



NEMO|etc.

Certificate of Authorization #32455
353 Christian Street, Unit #13
Oxford, CT 06478
(203) 262-9245

ENGINEER

EVALUATE

TEST

CONSULT

EVALUATION REPORT

Mule-Hide Products Co., Inc.
1195 Prince Hall Dr
Beloit, WI 53511
(608) 365-3111

Evaluation Report 10570.12.15-R3
FL19566-R3
Date of Issuance: 12/16/2015
Revision 3: 10/05/2020

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **7th Edition (2020) Florida Building Code, High Velocity Hurricane Zone (HVHZ)** sections noted herein.

DESCRIPTION: Mule-Hide EPDM Single Ply Roof Systems

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

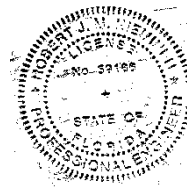
CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 4, plus a 24-page Appendix.

Prepared by:



Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 10/05/2020. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING SYSTEMS EVALUATION:
1. SCOPE:

Product Category: Roofing
Sub-Category: Single Ply Roof Systems
Material: EPDM

Compliance Statement: Mule-Hide EPDM Single Ply Roof Systems, as produced by Mule-Hide Products Co., Inc., have demonstrated compliance with the following sections of the **7th Edition (2020) Florida Building Code, High Velocity Hurricane Zone (HVHZ)** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
TAS 110	Resistance to Foot Traffic	TAS 114, Section 8.9	2011
TAS 110	Wind resistance	TAS 114, Appendix C, D or J	2011
TAS 110	Susceptibility Hail Damage	TAS 114, Appendix F	2011
TAS 110	Susceptibility to Leakage	TAS 114, Appendix G	2011
TAS 110	Material standard	ASTM D4637	2014

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
NEMO	Evaluation Report	C42330.06.13-3-R4	08/12/2020
FM Approvals (TST1867)	FM 4470 / TAS 114	3057831	02/22/2017
FM Approvals (TST1867)	FM 4470 / TAS 114	RR209155	04/03/2017
PRI (TST5878)	FM 4470 / TAS 114	CST-016-02-01	05/18/2011
UL LLC (TST9628)	Wind Uplift	03CA16620	12/05/2003
UL LLC (TST9628)	Wind Uplift	11CA16620	08/12/2013
UL, LLC (QUA9625)	Quality Control	ML R13850	09/27/2007
UL, LLC (QUA9625)	Quality Control	Service Confirmation	12/14/2018
UL, LLC (QUA9625)	Quality Control	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

This Evaluation Report covers **Mule-Hide EPDM Single Ply Roof Systems** installed in accordance with **Mule-Hide Products Co., Inc.** published installation instructions and the Limitations / Conditions of Use herein.

TABLE 1: MEMBRANES FOR EPDM SINGLE PLY ROOF SYSTEMS

Product	Nominal Thickness (mil)	Material Standard		Plant(s)
		Reference	Type	
Mule-Hide Standard Black EPDM	45, 60, 90	ASTM D4637	I	Carlisle, PA Greenville, IL
Mule-Hide White-on-Black EPDM	60, 90	ASTM D4637	I	Carlisle, PA
Mule-Hide Standard Reinforced EPDM	45, 60, 75	ASTM D4637	II	Carlisle, PA
Mule-Hide Standard EPDM Fleece-Backed	45, 60, 90	ASTM D4637	III	Carlisle, PA
Mule-Hide White-on-Black Fleece-Backed	45, 60, 90	ASTM D4637	III	Carlisle, PA

5. LIMITATIONS:

- 5.1 This is a Building Code Evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in Non-High Velocity Hurricane Zone jurisdictions.
- 5.3 The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under **Testing Application Standard TAS 114, Appendix J**. Roof decks shall be in accordance with **FBC HVHZ** requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This Evaluation Report does not include evaluation of fire classification. Refer to **FBC HVHZ 1516** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 This Evaluation Report does not include evaluation of roof edge termination. Refer to **Roofing Application Standard RAS 111** for requirements and limitations regarding edge securement for low-slope roofs.
- 5.6 Refer to **FBC HVHZ 1521** for requirements and limitations regarding recover installations.
- 5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with **Testing Application Standard TAS 105**.
- 5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with **Testing Application Standard TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.
- 5.6.3 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **Testing Application Standard TAS 124**.
- 5.7 Refer to Appendix 1 for system attachment requirements for wind load resistance.
- 5.7.1 "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **Testing Application Standard TAS 114** has already been applied). Refer to **FBC HVHZ 1620** and **Roofing Application Standard RAS 128** for determination of design wind loads.
- 5.7.2 For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with **FBC HVHZ 1620** or **Roofing Application Standard RAS 128**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Analysis shall be in accordance with **Roofing Application Standard RAS 117** or **Roofing Application Standard RAS 137**. **This extrapolation is not permitted for systems marked with an asterisk*.*
- 5.7.3 For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.
- 5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on Page 1 of this Evaluation Report.

6. INSTALLATION:

Mule-Hide EPDM Single Ply Roof Systems shall be installed in accordance with **Mule-Hide Products Co., Inc.** published installation instructions, subject to the Limitations / Conditions of Use noted below.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

UL, LLC. – QUA9625; (414) 248-6409; karen.buchmann@ul.com

- THE 24-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
1A	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	4-5
2A	Steel or Structural Concrete	New, Reroof (Tear-Off), Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	6-7
2B	Steel or Structural Concrete	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	8-13
2C	Steel or Structural Concrete	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover (Stress Plates)	14
2D	Steel or Structural Concrete	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover (Battens)	14-15
3A	Concrete	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	16-22
3B	Concrete	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	22
4A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	23-24
4B	Various	Recover	F	Non-Insulated, Bonded Roof Cover	24

The following notes apply to the systems outlined herein:

- The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC HVHZ requirements to the satisfaction of the Authority Having Jurisdiction. Deck-attachment details pertain to 'as-tested' conditions under Testing Application Standard TAS 114, Appendix J.
- Unless otherwise noted, fasteners and stress plates shall be as follows. Fasteners shall be of sufficient length for the following engagements:
 - Wood Deck: Mule-Hide Drill Point Fastener or Mule-Hide HDP Fastener with Mule-Hide 3 in. Insulation Plate, OMG #12 or #14 Roofgrip with Flat Bottom Plate, OMG #12 Standard or #14 HD with OMG Standard metal plate, Dekfast #12 or #14 with Hex Plate, Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate Plates. Minimum 1-inch wood penetration.
 - Steel Deck: Mule-Hide Drill Point Fastener or Mule-Hide HDP Fastener with Mule-Hide 3 in. Insulation Plate, OMG #12 or #14 Roofgrip with Flat Bottom Plate, OMG #12 Standard or #14 HD with OMG Standard metal plate, Dekfast #12 or #14 with Hex Plate, Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate Plates. Minimum ¾-inch steel penetration, engage the top flute of the steel deck.
 - Structural Concrete: Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail with Mule-Hide 3 in. Insulation Plate, OMG #14 Roofgrip with Flat Bottom Plate, OMG #14 HD or CD-10 with OMG Standard metal plate, Dekfast #14 with Hex Plate, Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 3" Metal Insulation Plate Plates. Minimum 1.25-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.
- Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC HVHZ 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, field withdrawal resistance testing shall be performed to confirm equivalent or determine enhanced fastening patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137. Calculations shall be prepared, signed and sealed by a qualified design professional.
- Preliminary insulation attachment for System Type D: Minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.
- Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.
 - Hot Asphalt: Applied at a rate of 20-40 lbs./sq.
 - Helix 2 Low-Rise Adhesive (Helix 2 LRA) (FULL): Full-coverage at 1 gal./square.
 - Helix 2 Low-Rise Adhesive (Helix 2 LRA) (RIBBON): Continuous 0.75 to 1-inch wide ribbons, 12-inch o.c.
 - Helix 2 Low-Rise Adhesive – Dual Tank (Helix 2 LRA-DT) (FULL): Continuous 0.5-inch wide, wet-beads, 4-inch o.c.
 - Helix 2 Low-Rise Adhesive – Dual Tank (Helix 2 LRA-DT) (RIBBON): Continuous 0.5-inch wide, wet-beads, 12-inch o.c. Note: When installing multiple layers of insulation, beads shall be placed perpendicular to those placed for attachment of the previous layer.
 - Helix Max Low-Rise Adhesive (Helix Max LRA) (FULL): Full-coverage at 1 gal./square.
 - Helix Max Low-Rise Adhesive (Helix Max LRA) (RIBBON): Continuous 1-inch wide ribbons, 12-inch o.c.

- OlyBond 500: Continuous ¾ to 1-inch wide ribbons, 12-inch o.c. using PaceCart or SpotShot application devices
 - Note: When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.
 - Note: The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.
- 7 Unless otherwise noted, all insulations are flat-stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to ‘increase’ the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table.
- Helix 2 LRA or Helix Max LRA (FULL or RIBBON): MDP -157.5 psf (Min. 0.5-inch thick)
 - OlyBond 500: MDP -187.5 psf (Min. 0.5-inch thick)
- 8 Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
- 9 For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC HVHZ 1620 or Roofing Application Standard RAS 128. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria in accordance with Roofing Application Standard RAS 117 or Roofing Application Standard RAS 137. *This extrapolation is not permitted for systems marked with an asterisk*
- 10 For assemblies marked with an asterisk*, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.
- 11 For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance in accordance with Testing Application Standard TAS 105. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Should the fastener resistance be less than that required, a revised fastener spacing – prepared, signed and sealed by a qualified design professional in accordance with Roofing Application Standard RAS 117 or Roofing Application Standard RAS 137 – may be submitted to the Building Official for review and acceptance.
- 12 Refer to FBC HVHZ 1521 for requirements and limitations regarding recover installations. For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance shall be conducted on mock-ups of the proposed new roof assembly. For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with Testing Application Standard TAS 124.
- 13 For Structural Concrete Deck or Recover Applications using System Type C-1, C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC HVHZ Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation (Note 5 herein). The separator component shall be documented as meeting FBC HVHZ 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.
- 14 Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC FBC HVHZ Product Approval for specific deck construction and limitations. Unless otherwise noted, for systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1. For “pre-existent” LWIC references, listings were established through testing over lightweight concrete cast using only foaming agent (ASTM C896), water and Portland cement (ASTM C150), with no proprietary additives, in accordance with procedures adopted by Miami-Dade BCCO (FBC CER1592). Use of these listings in new construction or re-roof (tear-off) applications is at the discretion of the Designer or Record and Authority Having Jurisdiction.
- 15 For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes. For bonded membrane applications, unless otherwise noted, refer to the following.

MEMBRANE / ADHESIVE COMBINATIONS			
MEMBRANE	ADHESIVE	METHOD	RATE
Non-Fleece Roof Covers	Mule-Hide Bonding Adhesive	Contact (both sides)	60 ft ² /gal (1.67 gal/square)
Non-Fleece Roof Covers	Aqua Base 120 Bonding Adhesive	Contact (both sides)	50 to 60 ft ² /gal (1.67 to 2.0 gal/square)
Non-Fleece Roof Covers	Mule-Hide Low VOC Bonding Adhesive	Contact (both sides)	60 ft ² /gal (1.67 gal/square)
Non-Fleece Roof Covers	Mule-Hide Acrylic Water Base Bonding Adhesive	Wet-lay (substrate)	100 ft ² /gal (1 gal/square)
Non-Fleece Roof Cover	Mule-Hide FR Adhesive	Wet-lay (substrate)	100 to 120 ft ² / gal (0.83 to 1 gal/square)
Fleece-Backed Roof Covers	Aqua Base 120 Bonding Adhesive	Wet lay (substrate)	0.83 to 1 gal/square
Fleece-Backed Roof Covers	Helix 2 LRA, Helix Max LRA or Helix 2 LRA-DT	Wet lay (substrate)	RIBBON spaced as noted herein or FULL Coverage = 1 gal/square or continuous ribbons, maximum 4-inch o.c.

16 Vapor barrier options for use over structural concrete deck followed by bonded insulation carry the following MDP limitations. The lesser of the MDP listings below vs. those in Table 3A applies.

VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY ADHESIVE-APPLIED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE	MDP (PSF)
		TYPE	APPLICATION		
VB-1.	702 Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, FULL-coverage at 1 gal/square.	-67.5
VB-2.	702 Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, RIBBON, 12-inch o.c.	-67.5
VB-3.	702 LV Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, FULL-coverage at 1 gal/square.	-97.5
VB-4.	702 LV Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, RIBBON, 12-inch o.c.	-97.5
VB-5.	CAV-GRIP Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, FULL-coverage at 1 gal/square.	-127.5
VB-6.	CAV-GRIP Primer	F5™ Air & Vapor Barrier	Self-adhering	Helix 2 LRA, RIBBON, 12-inch o.c.	-127.5
VB-7.	ASTM D41	SureMB 90TG Base	Torch-applied	Helix 2 LRA, RIBBON, 12-inch o.c.	-165.0
VB-8.	ASTM D41	SureMB 90 Base	Hot-asphalt	Hot asphalt at 25 lbs/square	-172.5
VB-9.	ASTM D41	SureMB 90TG Base	Torch-applied	Hot asphalt at 25 lbs/square	-180.0

17 For membrane attachment using batten-strips, end laps shall be spliced with sufficient dimension to allow for minimum 2-fasteners at each batten-strip lap.

18 Side laps shall be sealed in accordance with Mule-Hide requirements:

- Primed with Mule-Hide Tape Primer and adhered with Mule-Hide In-Seam Tape.
- Cleaned with Mule-Hide Splice Cleaner and adhered with Mule-Hide Black or White Splice Adhesive.

19 “MDP” = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC (HVHZ) 1620 and Roofing Application Standard RAS 128 for determination of design wind loads.

**TABLE 1A: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
MEMBRANE APPLIED IN MULE-HIDE BONDING ADHESIVE:							
W-1	Min. 19/32" plywood or wood plank	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch thick HP Recovery Board, min. 0.25-inch thick Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board, min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, H-Shield CG, ENRGY 3, PSI-25, Multi-Max FA-3	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
W-2	Min. 19/32" plywood or wood plank	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam Composite/FB, Polyiso HP-H Composite, Poly ISO 1-WF, H-Shield-WF, ENRGY 3 Plus	Note 2	1 per 3.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
W-3	Min. 19/32" plywood or wood plank	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Poly ISO 2, ACFoam II, ACFoam III, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, H-Shield CG, ENRGY 3, PSI-25, Multi-Max FA-3	Note 2	1 per 4.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
W-4	Min. 23/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 3.2 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
MEMBRANE APPLIED IN LOW VOC BONDING ADHESIVE:							
W-5	Min. 23/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 3.2 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-45.0*
MEMBRANE APPLIED IN HELIX 2 LRA, HELIX MAX LRA, HELIX 2 LRA-DT:							
W-6	Min. 23/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 3.2 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-45.0*
MEMBRANE APPLIED IN MULE-HIDE ACRYLIC WATER BASE BONDING ADHESIVE:							
W-7	Min. 19/32" plywood or wood plank; max. 24" spans	(Optional for Recover) One or more layers, any combination, min. 1.5-inch thick, loose laid	Min. 0.5-inch Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board or Min. 19/32-inch APA rated plywood	Mule-Hide Drill Point, Mule-Hide HDP or Mule-Hide EHD Fastener with Mule-Hide 3 in. Insulation Plate	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM or Standard Reinforced EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-45.0*

**TABLE 1A: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
W-8	Min. 19/32" plywood or wood plank, max. 24" spans	(Optional) One or more layers, any combination, loose laid	Min. 19/32-inch Mule-Hide FR Deck Panel A (plywood version), FR Deck Panel C (plywood version)	Note 2	1 per 4.0 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-45.0*
W-9	Min. 19/32" plywood or wood plank, max. 24" spans	(Optional) One or more layers, any combination, loose laid	Min. 19/32-inch Mule-Hide FR Deck Panel A (plywood version) or FR Deck Panel C (plywood version) attached through to engage wood supports	FBC HVHZ listed No. 8 course thread screws, min. 2-inch embedment	Edges: 6" o.c. Center: 6" o.c.	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-120.0*
MEMBRANE APPLIED IN MULE-HIDE FR ADHESIVE:							
W-10	Min. 19/32" plywood or wood plank, max. 24" spans	None	Min. 19/32" APA rated plywood attached through to engage wood supports	FBC HVHZ listed 10d ring shank nails	Edges: 6" o.c. Center: 6" o.c.	Mule-Hide Standard EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide FR Adhesive	-75.0*
W-11	Min. 19/32" plywood or wood plank, max. 24" spans	(Optional) One or more layers, any combination, loose laid	Min. 19/32" APA rated plywood attached through to engage wood supports	FBC HVHZ listed #10 wood screws, min. 1.5-inch embedment into wood supports.	Edges: 6" o.c. Center: 6" o.c.	Mule-Hide Standard EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide FR Adhesive	-120.0*

TABLE 2A: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)	MDP (psf)
		Type	Fasten (Note 11)	Attach	Type	Attach (Notes 6,7,8)		
MEMBRANE APPLIED IN MULE-HIDE BONDING ADHESIVE:								
SC-1	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 0.5-inch Dens Deck followed by min. 2-inch Insulfoam VIII	Note 2	1 per 2.0 ft ²	Min. 2-inch Insulfoam HD Composite	Helix Max LRA (RIBBON, 6-inch o.c.)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-2	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 2-inch Poly ISO 1, H-Shield, Polyiso HP-H	Note 2	1 per 1.3 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-60.0
MEMBRANE APPLIED IN HELIX 2 LRA, HELIX MAX LRA, HELIX 2 LRA-DT:								
SC-3	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N or HP-W, H-Shield, ENRGY 3, or AC Foam II	Note 2	1 per 2.0 ft ²	Additional layers of base insulation	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (RIBBON, 12-inch o.c.)	-45.0*
SC-4	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase or H-Shield	Note 2	1 per 3.2 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (FULL)	-45.0*
SC-5	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase or H-Shield	Note 2	1 per 3.2 ft ²	Min. 0.25-inch DensDeck Prime	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (FULL)	-45.0*
SC-6	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch Polyiso HP-H, InsulBase or H-Shield	Note 2	1 per 4.0 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (FULL)	-45.0*
SC-7	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch Polyiso HP-H, InsulBase or H-Shield	Note 2	1 per 4.0 ft ²	Min. 0.25-inch DensDeck Prime	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (FULL)	-45.0*
SC-8	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 0.5-inch DensDeck followed by min. 2-inch Insulfoam IX	Note 2	1 per 2.0 ft ²	Min. 2-inch Insulfoam HD Composite	Helix Max LRA (RIBBON, 6-inch o.c.)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-45.0*

TABLE 2A: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)	MDP (psf)
		Type	Fasten (Note 11)	Attach	Type	Attach (Notes 6,7,8)		
SC-9	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase or H-Shield	Note 2	1 per 1.6 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON, 6-inch o.c.)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA (FULL)	-67.5
SC-10	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 2.0 ft ²	Additional layers of base insulation	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (RIBBON, 12-inch o.c.)	-45.0*
SC-11	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 3.2 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (FULL)	-45.0*
SC-12	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 3.2 ft ²	Min. 0.25-inch DensDeck Prime	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (FULL)	-45.0*
SC-13	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 4.0 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (FULL)	-45.0*
SC-14	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 4.0 ft ²	Min. 0.25-inch DensDeck Prime	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (FULL)	-45.0*
SC-15	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield	Note 2	1 per 1.6 ft ²	Min. 1.0-inch base insulation	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (FULL)	-67.5

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
MEMBRANE APPLIED IN MULE-HIDE BONDING ADHESIVE:							
SC-16	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch thick Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board, min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, H-Shield CG, ENRGY 3, PSI-25, Multi-Max FA-3	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-17	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1-inch Polyiso HP-H or Poly ISO 1, H-Shield	Note 2	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-18	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, Poly ISO 2, ACFoam II, ACFoam III, H-Shield CG, ENRGY 3, PSI-25, Multi-Max FA-3	Note 2	1 per 4.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-19	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Polyiso HP-H Composite, ACFoam Composite/FB, Poly ISO 1-WF, H-Shield-WF, ENRGY 3 Plus	Note 2	1 per 3.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-20	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, HP-N or HP-W, Poly ISO 1, H-Shield, ENRGY 3 or Poly ISO 2, ACFoam II	Min. 0.5-inch Poly ISO 1-HD, SecurShield HD Plus	Note 2	1 per 4.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-45.0*
SC-21	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1-inch Approved polyisocyanurate	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-52.5
SC-22	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, HP-N or HP-W, Poly ISO 1, H-Shield, ENRGY 3 or Poly ISO 2, ACFoam II	Min. 0.5-inch Poly ISO 1-HD, SecurShield HD Plus	Note 2	1 per 1.78 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-60.0
SC-23	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-60.0

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
SC-24	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board, followed by min. 1.5-inch STYROFOAM DECKMATE Plus FA	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.3 ft ²	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-67.5
SC-25	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Approved polyisocyanurate	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.3 ft ²	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-67.5
SC-26	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 2, ACFoam II, Poly ISO 1, H-Shield or ENRGY 3.	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-75.0
SC-27	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1-inch Approved polyisocyanurate	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-75.0
SC-28	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 2-inch Approved polyisocyanurate	Min. 19/32-inch APA rated plywood	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-82.5
SC-29	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board, followed by min. 1.5-inch STYROFOAM DECKMATE Plus FA	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.0 ft ²	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-97.5
SC-30	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Approved polyisocyanurate	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.0 ft ²	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-97.5

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
SC-31	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Approved polyisocyanurate	Min. 19/32-inch APA rated plywood	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-105.0
SC-32	Min. 22 ga., type B, Grade 33 steel; 6' spans, two (2) Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield, Poly ISO 1-HD Composite, SecurShield HD Composite or H-Shield HD Composite	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-112.5
SC-33	Min. 22 ga., type B, Grade 33 steel; 6' spans, two (2) Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, HP-N or HP-W, Poly ISO 1, H-Shield, ENRGY 3 or Poly ISO 2, ACFoam II	Min. 0.5-inch Poly ISO 1-HD, SecurShield HD Plus	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.3 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-112.5
SC-34	Min. 22 ga., type B, Grade 80 steel; 6' spans, two (2) Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield, Poly ISO 1-HD Composite, SecurShield HD Composite or H-Shield HD Composite	Mule-Hide HDP Fastener or Mule-Hide Fluted Concrete Nail (<i>concrete only</i>) with Mule-Hide 3 in. Insulation Plate	1 per 1.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Bonding Adhesive	-127.5
MEMBRANE APPLIED IN AQUA BASE 120 BONDING ADHESIVE:							
SC-35	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Min. 0.5-inch HP Recovery Board	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Aqua Base 120 BA	-45.0*
SC-36	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 2, ACFoam II, Poly ISO 1, H-Shield, ENRGY 3, Min. 19/32" APA Rated plywood or Min. 0.25-inch Dens Deck Prime	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Aqua Base 120 BA	-45.0*
SC-37	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1-inch Polyiso HP-H or Poly ISO 1, H-Shield	Note 2	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Aqua Base 120 BA	-45.0*
MEMBRANE APPLIED IN LOW VOC BONDING ADHESIVE:							
SC-38	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Note 2	1 per 3.2 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-45.0*

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
SC-39	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Polyiso HP-H or Poly ISO 1, H-Shield	Note 2	1 per 4.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-45.0*
SC-40	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Min. 0.5-inch HP Recovery Board	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-45.0*
SC-41	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Polyiso HP-H or Poly ISO 1, H-Shield	Note 2	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-75.0
SC-42	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield	Note 2	1 per 1.0 ft ²	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM / Mule-Hide Low VOC Bonding Adhesive	-75.0
MEMBRANE APPLIED IN MULE-HIDE ACRYLIC WATER BASE BONDING ADHESIVE:							
SC-43	Min. 22 ga., type B, Grade 33 steel or Min. 2,500 psi structural concrete	(Optional for Recover) One or more layers, any combination, min. 1.5-inch thick, loose laid	Min. 0.5-inch Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board or Min. 19/32-inch APA rated plywood	Mule-Hide Drill Point (steel only), Mule-Hide HDP or Mule-Hide EHD (steel only) Fastener or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide 3 in. Insulation Plate	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide Standard Reinforced EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-45.0*
SC-44	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board or Min. 1.5-inch Poly ISO 1 or H-Shield, loose laid.	Min. 19/32-inch Mule-Hide FR Deck Panel A (plywood version), FR Deck Panel C (plywood version)	Note 2	1 per 2.0 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-45.0*
SC-45	Min. 22 ga., type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board or Min. 1.5-inch Poly ISO 1 or H-Shield, loose laid.	Min. 19/32-inch APA rated plywood, Mule-Hide FR Deck Panel A (plywood version), FR Deck Panel C (plywood version)	Note 2	1 per 1.6 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-82.5

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
SC-46	Min. 22 ga., type B, Grade 33 steel at max. 5'-4" spans or Min. 22 ga., Type B, Grade 80 steel at max. 6' spans or Min. 20 ga., type B, Grade 33 steel max. 6' spans attached with two (2) Traxx/5 screws with 3/8" washers, 6" o.c. or min. 2,500 psi structural concrete	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board or Min. 1.5-inch Poly ISO 1 or H-Shield, loose laid.	Min. 19/32-inch APA rated plywood, Mule-Hide FR Deck Panel A (plywood version), FR Deck Panel C (plywood version)	Mule-Hide HD Fasteners and Mule-Hide 3 in. Insulation Plates or Trufast #14 HD Fasteners and Trufast 3" Metal Insulation Plate plates	1 per 1.3 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-105.0
SC-47	Min. 22 ga., type B, Grade 33 steel at max. 5'-4" spans or Min. 22 ga., Type B, Grade 80 steel at max. 6' spans or Min. 20 ga., type B, Grade 33 steel max. 6' spans attached with two (2) Traxx/5 screws with 3/8" washers, 6" o.c. or min. 2,500 psi structural concrete	(Optional) Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board or Min. 1.5-inch Poly ISO 1 or H-Shield, loose laid.	Min. 2-inch Poly ISO 1-NB (plywood top) or H-Shield NB (plywood top) or Min. 3-inch Poly ISO 1 Cool-Vent (plywood top) or Cool-Vent (plywood top)	Mule-Hide HD Fasteners and Mule-Hide 3 in. Insulation Plates or Trufast #14 HD Fasteners and Trufast 3" Metal Insulation Plate plates	1 per 1.3 ft ²	Mule-Hide Standard Black EPDM or Mule-Hide White-on-Black EPDM / Mule-Hide Acrylic Water Base Bonding Adhesive	-105.0
MEMBRANE APPLIED IN HELIX 2 LRA, HELIX MAX LRA, HELIX 2 LRA-DT:							
SC-48	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield, H-Shield CG	Note 2	1 per 3.2 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA-DT (RIBBON, 12-inch o.c.)	-45.0*
SC-49	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min 0.5-inch HP Recovery Board	Note 2	1 per 2.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (RIBBON, 12-inch o.c.)	-45.0*
SC-50	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min 0.5-inch DensDeck Prime	Note 2	1 per 2.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (RIBBON, 12-inch o.c.)	-45.0*
SC-51	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N or HP-W, H-Shield, ENRGY 3 or ACFoam II	Min. 0.5-inch SecurShield HD Plus	Note 2	1 per 4.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-45.0*
SC-52	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N or HP-W, H-Shield, ENRGY 3 or ACFoam II	Min. 0.5-inch SecurShield HD Plus	Note 2	1 per 1.8 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-60.0

**TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C1 MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer (Note 13)	Top Insulation Layer			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach		
SC-53	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch APA rated plywood	Note 2	1 per 1.9 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-75.0
SC-54	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch DensDeck Prime	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-97.5
SC-55	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch Polyiso HP-H, InsulBase	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-112.5
SC-56	Min. 22 ga., type B, Grade 33 steel; Traxx/5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N or HP-W, H-Shield, ENRGY 3 or ACFoam II	Min. 0.5-inch SecurShield HD Plus	Note 2	1 per 1.3 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-112.5
SC-57	Min. 22 ga., type B, Grade 33 steel; two (2) Teks 5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA (FULL)	-127.5
SC-58	Min. 22 ga., type B, Grade 33 steel; two (2) Teks 5 screws, 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch SecurShield	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix Max LRA, Helix 2 LRA-DT (FULL)	-135.0
SC-59	Min. 22 ga., type B, Grade 33 steel; two (2) Teks 5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch APA rated plywood	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-135.0
SC-60	Min. 22 ga., type B, Grade 33 steel; two (2) Teks 5 screws, 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.0 ft ²	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed / Helix 2 LRA, Helix 2 LRA-DT (FULL)	-135.0

**TABLE 2C: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck	Insulation (Note 13)		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Membrane	Fasteners (Note 11)	Attachment	
SC-61	Min. 22 ga, type B, Grade 40 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM (0.070" thick)	Mule-Hide HD Fasteners or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Polymer Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c.	-52.5
SC-62	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide HD Fasteners or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Polymer Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c.	-52.5
SC-63	Min. 22 ga, type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide HD Fasteners or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Polymer Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c.	-52.5
SC-64	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM (0.070" thick)	Mule-Hide HD Fasteners or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Polymer Seam Plates	6-inch o.c. within 7-inch wide laps spaced 115-inch o.c.	-60.0

**TABLE 2D: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck	Insulation (Note 13)		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Membrane	Fasteners (Note 11)	Attachment	
SC-65	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c.	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Carlisle SynTec Sure-Tite Fasteners (steel only) with ST Membrane Fastening Bars	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c.	-45.0
SC-66	Min. 22 ga, type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c.	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Carlisle SynTec Sure-Tite Fasteners (steel only) with ST Membrane Fastening Bars	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c.	-45.0
SC-67	Min. 22 ga, type B, Grade 40 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide EHD Fasteners (steel only) or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Metal Batten Bars or Carlisle SynTec Sure-Tite Fasteners (steel only) with ST Membrane Fastening Bars	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c.	-52.5

**TABLE 2D: STEEL OR STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck	Insulation (Note 13)		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Membrane	Fasteners (Note 11)	Attachment	
SC-68	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c.	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Carlisle SynTec Sure-Tite Fasteners (steel only) with ST Membrane Fastening Bars	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c.	-52.5
SC-69	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide EHD Fasteners (steel only) or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Metal Batten Bars or Carlisle SynTec Sure-Tite Fasteners (steel only) with ST Membrane Fastening Bars	Fasteners 6-inch o.c. through batten within min. 5-inch wide laps spaced max. 115-inch o.c.	-60.0
SC-70	Min. 22 ga, type B, Grade 33 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide EHD Fasteners (steel only) or Mule-Hide Fluted Concrete Nail (concrete only) with OMG Polymer Batten Strip.	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c.	-60.0
SC-71	Min. 22 ga, type B, Grade 80 steel; 6' spans, Traxx/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 1.5" thick, one or more layers, any combination	Prelim attach	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide EHD Fasteners (steel only) or Mule-Hide Fluted Concrete Nail (concrete only) with Mule-Hide Metal Batten Bars	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c.	-82.5

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
 NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
MEMBRANE APPLIED IN MULE-HIDE BONDING ADHESIVE:								
C-1.	Min. 2,500 psi structural concrete (primed)	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-2.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
C-3.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	Min 0.5-inch HP Recovery Board	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
C-4.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-352.5*
C-5.	Min. 2,500 psi structural concrete	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	(Optional) Additional layers of base insulation	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-6.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (RIBBON)	Min 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA (RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-7.	Min. 2,500 psi structural concrete	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-8.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulam (GYP)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-9.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 0.25-inch Dens Deck, Dens Deck Prime	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-232.5*

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS**

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-10.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (RIBBON)	(Optional) Additional layers of base insulation	Helix 2 LRA, Helix Max LRA (RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-240.0*
C-11.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (RIBBON)	Min. 2-inch Polyiso HP-H Composite	Helix 2 LRA, Helix Max LRA (RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-240.0*
C-12.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulam (WF)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-255.0*
C-13.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch SecurShield or H-Shield CG	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 1.5-inch Poly ISO 1-HD Composite, SecurShield HD Composite or H-Shield HD Composite	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-270.0*
C-14.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulfoam HD Composite	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-270.0*
C-15.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL)	(Optional) Additional layers of base insulation	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
C-16.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL)	Min 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
C-17.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL)	Min. 2-inch Polyiso HP-H Composite	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
C-18.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	OB500	Min 0.5-inch HP Recovery Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS**

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-19.	Min. 2,500 psi structural concrete	Min. 1.0-inch Foamular 250	OB500	Min 0.5-inch HP Recovery Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
C-20.	Min. 2,500 psi structural concrete	Min. 2.0-inch, Insulfoam IX	OB500	Min. 0.25-inch Dens Deck or Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
C-21.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, HP-N, HP-W, ENRGY 3	OB500	(Optional) Additional layers of base insulation	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-150.0*
C-22.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-150.0*
C-23.	Min. 2,500 psi structural concrete	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	OB500	(Optional) Additional layers of base insulation	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-157.5*
C-24.	Min. 2,500 psi structural concrete	Min. 1.0-inch STYROFOAM DECKMATE Plus FA	OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-232.5*
C-25.	Min. 2,500 psi structural concrete	Min. 1.0-inch Foamular 250	OB500	Min. 0.25-inch Dens Deck or Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-277.5*
MEMBRANE APPLIED IN AQUA BASE 120 BONDING ADHESIVE:								
C-26.	Min. 2,500 psi structural concrete (primed)	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	Min. 0.5-inch HP Recovery Board	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
C-27.	Min. 2,500 psi structural concrete (primed)	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-157.5*

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
 NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-28.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*
C-29.	Min. 2,500 psi structural concrete (primed)	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	Min. 0.25-inch Dens Deck Prime	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*
C-30.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 2, ACFoam II, Poly ISO 1, H-Shield, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
C-31.	Min. 2,500 psi structural concrete	Min. 1-inch Insulfoam I	Helix Max LRA (FULL or RIBBON)	Min. 0.5-inch HP Recovery Board	Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
C-32.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulam (WF)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
C-33.	Min. 2,500 psi structural concrete	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	(Optional) Additional layers of base insulation	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-157.5*
C-34.	Min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 2, ACFoam II, Poly ISO 1, H-Shield, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	(Optional) Additional layers of base insulation	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*
C-35.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, HP-N, HP-W, Poly ISO 2, ACFoam II, Poly ISO 1, H-Shield, ENRGY 3	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 0.25-inch Dens Deck Prime	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*
C-36.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	Min. 0.5-inch HP Recovery Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
C-37.	Min. 2,500 psi structural concrete	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	(Optional) Additional layers of base insulation	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-105.0*

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
 NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-38.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	Min. 0.25-inch Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-150.0*
MEMBRANE APPLIED IN LOW VOC BONDING ADHESIVE:								
C-39.	Min. 2,500 psi structural concrete	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Helix 2 LRA, Helix Max LRA (FULL or RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Low VOC Bonding Adhesive	-75.0*
C-40.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulam (GYP)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Low VOC Bonding Adhesive	-75.0*
C-41.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch SecurShield or H-Shield CG	Helix 2 LRA, Helix Max LRA (RIBBON)	Min. 1.5-inch Poly ISO 1-HD Composite, SecurShield HD Composite or H-Shield HD Composite	Helix 2 LRA, Helix Max LRA (RIBBON)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Low VOC Bonding Adhesive	-285.0*
C-42.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulfoam HD Composite	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Low VOC Bonding Adhesive	-472.5*
C-43.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch SecurShield or H-Shield CG	Helix 2 LRA, Helix Max LRA (FULL)	Min. 1.5-inch Poly ISO 1-HD Composite, SecurShield HD Composite or H-Shield HD Composite	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Low VOC Bonding Adhesive	-495.0*
MEMBRANE APPLIED IN HELIX 2 LRA, HELIX MAX LRA, HELIX 2 LRA-DT:								
C-44.	Min. 2,500 psi structural concrete	Min. 1-inch Insulfoam IX	Helix Max LRA (RIBBON)	Min. 0.5-inch HP Recovery Board	Helix Max LRA (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-142.5*
C-45.	Min. 2,500 psi structural concrete	Min. 1-inch Insulfoam IX	BIAB	Min. 0.5-inch HP Recovery Board	BIAB	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-157.5*
C-46.	Min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, HP-W, H-Shield, ENRGY 3, ACFoam II	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-157.5*
C-47.	Min. 2,500 psi structural concrete	Min. 1.5-inch Kingspan GreenGuard or Min. 1.0-inch Dow STYROFOAM ROOFMATE	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-157.5*

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
 NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-48.	Min. 2,500 psi structural concrete	(Optional) Polyiso HP-H, InsulBase, HP-N, or HP-W, ENRGY 3, H-Shield, or AC Foam II	Helix 2 LRA, Helix Max LRA (FULL)	Polyiso HP-NB, StormBase, H-Shield NB (plywood top facer only)	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-187.5*
C-49.	Min. 2,500 psi structural concrete	Min. 0.5-inch HP Recovery Board	Helix Max LRA (RIBBON)	None	N/A	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-202.5*
C-50.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, or HP-W, ENRGY 3, H-Shield, or AC Foam II	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Min. 19/32-inch APA rated plywood or min. 0.25-inch DensDeck or DensDeck Prime	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-240.0*
C-51.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, or HP-W, ENRGY 3, H-Shield, or AC Foam II	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Min. 19/32-inch APA rated plywood or min. 0.25-inch DensDeck Prime	Helix 2 LRA, Helix Max LRA, BIAB (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA-DT (FULL)	-240.0*
C-52.	Min. 2,500 psi structural concrete	Min. 1.5-inch InsulLam (WF)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-255.0*
C-53.	Min. 2,500 psi structural concrete	Min. 1-inch Insulfoam IX	Helix Max LRA (FULL)	Min. 0.5-inch HP Recovery Board	Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-300.0*
C-54.	Min. 2,500 psi structural concrete	Min. 1-inch Insulfoam IX	Helix 2 LRA (FULL)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-322.5*
C-55.	Min. 2,500 psi structural concrete	Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, HP-W, H-Shield, ENRGY 3, ACFoam II	Helix 2 LRA, Helix Max LRA (FULL)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-330.0*
C-56.	Min. 2,500 psi structural concrete	Min. 1.5-inch Kingspan GreenGuard or Min. 1.0-inch Dow STYROFOAM ROOFMATE	Helix 2 LRA, Helix Max LRA (FULL)	Min. 0.5-inch HP Recovery Board	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-330.0*
C-57.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, or HP-W, ENRGY 3, H-Shield, or AC Foam II	Helix 2 LRA, Helix Max LRA (FULL)	Min. 19/32-inch APA rated plywood or min. 0.25-inch DensDeck Prime	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA-DT (FULL)	-382.5*
C-58.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, HP-N, or HP-W, ENRGY 3, H-Shield, or AC Foam II	Helix 2 LRA, Helix Max LRA (FULL)	Min. 19/32-inch APA rated plywood or min. 0.25-inch DensDeck or DensDeck Prime	Helix 2 LRA, Helix Max LRA (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-457.5*

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER
 NOTE: REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Membrane	Application	
C-59.	Min. 2,500 psi structural concrete	Min. 1.5-inch InsulLam (PLY)	Helix Max LRA (FULL)	None	N/A	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-457.5*
C-60.	Min. 2,500 psi structural concrete	Elastospray 81255 spray applied to min. 1.5-inch thick	N/A	None	N/A	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, (FULL)	-495.0*
C-61.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield, SecurShield, H-Shield CG	Helix 2 LRA-DT (RIBBON)	Polyiso HP-NB, StormBase, H-Shield NB	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-112.5
C-62.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield, SecurShield, H-Shield CG	Helix 2 LRA-DT (RIBBON)	Min. 7/16-inch APA rated OSB or min. 0.25-inch DensDeck Prime	Helix 2 LRA-DT (RIBBON)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-112.5
C-63.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield, SecurShield, H-Shield CG	Helix 2 LRA-DT (FULL)	Polyiso HP-NB, StormBase, H-Shield NB	Helix 2 LRA-DT (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-187.5
C-64.	Min. 2,500 psi structural concrete	(Optional) Min. 1.5-inch Polyiso HP-H, InsulBase, H-Shield, SecurShield, H-Shield CG	Helix 2 LRA-DT (FULL)	Min. 7/16-inch APA rated OSB or min. 0.25-inch DensDeck Prime	Helix 2 LRA-DT (FULL)	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, Helix 2 LRA-DT (FULL)	-382.5

TABLE 3B: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Roof Deck	Roof Cover (Note 15)		MDP (psf)
		Membrane	Application	
C-65.	Min. 2,500 psi structural concrete	Mule-Hide White-on-Black EPDM	Mule-Hide Bonding Adhesive	-240.0*
C-66.	Min. 2,500 psi structural concrete	Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-240.0*
C-67.	Min. 2,500 psi structural concrete	Mule-Hide Standard Black EPDM	Mule-Hide Bonding Adhesive	-315.0*
C-68.	Min. 2,500 psi structural concrete	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA, (FULL)	-495.0*

TABLE 4A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Note 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7&8)	Type	Attach (Notes 6,7&8)	Membrane	Application	
MEMBRANE APPLIED IN MULE-HIDE BONDING ADHESIVE:								
R-1	Existing asphaltic BUR	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
R-2	Existing asphaltic BUR	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	Min 0.5-inch HP Recovery Board	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-330.0*
R-3	Existing asphaltic BUR	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	Hot Asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-352.5*
R-4	Existing asphaltic BUR or mineral surface cap	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	OB500	(Optional) Additional layers of base insulation	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
R-5	Existing asphaltic BUR or mineral surface cap	Min. 1.5-inch Poly ISO 2, ACFoam II, ACFoam III, Poly ISO 1, H-Shield, Polyiso HP-H, HP-N, HP-W, ENRGY 3	OB500	Min 0.5-inch HP Recovery Board or min. 0.25-inch Dens Deck or Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
R-6	Existing asphaltic BUR or mineral surface cap	Min. 1.0-inch Foamular 250 or STYROFOAM DECKMATE Plus FA or min. 2.0-inch, Insulfoam IX	OB500	Min 0.5-inch HP Recovery Board or min. 0.25-inch Dens Deck or Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
R-7	Existing asphaltic BUR or mineral surface cap	Min. 1.0-inch Foamular 250	OB500	Min. 0.25-inch Dens Deck or Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide White-on-Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Bonding Adhesive	-120.0*
MEMBRANE APPLIED IN AQUA BASE 120 BONDING ADHESIVE:								
R-8	Existing asphaltic BUR	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	(Optional) Additional layers of base insulation	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*

TABLE 4A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Note 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Notes 6,7&8)	Type	Attach (Notes 6,7&8)	Membrane	Application	
R-9	Existing asphaltic BUR	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	Min. 0.5-inch HP Recovery Board	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
R-10	Existing asphaltic BUR	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	Hot Asphalt	Min. 0.25-inch Dens Deck Prime	Hot Asphalt	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-165.0*
R-11	Existing asphaltic BUR or mineral surface cap	Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	(Optional) Additional layers of base insulation	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-105.0*
R-12	Existing asphaltic BUR or mineral surface cap	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	Min. 0.5-inch HP Recovery Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-90.0*
R-13	Existing asphaltic BUR or mineral surface cap	(Optional) Min. 1.5-inch Poly ISO 2, ACFoam II, Polyiso HP-H, HP-N, HP-W, Poly ISO 1, H-Shield, ENRGY 3	OB500	Min. 0.25-inch Dens Deck Prime	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Aqua Base 120 BA	-150.0*
MEMBRANE APPLIED IN LOW VOC BONDING ADHESIVE:								
R-14	Existing asphaltic BUR or mineral surface cap	Min. 0.5-inch Polyiso HP-H or Poly ISO 1, H-Shield	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Low VOC Bonding Adhesive	-75.0*
R-15	Existing asphaltic BUR or mineral surface cap	Min. 1.5-inch Insulam (GYP)	OB500	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Low VOC Bonding Adhesive	-75.0*
R-16	Existing asphaltic BUR or mineral surface cap	Min. 1.5-inch Insulfoam HD Composite	OB500	None	N/A	Mule-Hide Standard Black EPDM, Mule-Hide Standard Reinforced EPDM or Mule-Hide FR Reinforced EPDM	Mule-Hide Low VOC Bonding Adhesive	-120.0*

TABLE 4B: RECOVER APPLICATIONS
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Roof Cover (Note 15)		MDP (psf)
		Membrane	Application	
R-17	Existing, fully-adhered EPDM roof cover over insulated steel deck	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (RIBBON 6-inch o.c. or FULL coverage)	-75.0*
R-18	Existing, fully-adhered EPDM roof cover over insulated or non-insulated structural concrete deck	Mule-Hide Standard EPDM Fleece-Backed or White-on-Black EPDM Fleece-Backed	Helix 2 LRA, Helix Max LRA (FULL)	-315.0*