the project, including application rates for that specific project. Other Manufactures may be considered, submit request prior to bidding.

SHEET METAL

If the perimeter sheet metal is to be included in the Mule-Hide Warranty, it must be Mule-Hide Metal Accessories purchased from Mule-Hide or Anchor-Tite as manufactured by Metal-Era. Contractor to submit proof of purchase of Mule-Hide Metal Accessories. Contractor to provide proof of purchase and copy of Metal-Era Warranty for project.

NOTES:

1. **This is a summary of the Mule-Hide upgrade requirements for a 10 or 15 year *Premium* Warranty. Refer to Mule-Hide's Specification Manuals for complete specification and details.**

2. **The information contained in this document is general information. Requirements may be different for each specific job based on the conditions of each building. Always contact Mule-Hide Technical Department to review the specific job conditions prior to bidding the project.**