Pacific
Roofing
Company

August 14, 2013

Pactrust

Attn: John
Re: Kelly Goodwin

The following are our submittals for the single ply roofing on this project

Manufacturer Mule-Hide
-Remove existing roofing to substrate
-Install a ¼ inch Securock with long joints continuous
and end joints staggered at least 12 inches
- Attach the Securock in adhesive
-Fully adhere a Mule-Hide .060 TPO sheet in accordance with Mule-Hide Specification
-Install Mule-hide Universal inside and outside corners
-Clean up and haul away all roofing debris.

Upon completion we will give a 2 yr labor and material warranty

If you should have any questions, Please feel free to call.

Respectfully,

Guy Belt
President

P.O. BOX 1728 • BEAVERTON, OR 97075 • (503) 647-2894 • FAX 647-7415
CCB# 41571

JM® SECUROCK® Gypsum-Fiber Roof Board

Gypsum and Cellulose Fiber Cover Board

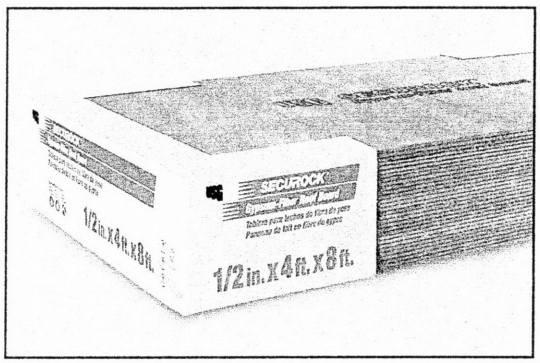
Meets the requirements of ASTM C 1278

Features

Strength: Engineered to provide high wind-uplift performance. Uniform composition provides enhanced bond strength of membrane systems with no risk of facer delamination.

Fire Performance: Provides excellent fire performance, and demonstrates exceptional surface burning characteristics. The 5/8" thickness meets the requirements of Type X per ASTM C 1177.

Moisture and Mold Resistance: Integral water-resistant core scored a maximum "10" for mold resistance when tested per ASTM D 3273.



Component
B
Cover Board
Multi-Ply

Type
GY
Gypsum
LT
Low Thermal

System Compatibility *Please refer to the specific JM Specification sheets for details.*

Multi-Ply	BUR		APP		SBS			
	HA	CA	CA	HW	HA	CA	HW	SA
	Compatible with all Multi-Ply systems							

Single Ply	TPO		PVC		EPDM	
	MF	FA	MF	FA	MF	FA
	Compatible with the selected Single Ply systems above					

Key: **HA** = Hot Applied **CA** = Cold Applied **HW** = Heat Weldable **SA** = Self Adhered **MF** = Mechanically Fastened **FA** = Fully Adhered **BA** = Ballasted

Energy and the Environment

LEED®	Recycled Content	Pre-Consumer: 95% (SCS Certified)

Peak Advantage® Guarantee Information

Systems	Guarantee Term*
When used in most 2-5 ply multi-ply or single ply systems	10, 15 or 20 years

* Contact JM Technical Services for specific systems or terms over 20 years.

Codes and Approvals

CLASSIFIED C UL US

FM APPROVED

MIAMI-DADE COUNTY APPROVED
Miami-Dade County Product Control Approved

Installation/Application

Cold Applied | Urethane Adhesive | Mechanically Fastened

Refer to the Application Guides and Detail Drawings for instructions.

Packaging and Dimensions

Sizes	4' x 4' (1.22 m x 1.22 m) 4' x 8' (1.22 m x 2.44 m)			
Thickness (nom)	¼" (6.35 mm)	⅜" (9.5 mm)	½" (12.7 mm)	⅝" (15.9 mm)
Weight/Board 4' x 8' boards	50 lbs (22.68 kg)	65 lbs (29.48 kg)	78 lbs (35.38 kg)	100 lbs (45.36 kg)
Coverage/Pallet 4' x 8' boards	1,600 ft² (148.7 m²)	1,280 ft² (118.9 m²)	960 ft² (89.2 m²)	768 ft² (71.4 m²)
Boards/Pallet 4' x 8' boards	50	40	30	24
Pallet Weight 4' x 8' boards	2,375 lb (1,077.3 kg)	2,595 lb (1,177.1 kg)	2,445 lb (1,109.0 kg)	2,432 lb (1,103.1 kg)
Pallets per Truck*	17	17	18	18
Producing Locations	Gypsum, OH			

* Assumes 48' flatbed truck.

Refer to the Material Safety Data Sheet and product label prior to using this product.

JM® SECUROCK® Gypsum-Fiber Roof Board

Gypsum and Cellulose Fiber Cover Board

Meets the requirements of ASTM C 1278

Typical Physical Properties

	Test	ASTM	JM SECUROCK Gypsum-Fiber Roof Board			
			¼" (6.35 mm)	⅜" (9.5 mm)	½" (12.7 mm)	⅝" (15.9 mm)
Strength	Compressive Strength, psi (kPa) *(nom.)*	C 1278	1,250 (8618.4)	1,000 (6894.8)	500 (3447.4)	500 (3447.4)
	Flexural Strength, parallel *(min.)*	C 473	40 lb	70 lb	110 lb	161 lb
	Bending Radius, ft (m)	NA	25 (7.62)	25 (7.62)	25 (7.62)	30 (9.14)
Moisture	Moisture Vapor Permeance, perms (ng/(Pa•s•m²)	E 96	30 (1,716)	26 (1,487.2)	26 (1,487.2)	24 (1,372.8)
	Water Absorption, % *(max).*	C 473	10			
	Surface Water Absorption, g *(nom.)*	C 473	1.6			
	Mold Resistance	D 3273	10			
Installation	Flute Spannability, in. (cm)	E 661	2 5/8 (6.67)	5 (12.7)	8 (20.32)	8 (20.32)
	Weight, lb/ft² (kg/m²) *(nom.)*	NA	1.43 (6.98)	1.97 (9.62)	2.47 (12.06)	3.06 (14.94)
	Linear variation with change in moisture, in/in • %RH	D 1037	8×10^{-6}			
	Coefficient of Thermal Expansion, in./in. • °F	E 831	8×10^{-6}			

Thermal Performance

Thickness		Nominal R-Value (Resistance)	
in.	mm	(hr•ft²•°F)/BTU	m²•°C/W
¼	6.35	0.2	0.04
⅜	9.5	0.3	0.05
½	12.7	0.5	0.09
⅝	15.9	0.6	0.11

Test	ASTM	JM SECUROCK Gypsum-Fiber Board
Flame Spread	E 84	5
Smoke Developed	E 84	0

Refer to the Material Safety Data Sheet and product label prior to using this product.

MULE-HIDE TPO-c MEMBRANE
(Standard and FR)

PRODUCT DESCRIPTION

Mule-Hide's TPO-c Membrane is a polyester reinforced, .045" or .060 thick, polyolefin based, thermoplastic, heat-weldable membrane. The Mule-Hide TPO-c membrane is also available in thicknesses of .072" and .080" (see TPO-c EXTRA). It is used in mechanically attached and fully adhered roofing assemblies. It may also be used as flexible membrane flashings for walls, curbs, etc, when installing TPO-c membrane roofing systems.

BASIC USES

The TPO-c membrane is used in mechanically attached and fully adhered roofing systems in new construction, reroofing and recover (retrofit) applications. The system must be installed over an acceptable roof insulation or other suitable substrate. See the Mule-Hide TPO Specifications Manual for complete specifications and details.

SPECIFICATIONS

Colors: White top/Black bottom (Standard)
(Special Order Top Colors) Tan and Gray.
Material: .045-inch and .060-inch (nominal) thick polyester reinforced thermoplastic
Sizes: Field Sheet – 8', 10' and 12' by 100'
Perimeter Sheet – 4' , 5' and 6' by 100'

Physical Properties	Test Method	Typical Values Unaged Sheet	Property after ASTM D-573 aging[1] 28 days @ 240°F
Thickness Tolerance on nominal, %	ASTM D-751	±10	
Thickness over scrim, in. (mm) 45 – mil 60 – mil	ASTM D-6878 Optical Method (avg. of 3 areas)	 0.015 (0.381) ±10% 0.020 (0.508) ±10%	
Breaking Strength, lbf (kN)	ASTM D-751 (Grab Method)	225 (1.0) min. 45-mil 320 (1.5) typical 45-mil 250 (1.1) min. 60-mil 360 (1.6) min. 60-mil	225 (1.0) min. 320 (1.5) typical 250 (1.1) min. 60-mil 360 (1.6) 60-mil
Elongation at break of fabric	ASTM D-751	25 typical	25 typical
Tear Strength, lbf (N) 8 by 8 in. specimen	ASTM D-751 (B Tongue Tear)	55 (245) min. 130 (578) typical	55 (245) min. 130 (578) typical
Brittleness point, F° (C°)	ASTM D-2137	-40 (-40) max. -50 (-46) typical	
Linear Dimensional Change (shrinkage), % after 6 hours@158° F (70° C)	ASTM D-1204	+/- 0.5 max - 0.2 typical	
Ozone resistance, 100 pphm, 168 hours	ASTM D-1149	No cracks	No cracks
Resistance to water absorption After 7 days immersion 158°F (70°C) Change in mass, %	ASTM D-471	4.0 max. 2.0 typical	
Resistance to microbial surface growth, rating (1 is very poor, 10 is no growth)	ASTM D-3274 2-yr s. Florida	9-10 typical	
Field seam strength, lbf/in. (kN/m) Seams tested in peel	ASTM D-1876	25 (4.4) min. 60 (10.5) typical	
Water vapor permeance, Perms	ASTM E-96	0.10 max. 0.05 typical	
Water Absorption	ASTM D-471 @ 158°F, 1 week	0.7%	
Puncture resistance, lbf (N)	FTM 101C Method 2031	250 (1.1) min. 45-mil 325 (1.4) typical 45-mil 300 (1.3) min. 60-mil 350 (1.6) typical 60-mil	
Resistance to xenon-arc weatherhing[2] Xenon-Arc, 17,640 kj/m^2 total radiant exposure, visual condition at 10X	ASTM G-155 0.70 W/m^2 80°C B.P.T.	No cracks No loss of breaking or tearing strength	

[1] Aging conditions are 28 days at 240°F (116° C) equivalent to 400 days at 176°F (80°C) for breaking strength, elongation, tear strength, ozone and puncture resistance

[2] Approximately equivalent to 14,000 hour exposure at 0.35 W/m^2 irradiance B.P.T. is black panel temperature

Form # PDS-TPO-01
Date 05/01/2008

MULE-HIDE PRODUCTS CO., INC.
P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

PRODUCT DATA SHEET

MULE-HIDE TPO-c MEMBRANE
(Standard and FR)

SYSTEM BENEFITS

- Wide window of weldability
- Outstanding puncture resistance
- Chlorine-free with no halogenated flame retardants
- Excellent low temperature impact resistance
- Excellent chemical resistance to acids, bases, restaurant oils and greases
- Plasticizer-free, does not contain liquid or polymeric plasticizer
- Exceptional resistance to solar UV, ozone and oxidation
- Low vapor permeance and water absorption
- Polyester reinforcing fabric which is resistant to degradation by bacteria, mildew and fungi
- TPO-c is 100% recyclable

CODE APROVALS

FM Class 1-90 and UL Class A classifications available. Contact Mule-Hide for other available rated assemblies.

INSTALLATION INSTRUCTIONS

(1) Approved insulation shall be mechanically attached with its largest dimensions perpendicular to the direction of the membrane seams where possible. (2) For mechanically attached systems, perimeter sheets will be installed in an approved pattern along all exterior roof edges. (2.a.) Mechanical fasteners and plates are installed in the seams of both the perimeter sheets and field sheets, insulation and into the roof deck. Minimum penetrations for various decks are: metal - 1/2", wood - 1-1/2" and concrete - 1-1/4" to 1-1/2". Contact Mule-Hide for application over deck types not listed. (3) For fully adhered systems, perimeter sheets are not required. (3.a.) The membrane is required to be mechanically attached only at the base of all vertical surfaces, roof edges, and angle changes. (3.b.) The field of the roof is fully adhered to the substrate with Mule-Hide TPO Bonding Adhesive. (4) For hot air welding, the membrane shall be overlapped over the fasteners and hot air welded. All welded seams must be probed. (5) All details will be done in accordance with Mule-Hide details. (6) On projects where a Mule-Hide Standard or Premium Warranty is requested, an authorized Mule-Hide representative shall inspect all completed work. This is only a brief summary and not the complete specification. The Mule-Hide TPO Specifications, Details, Technical Bulletins, associated documents should be thoroughly reviewed prior to starting any project.

SUPPLEMENTAL APPROVALS, STATEMENTS AND CHARACTISTICS:

1) TPO-c meets and exceeds the requirements of **ASTM D6878**[1] Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing

2) **Radiative Properties** for ENERGY STAR®, Cool Roof Rating Council (CRRC) and LEED™

	TEST METHOD	WHITE TPO-c	TAN TPO-c	GRAY TPO-c
ENERGY STAR® initial solar reflectance	Solar Spectrum Reflectometer	0.87	0.68	N/A
ENERGY STAR® solar reflectance after 3 years	Solar Spectrum Reflectometer (after cleaning)	0.83	0.64	N/A
CRRC initial solar reflectance	ASTM C1549	0.79	0.66	0.26
CRRC solar reflectance after 3 years	ASTM C1549 (uncleaned)	Pending	Pending	Pending
CRRC initial thermal emittance	ASTMC1371	0.90	0.89	.089
CRRC thermal emittance after 3 years	ASTM C1371 (uncleaned)	Pending	Pending	Pending
LEED™ thermal emittance	ASTM E408	0.95	0.95	.095
SRI (Solar Reflectance Index)	ASTM E1980	110	88	55

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MULE-HIDE TPO-c MEMBRANE
(Standard and FR)

An ENERGY STAR qualified low slop roof product must have an initial solar reflectance of at least 0.65 and a 3-year aged solar reflectance of at least 0.50. Cleaning the aged roof surface is permitted by the ENERGY STAR test protocol.

The Cool Roof Rating Council (CRRC) does not specify minimums for reflectance or emittance but they do require specific protocols for testing and reporting. Cleaning of the aged roof surface is not permitted for determination of radiative properties after 3 years.

A LEED "point" may be earned if a roof material is ENERGY STAR qualified and has a thermal emittance of at least 0.90 as determined by ASTM E408.

Solar Reflectance Index (SRI) is calculated per ASTM E 1980. The SRI is a measure of the roof's ability to reject solar heat, as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is 0 and a standard white (reflectance 0.80, emittance 0.90) is 100. Materials with the highest SRI values are the coolest choices for roofing. Due to the way SRI is defined, particularly hot materials can even take slightly negative values, and particularly cool materials can even exceed 100.

3) TPO-c membranes conform to requirements of the U.S.E.P.A. Toxic Leachate Test (40 CFR part 136) performed by an independent analytical laboratory.

4) TPO-c was tested for dynamic puncture resistance per ASTM D5635-04 using the most recently modified impact head. 45-mil was watertight after an impact energy of 12.5 J (9.2 ft-lbf) and 60-mil was watertight after 22.5 J (16.6 ft-lbf)

CUSTOMER SERVICES

Contact Mule-Hide Products Co., Inc. at 800/786-1492 for additional information.

DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not make nor does it authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Mule-Hide's physical properties. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury of person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the complaint or failure before repairs are made.

MULE-HIDE PRODUCTS CO., INC.
P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

PRODUCT DATA SHEET

MULE-HIDE TPO FLASHING (.060 NON-REINFORCED)

PRODUCT DESCRIPTION

Mule-Hide TPO Flashing is a .060" (60 mil) thick (nominal), non-reinforced TPO (polyolefin-based) membrane.

BASIC USES

The Mule-Hide TPO Flashing is primarily used to seal details where field fabrication is necessary, such as drain details, pipe flashings, pitch pocket flashings, seaming joints of the Mule-Hide TPO Coated Metal, and any place where reinforced membrane is not practical.

SPECIFICATIONS

Colors:	(Standard) White (Special Colors) Gray and Tan
Thickness:	.060-inch (nominal, +/- 10%) thick (60 mil) membrane
Size:	12" or 24" wide by 50' long

TYPICAL PROPERTIES AND CHARACTERISTICS:

Properties	ASTM Test Method	Specification
Tolerance on nominal thickness, %	D 412	+15 / -10
Weight, lb/ft^2 (kg/m^2), typical		0.30 (1.5)
Tensile strength, min., psi (Mpa)	D 412 Die C	1500 (10.3)
Elongation, ultimate, min., %	D 412 Die C	500
Tear strength, min., lbf/in (kN/m)	D 624 Die C	300 (52.3)
Ozone resistance, 168h @ 100 pphm, 50% ext	D 1149	No Cracks
Heat aging: 28 days at 240°F (116°C)	D 573	
Tensile strength, min., psi (MPa)	D 412	1400 (9.7)
Elongation, ultimate, min., %	D 412	400
Tear strength, min., lbf/in (kN/m)	D 624	250 (43.8)
Linear dimensional change, max., %	D 1204	±4
Resistance to Xenon-arc weathering	G 26	No Cracks
Xenon-Arc, 5040 kJ/m^2 total radiant	0.70 W/m^2	
Exposure, visual condition at 10X	80°C B.P.T.	

PACKAGING AND STORAGE

Mule-Hide TPO Flashing should be stored in a clean, dry area and protected from extreme temperatures.

INSTALLATION INSTRUCTIONS

Mule-Hide TPO Flashing shall be installed by heat welding. Refer to Mule-Hide Details published in the Mule-Hide Thermoplastic Specification Manual for specific uses.

PRECAUTIONS

Do not overheat membrane when welding with hot air tools.

Form # PDS-TPO-10
Date 01/01/2006

MULE-HIDE PRODUCTS CO., INC.
P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

PRODUCT DATA SHEET

MULE-HIDE TPO UNIVERSAL CORNERS

PRODUCT DESCRIPTION

Mule-Hide TPO Universal Corners are pre-molded from non-reinforced TPO (polyolefin) membrane.

BASIC USES

They are uniform in shape and size and provide water tightness at corners formed by TPO coated metal and flashing membrane. They provide a neat, finished look to building corners, curbs and parapet flashings with no cutting or stretching required.

SPECIFICATIONS

Colors:	White, Gray, Tan (special order)
Thickness:	.060" (1.52mm) thick molded material

PACKAGING AND STORAGE

Corners should be stored in a clean, dry area and protected from extreme temperatures.

INSTALLATION INSTRUCTIONS

Mule-Hide TPO Universal Corners must be installed by heat welding. Refer to Mule-Hide Details published in the Mule-Hide TPO Specification Manual.

PRECAUTIONS

Do not overheat membrane when using hot air tools to weld corners. Do not use adhesive to install. TPO Universal Corners or TPO-c membrane that has been exposed to the weather for approximately 7 days or longer prior to use must be prepared with Weathered Membrane Cleaner prior to hot air welding.

TECHNICAL SERVICES

Contact Mule-Hide Products Co., Inc. at 608/365-3111 for technical service information.

DISCLAIMER

Form # PDS-TPO-08
Date 01/01/2006

MULE-HIDE PRODUCTS CO., INC.
P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

PRODUCT DATA SHEET

MULE-HIDE TPO BONDING ADHESIVE

PRODUCT DESCRIPTION

Mule-Hide TPO Bonding Adhesive is a high strength solvent-based contact adhesive that allows bonding of Mule-Hide membrane to various porous and non-porous substrates.

PRODUCT BENEFITS

- Fast drying
- Excellent heat resistance
- Brushes or roller coats easily over a wide application temperature range
- Long open tack time
- Excellent green strength

SPECIFICATIONS

Color	Yellow
Flash Point	-4 degrees F (-20 degrees C) Closed Cup
Estimated Coverage	60 ft^2 (5.6 square m) per gallon finished surface. Coverage rates are average and may vary due to conditions on the job site. Porous surfaces and substrates may require more bonding adhesive than the typical coverage rate.
Packaging	5 Gallon Pail
Shelf Life	1 Year
Avg. Net Weight	7.4 lbs./Gal (3.2 Kg)

PACKAGING AND STORAGE

DOT Label Required: Flammable Liquid

Mule-Hide TPO Bonding Adhesive should be stored in a closed container between 60°F and 80°F for no lon ger than one year. Rotate stock.

INSTALLATION INSTRUCTIONS

Read instruction information on label prior to use. Materials to be bonded should be clean, dry, and free from contaminates. Stir adhesive thoroughly before use. Apply adhesive by roller to the substrate and membrane at the specified coverage rate. Allow to dry 15 to 30 minutes (but still tacky) before assembly. Mate with adequate pressure to ensure contact of all bonding areas. See Mule-Hide TPO Specifications Manual for additional application procedures.

CAUTIONS AND WARNINGS

1. Review the applicable Material Safety Data Sheet for complete safety information prior to use.
2. Mule-Hide TPO Bonding Adhesive is **EXTREMELY FLAMMABLE** – It contains solvents that are dangerous fire and explosion hazards when exposed to heat, flame or sparks. Do not smoke while applying. Do not use in a confined or unventilated area. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flashback. All containers should be grounded when material is transferred from one container to another. A red caution label is required when shipping. A fire extinguisher should be available. In case of fire, use water spray, foam, dry chemical or carbon dioxide. Do not use a solid stream of water because it can scatter and spread the fire.
3. Avoid breathing vapors. Keep container closed when not in use. Use with adequate ventilation. If inhaled, remove to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately. During application, efforts must be made to prevent fumes from entering the building via air ventilation ducts. Do not place open containers or mix adhesive near fresh air intake units. When possible, shut down or seal off the closest units.
4. If swallowed, **DO NOT INDUCE VOMITING.** Call a physician immediately.
5. Avoid contact with eyes. Safety glasses or goggles are recommended. If splashed in eyes, immediately flush eyes with plenty of clean water for at least 15 minutes. Contact a physician immediately.
6. Avoid contact with skin. Wash hands thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water. Contact physician if irritation persists.

Note: Solvent resistant gloves are recommended to be worn when using this product to protect hands from irritating ingredients.

Form # PDS-TPO-16
Date 01/01/2006

MULE-HIDE PRODUCTS CO., INC.
P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

MULE-HIDE TPO BONDING ADHESIVE

7. **Do not thin TPO Bonding Adhesive.** Thinning will affect performance. Excessively thick or gelled material should be discarded.
8. Job site storage in excess of 90℉ (32℃) may a ffect product shelf life. Should the TPO Bonding Adhesive be stored at temperatures lower than 60℉ (15℃), restore to room temperature prior to use.
9. Opened containers of TPO Bonding Adhesive should be used within 48 hours. Adhesives will begin to thicken after this point, making it difficult, and eventually impossible, to control applied thickness. In hot weather, do not leave sealed containers on roof for prolonged periods of time. In cold weather, keep material at room temperature until ready to use. Stir adhesive occasionally while using.
10. **Adhesive must be allowed to dry thoroughly.** If membrane is mated with the substrate prior to the adhesive being dry, blistering will occur and not subside over time.
11. **KEEP OUT OF THE REACH OF CHILDREN.**

MIXING:

Stir thoroughly until all settled pigments are dispersed and the adhesive is uniform in color. Minimum 5 minutes stirring is recommended.

TECHNICAL SERVICES

Contact Mule-Hide Products Co., Inc. at 608/365-3111 for technical service information.

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P.O. Box 1057, Beloit, WI 53512-1057 • 608/365-3111 • Fax: 608/365-7852

Class A – Fully Adhered (Continued)

80. **Deck:** NC **Incline:** 2-1/2 **Impact:** 2
Insulation (Optional): — Any UL Classified, any combination, any thickness.
Barrier Board: — 1/2 in. min gypsum board.
Membrane: — "72 mil Mule-Hide TPO-c Extra" or "80 mil Mule-Hide TPO-c Extra", fully adhered with "Mule-Hide TPO-c Bonding Adhesive" at 1-1/3 gal/sq.

81. **Deck:** C-15/32 **Incline:** Unlimited
Slip Sheet: — Three layers Elk " VersaShield Underlayment" or "VersaShield FB-2S".
Insulation: — Any UL Classified (except EPS or fiberboard), any combination, any thickness.
Membrane: — "Mule-Hide TPO-c (FR)" membrane, fully adhered with "Mule-Hide TPO-c Bonding Adhesive" at 1-1/3 gal/sq.

82. **Deck:** NC **Incline:** 3/8
Insulation: — Atlas Roofing "ACFoam II" or "ACFoam III", Dow "Hy-Therm AP", Hunter Panels "H-Shield", Johns Manville "ENRGY-3", Firestone Building Products "ISO 95+GL", "GW" or "HF", Rmax Inc. "Multi-Max-3", any combination, any thickness.
Membrane: — "Mule-Hide TPO-c" or "Mule-Hide TPO-c Extra", fully adhered with "WBBA 2000 Bonding Adhesive", at 120 ft^2/gal.

83. **Deck:** NC **Incline:** 1/2
Insulation: — Atlas Roofing "ACFoam II" or "ACFoam III", Dow "Hy-Therm AP", Hunter Panels "H-Shield", Johns Manville "ENRGY-3", Firestone Building Products "ISO 95+GL", "GW" or "HF", Rmax Inc. "Multi-Max-3", any combination, any thickness.
Membrane: — "Mule-Hide TPO-c (FR)" or "Mule-Hide TPO-c Extra (FR)", fully adhered with "WBBA 2000 Bonding Adhesive", at 120 ft^2/gal.

84. **Deck:** NC **Incline:** 1/2
Insulation: — Any UL Classified wood fiberboard; Johns Manville "ENRGY 3 Plus" (composite) insulation; cellular concrete, precast concrete with grouted joints or structural (poured-in-place) concrete.
Membrane: — "Mule-Hide TPO-c" or "Mule-Hide TPO-c Extra", fully adhered with "WBBA 2000 Bonding Adhesive", at 120 ft^2/ gal.

85. **Deck:** NC **Incline:** 1
Insulation: — Any UL Classified wood fiberboard; Johns Manville "ENRGY 3 Plus" (composite) insulation; cellular concrete, precast concrete with grouted joints or structural (poured-in-place) concrete.
Membrane: — "Mule-Hide TPO-c (FR)" or Mule-Hide TPO-c Extra (FR)", fully adhered with "WBBA 2000 Bonding Adhesive", at 120 ft^2/gal.

86. **Deck:** NC **Incline:** 1
Insulation (Optional): — Any UL Classified, any combination, any thickness.
Barrier Board: — 1/2 in. min gypsum board or 1/4 in. thick G-P Gypsum DensDeck®.
Membrane: — "Mule-Hide TPO-c", "Mule-Hide TPO-c Extra", "Mule-Hide TPO-c (FR)" or "Mule-Hide TPO-c Extra (FR)", fully adhered with "WBBA 2000 Bonding Adhesive" at 120 ft^2/gal.

624-6300

(7)

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CITY OF PORTLAND, OREGON - BUREAU OF DEVELOPMENT SERVICES

1900 SW Fourth Avenue, Suite 5000 • Portland, Oregon 97201 • www.portlandonline.com/bds • Fax 503-823-7425

Facility Permit Plan Intake Form

FOR INTAKE, STAFF USE ONLY		Building/Mechanical	SCOTT 1
Date Received		Electrical	
Building Registration #	02-143508-RC	Plumbing	
Fixed Bid		Fire	JERRY 3
Bin #	B-2	Planning	ERIKA 2
Building Permit #	13-194658-FA	BES	
Mechanical #		PDOT	
Plumbing Permit #		Structural	
Electrical Permit #		Other	

APPLICANT: Complete all sections below that apply to the project. Please print legibly.

Print Name Guy Belt Sign Name Guy Belt

Street Address PO Box 1728

City Beaverton State OR Zip Code 97075

Day Phone 503-647-2894 FAX 503-647-7415 email PRC97075@AOL.COM

Plans / permits available for pick up at 1900 SW 4th Avenue, 2nd floor between 8:00 am to 5:00 pm

Contact Name for plan/permit pick up Guy Belt

Day Phone 503-647-2894 email PRC97075@AOL.COM

Project Building Name / # Kelly Goodwin

Project Address or Location 4330 NW Yeon Port OR 97210

Project Name and Description Kelly Goodwin Re Roof & Tear off

Total Project Value $28,600 Project Reference #/Billing ID # RE-ROOF-GLIP102

Building Contractor Pacific Roofing CCB # 41571

MechanicalContractor CCB #

Electrical Contractor CCB# License #

Plumbing Contractor CCB# License #

☐ **Building Permit**

No. of Stories

Const. Type

[Y] [N] Alarms Required

[Y] [N] Smoke Det. Req'd

[Y] [N] Sprinklers Req'd

[Y] [N] Struct. Eng / Calcs Submitted

☐ **Electrical Permit**

Please provide a completed standard electrical permit application form. You may mail or deliver it to 1900 SW 4th Avenue, Portland, Oregon 97201 or FAX to 503-823-7425.

☐ **Mechanical Permit**

Mechanical Valuation

Description

☐ **Plumbing Permit**

Number of Fixtures

Back Flow Devices

Water Service (# of Feet)

Medical Gas

Other

City of Portland
REVIEWED FOR CODE COMPLIANCE
AUG 30 2013
13-194658-FA
Permit Number

13-194658-FA

B-2