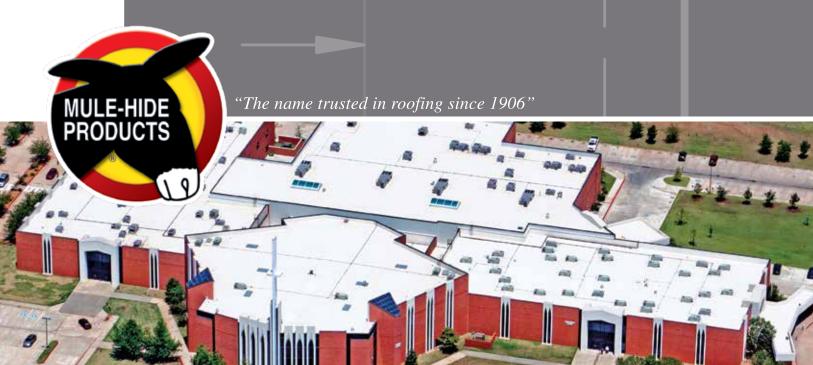
# HEAT-WELD ROOFING SYSTEM

FAQ'S & REFERENCE GUIDE

Frequently Asked Questions
Estimating Tips

Select-A-Membrane Chart

Adhesive Types & Uses



### **HEAT-WELD SYSTEM FAQ'S**

# WHAT HEAT WELDABLE MEMBRANES ARE AVAILABLE FROM MULE-HIDE?

Mule-Hide offers TPO, PVC and DecTec® Walkable PVC membranes.

## DOES THE CONTRACTOR NEED TO PROVIDE MATERIAL INVOICES ALONG WITH WARRANTY APPLICATIONS?

Specific warranties may require submision of material invoices.

# DOES MULE-HIDE REQUIRE A TOTAL TEAR-OFF FOR LABOR & MATERIAL ROOFING SYSTEM WARRANTIES?

No, this is not required, but all areas of wet insulation must be replaced with new, dry, similar material, specific warranties may require an independent moisture scan of the roof.

# DOES MULE-HIDE OFFER ANY PRE-JOB "WALK THE ROOF" OR JOB STARTS?

Yes, Mule-Hide Territory Managers offer these services.

# WHAT ARE THE WARRANTY FEES FOR HEAT-WELD ROOFING SYSTEMS?

Fees vary depending on the type of warranty desired. Current fees are listed on Mule-Hide Warranty Application Forms and on the website.

# DO I NEED WALK PADS FOR A LARGE COMMERCIAL ROOFING PROJECT?

Walk pads are always recommended. Mule-Hide offers walk pads for each system/membrane type we sell.

#### WHAT IF I NEED A SUBMITTAL PACKAGE?

Contact your ABC Sales Associate, Mule-Hide Territory Manager or go to www.mulehide.com and make a request online.



### WHAT IF I NEED TO PROVE MULE-HIDE TPO, PVC OR DECTEC® WALKABLE PVC MEETS A WRITTEN SPECIFICATION OR COMPLIES WITH A UL, FM OR OTHER CODE REQUIREMENT?

Just provide Mule-Hide with the following information:

- A copy of the specification
- Name & address to whom the letter should be addressed
- Your phone & fax number
- What is the UL/FM requirement?
- Deck type?
- Slope?
- Insulation type and thickness?
- Membrane and system?
- Building location and height?
- Overall dimensions?
- Parapet height?



### **ESTIMATING TIPS**



TPO ACCESSORIES	<b>COVERAGE RATES</b>			
Adhesives & Sealan	Adhesives & Sealants			
TPO Bonding Adhesive - 5 gal.	300 sq. ft. (2-sided)			
Low VOC Bonding Adhesive	60 sq. ft. per gal.			
Low VOC BOnding Adhesive-1168	60 sq. ft. per gal.			
Thermoplastic (1-Part) Pourable Sealer, four ½				
gal. pouches	122 cubic inches/pouch			
Universal Single-Ply Sealant	20 linear ft. per tube			
Water Cut-Off	20 linear ft. per tube			
WBBA 2000 (water based contact adhesive)	50-60 sq. ft. per gal.			
Seaming				
TPO Cut-Edge Sealant				
(white or clear), 8 pints per carton	200 linear ft. per pint			
Low-VOC EPDM Tape Primer - 1 gal.	250 sq. ft. per gal.			
Tape Primer - 1 gal.	200 square ft. per gal.			
Weathered Membrane Cleaner, 1 or 5 gal.	400 linear ft. per gal.			
Flashings				
TPO Flashing Strips, reinforced				
(.045", white, gray, tan)	6" x 100 ft.			
TPO Flashing Strips, non-reinforced				
(.060", white, gray, tan)	12" or 24" x 50 ft.			
TPO Cover Strip with Tape (white, gray, tan)	6" x 100 ft.			
TPO Molded Sealant Pockets	C" v 7 1/ " ovol			
(white, gray, tan), 100 per carton	6" x 7 ½" oval			
TPO Molded Sealant Pocket Extension Legs (white), 10/carton	10" long			
TPO Premolded Pipe Seal	6" x 10", 1 per			
(white, gray, tan), 8 per carton	penetration			
TPO Pressure Sensative Russ Strip with Tape	μ			
(white)	6" or 10" x 100 ft.			
	1", 2", 3", 4", 5" and 6"			
TPO Split Pipe Seals (white)	O.D. Pipe			
TPO Square Tubing Wrap	3", 4" and 6" x 11"			
TPO T-Joint Covers				
(white, gray, tan), 20 per carton, 4 1/2" circle	1 per T-Joint			
TPO Universal Corners				
(white, gray, tan) 20 per carton	1 per corner			
Fasteners				
2.4" Seam Plates	1,000 per pail			
3" Insulation Plates	1,000 per pail			
Drill Point Fasteners (for Insulation only) - #12	1,000/500 per pail*			
HDP Fasteners - #14	1,000/500/250 per pail*			
EHD Fasteners - #15	1,000/500/250 per pail*			
Pre-Assembled Fasteners - #12 w/insulation plate	250/200 per pail*			
*See price list for fastener length/QTY per pail				
Accessories				

See price list for lasterier length/Q11 per pair			
Accessories			
All-Purpose Bar	10 ft. long pieces		
HP Protective Mat	15' wide x 300' long		
Poly ISO 1 Roof Insulation - Flat	4' x 4' or 4' x 8' Sheets		
Poly ISO 1 Roof Insulation - Tapered	4' x 4' Sheets		
Poly ISO 2 Roof Insulation - Flat	4' x 4' or 4' x 8' Sheets		
Poly ISO 2 Roof Insulation - Tapered	4' x 4' Sheets		
Rubber Paver Blocks	24" wide x 24" long		
TPO Coated Metal (white, gray, tan), 10 or 25 per pallet	4' x 10"		
TPO Walkway Pads (white, gray, tan), 30" x 50' x 1/8" thick	125 sq. ft.		
Yellow Warning Strip	12" wide x 100' long roll		
DensDeck®	4' x 8' Sheets		
DensDeck® Prime	4' x 4' or 4' x 8' Sheets		
SECUROCK®	4' x 8' Sheets		

Adhesives & Sealants
Low VOC PVC Bonding Adhesive - 5 gal. 300 sq. ft. (2-sided)
Thermoplastic (1-Part) Pourable Sealer
four ½ gal. pouches 122 cubic inches/pouch
Universal Single-Ply Sealant 20 linear ft. per tube
Water Cut-Off 20 linear ft. per tube
WBBA 2000 (water based contact adhesive) 50-60 sq. ft. per gal.
Seaming
PVC Cut-Edge Sealant
(white or clear), 8 pints per carton 225 linear ft. per bottle
PVC Membrane Cleaner, 5 gal. 400 sq. ft. per gal.
Flashings
PVC Non-Reinforced Flashing (white, gray) 12" or 24" x 50 ft.
PVC Molded Sealant Pocket Extension
(white), 5/carton 10" long
6" x 10", 1 per PVC Pipe Seal, (white), 8 per carton penetration
PVC T-Joint Covers
(white, gray, tan), 20 per carton, 4 ½" circle 1 per T-Joint
PVC Universal Corners
(white, gray, tan) 20 per carton 1 per corner
Fasteners
2.4" Seam Plates 1,000 per pail
3" Insulation Plates 1,000 per pail
Drill Point Fasteners (for Insulation only) - #12 1,000/500 per pail*
HDP Fasteners - #14 1,000/500/250 per pail*
EHD Fasteners - #15 1,000/500/250 per pail*
Pre-Assembled Fasteners - #12 w/insulation plate 250/200 per pail*
*See price list for fastener length/QTY per pail
Accessories
All-Purpose Bar 10 ft. long pieces
HP Protective Mat 15' wide x 300' long
Poly ISO 1 Roof Insulation 4' x 4' or 4' x 8' Sheets
Poly ISO 2 Roof Insulation 4' x 4' or 4' x 8' Sheets
Rubber Paver Blocks 24" wide x 24" long
TPO Coated Metal
(white, gray, tan), 10 or 25 per pallet 4" x 10"
TPO Walkway Pads (white, gray, tan), 30" x 50' x 1/8" thick 125 sq. ft.
Yellow Warning Strip 12" wide x 100' long roll
DensDeck® 4' x 8' Sheets
SECUROCK® 4' x 8' Sheets

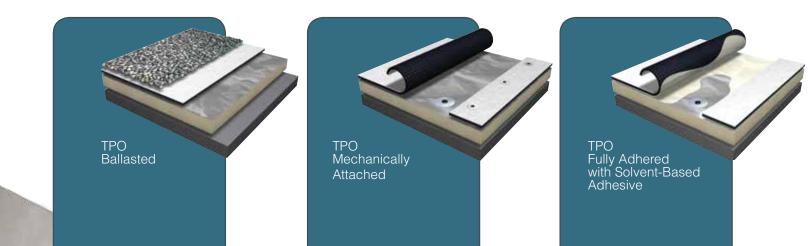
DECTEC® WALKABLE PVC	
MEMBRANE ACCESSORIES	COVERAGE RATES
WBA 100 Water Base Latex Adhesive (beige), 2.5 gal.	125 -175 sq. ft. per gal.
SBA 100 Solvent Base Adhesive (clear), 1 or 5 gal.	80 sq. ft. per gal.
Deck Patch in a 5 gal. pail (add water)	As needed
PVC Drain NDR 4-1 Universal Drain	1 per drain
PVC Drip, 2" x 1 ½" x ½" x ½" x 8'	200 linear ft. per tube
PVC Kickout, 3" x 1/2" x 1/2" x 8'	160 linear ft. per tube
PVC Corner (for inside corners under membrane)	1 per inside corner
PVC Flash, 4" (for 4" wood post & columns only)	2 per post
PVC Flash, 6"	
(for all flashings except 4" post requiring boot)	Varies with application
PVC Termination Bar (10' long pieces)	250 linear ft. per tube

### **SELECT-A-MEMBRANE GUIDE**

				_
Roofing System		<b>TPO-c Membrane</b> (White, Gray, Tan)		
		45 Mil	60 Mil	80 Mil
Mechanically Att	tached System - Requires approved : unlimited)	Recommended Recommended Optional		Optional
Fully Adhered Systems	<b>2-sided solvent based contact application</b> . Requires approved substrate. (Max. slope: unlimited)	TPO Bonding Adhesive or Low VOC Bonding Adhesive	TPO Bonding Adhesive or Low VOC Bonding Adhesive	TPO Bonding Adhesive or Low VOC Bonding Adhesive
	<b>2-sided water based contact application.</b> Requires approved substrate. (Max. slope: unlimited)	WBBA 2000 Adhesive	WBBA 2000 Adhesive	WBBA 2000 Adhesive
	<b>DecTec® System - Single-sided application.</b> Requires clean plywood subtrate.	N/A	N/A	N/A
	DecTec® System - 2-sided contact application. Requires clean concrete subtrate.	N/A	N/A	N/A

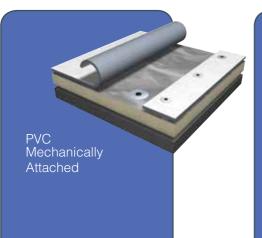
Features/Benefits				
		45 Mil	60 Mil	80 Mil
Durability		Good	Better	Best
Membrane Lifecycle		Better	Best	Best
Improved Energy Efficient building interior)	cy (Reflects sun, cools	Yes	Yes	Yes
<b>Energy Star Rated</b>		White/Tan Only	White/Tan Only	White/Tan Only
Affordability		Ecconomical	Moderate	Premium
Warranties	Material Only	15 yr Max	20 yr Max	30 yr Max
	Standard System			
	Premium System			

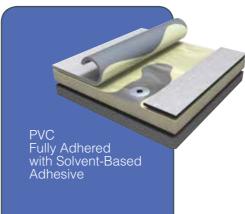
Refer to Mule-Hide UL & FM listed assemblies for all product specific information. Contact Mule-Hide Technical Support for additional information at 800-786-1492.



Membra	ane Type			
PVC Membrane (White, Gray, Tan)		DecTec® Walkable PVC Membrane (Brick, Bronze, Granite)		
50 Mil	60 mil	80 Mil	60 Mil	<b>80 Mil</b> (Bronze & Granite Only)
Recommended	Recommended	Optional	N/A	N/A
Low VOC PVC Bonding Adhesive	Low VOC PVC Bonding Adhesive	Low VOC PVC Bonding Adhesive	N/A	N/A
WBBA 2000 Adhesive	WBBA 2000 Adhesive	WBBA 2000 Adhesive	N/A	N/A
N/A	N/A	N/A	DecTec® WBA 100 Water Base Latex Adhesive	DecTec® WBA 100 Water Base Latex Adhesive
N/A	N/A	N/A	DecTec® SBA 100 Solvent Base Adhesive	DecTec® SBA 100 Solvent Base Adhesive

Membrane Selection Guide				
50 Mil	60 Mil	80 Mil	60 Mil	80 Mil
Good	Better	Best	Better	Best
Better	Best	Best	Better	Best
Yes	Yes	Yes	Yes (Cool Step Only)	Yes (Cool Step Only)
White Only	White Only	White Only	N/A	N/A
Moderate	Premium	Premium	Premium	Premium
15 yr max	20 yr max	20 yr max	10 yr max	15 yr max
			N/A	N/A
			N/A	N/A







### **ADHESIVES TYPES & USES**

#### WATER BASED ADHESIVES

WBBA 2000 Bonding Adhesive is a two-sided water based bonding adhesive used to adhere EPDM, TPO and PVC membranes to approved surfaces. WBBA 2000 may be used as a one-sided, wet lay-in adhesive with Mule-Hide Fleece Backed membranes. Low temperature restrictions apply to this product.

DecTec® WBA 100 Water Base Latex Adhesive (beige) to fully adhere DecTec® Walkable PVC to plywood surfaces only (must be a clean porous surface, not for use in temperatures under 50° F). Single-side application by trowel on the plywood substrate only. Requires 4 to 6 hours to set. Not for use on vertical surfaces.

### **SOLVENT BASED ADHESIVES**

<u>TPO Bonding Adhesive (amber)</u> is a solvent based contact adhesive used to adhere TPO membranes and flashing materials to acceptable horizontal and vertical surfaces.

Low VOC Bonding Adhesive is a high strength solvent-based contact adhesive that allows bonding of EPDM and TPO membrane to various porous and non-porous substrates. It is specially formulated using a blend of VOC exempt and non-exempt solvents to be meet the < 250 g/l VOC content requirements of the OTC Model Rule for Single Ply Roofing Adhesives.

DecTec® SBA 100 Solvent Base Adhesive (clear) to adhere DecTec® Walkable PVC to concrete or other non-porous substrates-horizontal or vertical surfaces (not for use in temperatures lower than 34° F). Also works well on clean metal and flashings. Two-sided application by trowel or medium nap roller to both surfaces—back of membrane sheet & substrate.



















Contact Mule-Hide Products for specific product approvals and ratings. Featured industry association/organization logos are U.S. registered trademarks. Mule-Hide is an AIA registered CES provider. Energy Star is only valid in the United States for Roofing Products.

"The name trusted in roofing since 1906"

### Customer Line: 800-786-1492 • www.mulehide.com

Check our website monthly for the latest updates & technical bulletins.

National Support Center • 1195 Prince Hall Drive • Beloit, WI 53511 • tel. 608.365.3111 • fax. 608.365.7852

MULE-HIDE PRODUCTS The information herein should not be considered all-inclusive and should always be accompanied by a review of the Mule-Hide specifications and guidelines and good application practices.

This information herein is based upon data and knowledge considered to be true and accurate at the time of printing and is provided for the reader's consideration, investigation and verification. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Mule-Hide Products Co., Inc. does not warrant any results to be obtained. Statements concerning possible use of Mule-Hide products are made without knowledge of your particular roof and such an application may not be fit for your particular purpose. MULE-HIDE DISCLAIMS ALL WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, except written warranties attached to Mule-Hide products and written warranties signed by an officer of Mule-Hide.

Visit the Mule-Hide website at www.mulehide.com prior to any installation for updated technical specifications and details.

Mule-Hide is a U.S. registered trademark. DensDeck is wholly owned registered trademark of Georgia-Pacific Gypsum LLC/Georgia-Pacific Wood Products LLC. SECUROCK is wholly owned registered trademark of USG Corporation. DecTec® is the wholly owned registered trademark of Skyline Building Systems Inc., used under license. All rights reserved.