



EXTERIOR RESEARCH & DESIGN, LLC.

Certificate of Authorization #9503

353 Christian Street

Oxford, CT 06478

(203) 262-9245

EVALUATION REPORT

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

Evaluation Report M10000.03.08-R6
FL10497-R6
Date of Issuance: 03/28/2008
Revision 6: 09/08/2017

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 **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: Mule-Hide SBS and APP Modified Bitumen Roof Systems

LABELING: Labeling shall be in accordance with the requirements 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 documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

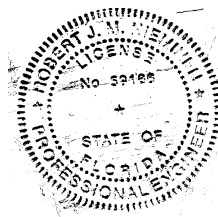
ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity | ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

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 5, plus a 22-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 09/08/2017. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. Exterior Research & Design, LLC. d/b/a Trinity | ERD 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. Exterior Research & Design, LLC. d/b/a Trinity | ERD 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 Trinity|ERD 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: Modified Bitumen Roof Systems

Compliance Statement: **Mule-Hide SBS and APP Modified Bitumen Roof Systems**, as produced by **Mule-Hide Products Co., Inc.**, have demonstrated compliance with the following sections of the **6th Edition (2017) Florida Building Code** 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>
1504.3.1	Wind	FM 4474	2011
1504.7	Impact	FM 4470	2012
1507.11.2	Physical Properties	ASTM D6163	2008
1507.11.2	Physical Properties	ASTM D6164	2011
1507.11.2	Physical Properties	ASTM D6222	2011

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
ERD (TST6049)	Physical Properties	P10490.10.08-2	10/30/2008
ERD (TST6049)	FM 4470/4474	P13760.09.09	09/10/2009
ERD (TST6049)	FM 4470/4474	P13770.09.09	09/10/2009
ERD (TST6049)	FM 4470/4474	P30540.11.09-R1	11/30/2009
ERD (TST6049)	FM 4470/4474	P30550.12.09	12/02/2009
ERD (TST6049)	Physical Properties	P33960.12.10	12/30/2010
ERD (TST6049)	FM 4470/4474	P33970.03.11	03/15/2011
ERD (TST6049)	Physical Properties	P37590.03.13-3A	03/06/2013
ERD (TST6049)	FM 4470/4474	P39680.03.13	03/04/2013
ERD (TST6049)	Physical Properties	P37590.03.13-1-R1	06/26/2013
ERD (TST6049)	Physical Properties	P37590.03.13-2-R1	07/01/2013
ERD (TST6049)	Physical Properties	P37590.07.13-2	07/01/2013
ERD (TST6049)	Physical Properties	P37590.03.13-5-R1	07/01/2013
ERD (TST6049)	Physical Properties	P37590.07.13-1	07/02/2013
ERD (TST6049)	FM 4470/4474	P41630.08.13	08/06/2013
ERD (TST6049)	Physical Properties	P45940.09.13	09/04/2013
ERD (TST6049)	Physical Properties	P44370.10.13	10/04/2013
ERD (TST6049)	FM 4470/4474	SC6160.11.14	11/10/2014
ERD (TST6049)	Physical Properties	SC5170.05.15	05/08/2015
ERD (TST6049)	FM 4474	SC8085.05.15	05/19/2015
ERD (TST6049)	FM 4470/4474	SC8905.15	11/24/2015
FM Approvals (TST1867)	FM 4470	2W7A7.AM	08/04/1994
FM Approvals (TST1867)	FM 4470	0D3A3.AM	04/04/1997
FM Approvals (TST1867)	FM 4470	2D0A0.AM	12/23/1998
FM Approvals (TST1867)	FM 4470	2D5A9.AM	06/22/1999
FM Approvals (TST1867)	FM 4470	3006646	01/04/2000
FM Approvals (TST1867)	FM 4470	3001334	01/25/2000
FM Approvals (TST1867)	FM 4470	3001334	02/15/2000
FM Approvals (TST1867)	FM 4470	3000857	01/12/2000
FM Approvals (TST1867)	FM 4470	3004091	01/12/2000
FM Approvals (TST1867)	FM 4470	3006115	05/02/2001
FM Approvals (TST1867)	FM 4470	3012321	07/29/2002
FM Approvals (TST1867)	FM 4470	3014692	08/05/2003
FM Approvals (TST1867)	FM 4470	3014751	08/27/2003
FM Approvals (TST1867)	FM 4470	3007170	01/13/2004

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
FM Approvals (TST1867)	FM 4470	3019317	06/30/2004
FM Approvals (TST1867)	FM 4470	3020703	07/30/2004
FM Approvals (TST1867)	FM 4470/4474	3018332	01/31/2006
FM Approvals (TST1867)	FM 4470/4474	3023368	03/20/2006
FM Approvals (TST1867)	FM 4470/4474	3024594	05/23/2006
FM Approvals (TST1867)	FM 4470/4474	3023458	07/18/2006
FM Approvals (TST1867)	FM 4470/4474	3030668	09/12/2007
FM Approvals (TST1867)	FM 4470/4474	3032172	06/12/2009
FM Approvals (TST1867)	FM 4470/4474	3049631	04/21/2014
PRI (TST5878)	Physical Properties	PUSA-062-02-01	12/04/2007
PRI (TST5878)	Physical Properties	PUSA-061-02-02	01/28/2008
PRI (TST5878)	Physical Properties	PUSA-064-02-02	02/27/2008
PRI (TST5878)	Physical Properties	PUSA-062-02-02	12/04/2008
Miami-Dade (CER1592)	HVHZ Compliance	Various NOAs	Various
Miami-Dade (CER1592)	Proposal for Review	10-0823	10/12/2010
UL LLC (QUA9625)	Quality Control	ML File No. R13850	09/23/2015
UL LLC (QUA9625)	Quality Control	Service Confirmation	Exp. 10/06/2018

4. PRODUCT DESCRIPTION:

This Evaluation Report covers **Mule-Hide Modified Bitumen Roof Systems** installed in accordance with **Mule-Hide Products Co., Inc.** published installation instructions and the Limitations / Conditions of Use herein. The following membranes make up the subject systems.

TABLE 1: ROLL-GOODS FOR MULE-HIDE MODIFIED BITUMEN ROOF SYSTEMS				
Type	Product	Specification		
		Reference	Grade	Type
SBS Membranes	Nail Base	ASTM D6163	S	I
	SA Base Sheet	ASTM D6163	S	I
	SA Base Sheet (FR)	ASTM D6163	S	I
	SA-SBS Cap Sheet	ASTM D6164	G	I
	SA-SBS Cap Sheet (FR)	ASTM D6164	G	I
APP Membranes	APP Torch Base	ASTM D6509	N/A	N/A
	APP Torch S	ASTM D6222	S	I
	APP Torch G	ASTM D6222	G	I
	APP Torch KoolCap G	ASTM D6222	G	I
	APP Torch G FR	ASTM D6222	G	I
	APP Torch KoolCap G FR	ASTM D6222	G	I
	SA-APP Cap Sheet	ASTM D6222	G	I
	SA-APP KoolCap G	ASTM D6222	G	I
	SA-APP Cap Sheet (FR)	ASTM D6222	G	I
	SA-APP KoolCap G FR	ASTM D6222	G	I

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither Trinity|ERD 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 **FBC HVHZ** jurisdictions.
- 5.3 Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 For steel deck installations, foam plastic insulation shall be separated from the building interior in accordance with **FBC 2603.4** unless the exceptions stated in **FBC 2603.4.1** and **2603.6** apply.
- 5.5 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- 5.6 For recover installations, the existing roof shall be examined in accordance with **FBC 1511**.
- 5.7 For mechanically attached insulation or membrane or strip-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16. Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are **ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117** and **Roofing Application Standard RAS 137**. Assemblies marked with an asterisk* carry the limitations set forth in **Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016)** for Zone 2/3 enhancements.
- 5.8 For assemblies with all components fully bonded in place, 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.
- 5.9 For mechanically attached insulation or membrane 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 and analysis shall be in accordance with **ANSI/SPRI FX-1 or Testing Application Standard TAS 105**.
- 5.10 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 **ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.
- 5.11 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 **ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124**.
- 5.12 Metal edge attachment (except gutters), shall be designed and installed for wind loads in accordance with FBC Chapter 16 and tested for resistance in accordance with **ANSI/SPRI ES-1 or Roofing Application Standard RAS 111**, except the basic wind speed shall be determined from **FBC Figure 1609.3(1), 1609.3(2) or 1609.3(3)**.
- 5.13 All products in the roof assembly shall have quality assurance in accordance with **FAC Rule 61G20-3**.

6. INSTALLATION:

- 6.1 **Mule-Hide Modified Bitumen Roof Systems** shall be installed in accordance with **Mule-Hide Products Co., Inc.** published installation instructions, subject to the Limitations / Conditions of Use noted herein.
- 6.2 System attachment requirements for wind load resistance are set forth in Appendix 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 **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.
- 6.3 Any FBC Approved coating listed for use with SBS or APP modified bitumen may be applied to the top roof membrane without adverse effect on the system wind load performance. Refer to current Roofing Materials Directory for fire ratings associated with coating usage.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Contact the noted QA agency for information on product locations covered for **F.A.C. Rule 61G20-3** QA requirements

9. QUALITY ASSURANCE ENTITY:

UL LLC – QUA9625; (314) 578-3406, k.chancellor@us.ul.com

- THE 22-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 or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	4
1B-1	Wood	New or Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	4
1B-2	Wood	New, Reroof (Tear-Off) or Recover	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	5
1C	Wood	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	6
1D	Wood	New, Reroof (Tear-Off) or Recover	D	Prelim. Attached Insulation, Mech. Attached Base Sheet, Bonded Roof Cover	7
1E-1	Wood	New or Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet (nails), Bonded Roof Cover	8
1E-2	Wood	New, Reroof (Tear-Off) or Recover	E	Non-Insulated, Mech. Attached Base Sheet (screws & plates), Bonded Roof Cover	9
1F	Wood	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	9
2A	Steel or Conc.	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	10
2B	Steel or Conc.	New, Reroof (Tear-Off) or Recover	D	Prelim. Attached Insulation, Mech. Attached Base Sheet, Bonded Roof Cover	11
3A	Concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	12-14
3B	Concrete	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	14
4A	LWIC	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	15-16
4B	LWIC	New or Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	16
4C	LWIC	New or Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	17-18
5A	CWF	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	19
5B	CWF	New, Reroof (Tear-Off) or Recover	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	19
5C	CWF	New or Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	19
6A	Gypsum	Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	20
6B	Gypsum	Reroof (Tear-Off)	E	Non-Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	21
7A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	21-22

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 requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- Insulation / base sheet fasteners shall be of sufficient length for the following deck engagement:
 - Wood: Minimum 0.75-inch penetration.
 - Steel: Minimum 0.75-inch penetration and engage the top flute of the steel deck.
 - Concrete: Minimum 1-inch embedment into pilot hole in accordance with fastener manufacturer's published installation instructions.
- Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite, gypsum-based roof board or mineral-wool roof board that meets the QA requirements of F.A.C. Rule 61G20-3 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for rigid insulation board for System Type D (mechanically attached base sheet, bonded roof cover), whereby the base sheet fasteners are installed through the LWIC to engage the structural steel or concrete deck. The structural deck shall be of equal or greater configuration to the steel and concrete deck listings. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- Preliminary insulation attachment for System Type D: Unless otherwise noted, refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29 (January 2016).

6. 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: Full coverage at 25-30 lbs/square.
 - Dow Insta-Stik Roofing Adhesive (D-IS): Continuous 0.75 to 1-inch wide ribbons, 12-inch o.c.
 - Millennium One Step Foamable Adhesive (M-OSFA): Continuous 0.25 to 0.5-inch wide ribbons, 12-inch o.c.
 - OMG OlyBond 500 (OB500): Continuous 0.75 to 1-inch wide ribbons, 12-inch o.c. (PaceCart or SpotShot). *Note: OlyBond Green may be used where OlyBond 500 is referenced.*
 - OlyBond Classic (OB Classic): Full coverage at 1 gal/square.
 - ICP Adhesives CR-20: Continuous 2.5-3.5-inch wide ribbons, 12-inch o.c.
 - *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:
- Millennium One Step Foamable Adhesive (M-OSFA): MDP -157.5 psf (Min. 0.5-inch thick)
 - OMG OlyBond 500 (OB500): MDP -45.0 psf (Min. 0.5-inch thick Multi-Max FA-3)
 - OMG OlyBond 500 (OB500): MDP -187.5 psf (Min. 0.5-inch thick ISO 95+ GL)
 - OMG OlyBond 500 (OB500): MDP -315.0 psf (Min. 0.5-inch thick ENRGY 3)
 - OMG OlyBond 500 (OB500): MDP -487.5 psf (Min. 0.5-inch thick ACFoam II, Poly ISO 2)
 - ICP Adhesives CR-20: MDP -117.5 psf (Min. 1.0-inch thick)
8. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
9. For mechanically attached components or partially bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16, and Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29 and Roofing Application Standard RAS 117. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016) for Zone 2/3 enhancements.
10. For assemblies with all components fully bonded in place, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16, and no rational analysis is permitted.
11. For mechanically attached components over existing 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 and analysis shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
12. For existing substrates in a bonded recover or re-roof installation, the existing roof surface or existing roof deck shall be examined for compatibility and bond performance with the selected adhesive, and the existing roof system (for recover) 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 ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124.
13. For Recover Applications using System Type D, the insulation is optional; however, the existing roof system shall be suitable for a recover application.
14. Lightweight Insulating Concrete (LWC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWC is referenced, refer to current LWC Product Approval for specific deck construction and limitations. For systems where specific LWC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1.

15. Unless otherwise noted, refer to the following references for bonded base, ply or cap sheet applications.

TABLE 1: MULE-HIDE ROOF COVERS			
Reference	Layer	Material	Application
SBS-SA (SBS, Self-Adhering)	Base Ply	One or more plies SA Base Sheet, SA Base Sheet (FR)	Self-Adhering
	Cap	SA-SBS Cap Sheet, SA-SBS Cap Sheet (FR)	
	Note: <i>Self-adhering membranes shall not be installed over APP-TA membranes.</i>		
APP-TA (APP, Torch-Applied)	Base Ply or Ply	One or more plies APP Torch Base, APP Torch S	Torch-Applied
	Cap	APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap G, APP Torch KoolCap G FR	
APP-SA (APP, Self-Adhering)	Cap	SA-APP Cap Sheet, SA-APP Cap Sheet (FR), SA-APP KoolCap G, SA-APP KoolCap G (FR)	Self-Adhering
	Note: <i>Self-adhering membranes shall not be installed over APP-TA membranes.</i>		

16. Any FBC Approved coating listed for use with SBS or APP modified bitumen roofing may be applied to the top roof membrane without adverse effect on the system wind load performance. Refer to current Roofing Materials Directory for fire ratings associated with coating usage.
17. Dens Deck shall be field-primed with PG100 prior to self-adhering membrane application. Refer to tables herein for other priming requirements.
18. Vapor barrier options for use over **structural concrete deck** followed by adhered insulation carry the following Maximum Design Pressure (MDP) limitations. The **lesser** of the MDP listings below vs. those in **Table 3A** applies:

VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; ADHERED INSULATION PER TABLE 3A					
Option #	Primer	Vapor Barrier		Insulation Adhesive	MDP (psf)
		Type	Attach		
VB-1.	Mule-Hide 121	SA Base Sheet	Self-Adhering	Inta-Stik or CR-20, 12-inch o.c.	-60.0
VB-2.	Mule-Hide 121	APP Torch Base	Torch-applied	Inta-Stik or CR-20, 12-inch o.c.	-75.0
VB-3.	Mule-Hide 121	SA-SBS Cap Sheet	Self-Adhering	Insta-Stik, 12-inch o.c.	-75.0
VB-4.	Mule-Hide 121	SA-SBS Cap Sheet	Self-Adhering	Millennium One Step Foamable Adhesive, 12-inch o.c.	-157.5
VB-5.	Mule-Hide 121	SA-SBS Cap Sheet	Self-Adhering	CR-20, 12-inch o.c.	-270.0
VB-6.	Mule-Hide 121	SA Base Sheet, SA Base Sheet (FR)	Self-Adhering	Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive, OlyBond 500 or CR-20, 12-inch o.c.	-290.0

19. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind loads.

TABLE 1A: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Cap	
W-1	Min. 15/32-inch plywood	Min. 1.5-inch ACFoam II, ACFoam III, ENRGY-3, H-Shield, H-Shield CG, Multi-Max FA3	D-IS, M-OSFA, OB500 or CR-20	(Optional) additional layer(s) of base insulation	D-IS, M-OSFA, OB500 or CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-52.5

TABLE 1B-1: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover (Note 15)			MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
TORCH-APPLIED BASE PLY:												
W-2	Min. 19/32-inch plywood	Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base, GAFGLAS #75	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 4-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-60.0
W-3	Min. 15/32-inch plywood	Polyglass G2 Base	Simplex MAXX Cap	9-inch o.c. in 4-inch lap and 9-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-82.5
W-4	Min. 15/32-inch plywood	Polyglass G2 Base	32 ga., 1-5/8-inch diameter tin caps with 12 ga. annular ring shank nails	6-inch o.c. in 4-inch lap and 6-inch o.c. in five (5) equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-90.0
SELF-ADHERING BASE PLY:												
W-5	Min. 19/32-inch plywood	Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base, GAFGLAS #75	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 4-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-60.0
W-6	Min. 19/32-inch plywood	Nail Base	32 ga., 1-5/8-inch diameter tin caps with 12 ga. annular ring shank nails	6-inch o.c. in 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	Min. 2-inch ACFoam II, Poly ISO 2, ACFoam III, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3, ENRGY-3	D-IS, OB500, CR-20, M-OSFA, atop fastener rows, 7-inch o.c.	(Optional) Additional layers of base insulation	D-IS, OB500, CR-20, M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-60.0*

TABLE 1B-2: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover (Note 15)			MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
TORCH-APPLIED BASE PLY:												
W-7	Min. 19/32-inch plywood	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-60.0
W-8	Min. 15/32-inch plywood	Polyglass G2 Base	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	9-inch o.c. in 4-inch lap and 9-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-82.5
SELF-ADHERING BASE PLY:												
W-9	Min. 19/32-inch plywood	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 2, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-60.0

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

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Cap	
TORCH-APPLIED BASE PLY:									
W-10	Min. 15/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	1 per 2 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-30.0
SELF-ADHERING BASE PLY:									
W-11	Min. 15/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-30.0
W-12	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ENRGY 3, H-Shield, Poly ISO 1, Polytherm	Dekfast Galvalume Steel Hex with Dekfast #12 DP or Mule-Hide 3" Insulation Plate with Mule-Hide Drill Point Fastener	1 per 1.33 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-82.5

TABLE 1D: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER

SYSTEM TYPE D: PRELIMINARILY ATTACHED INSULATION, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Insulation Layer(s)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Attach	Base	Fasten	Attach	Base Ply	Cap	
TORCH-APPLIED BASE PLY:									
W-13	Min. 19/32-inch plywood	One or more layers, any combination	Prelim. Attached	Nail Base, Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFLAS #75	OMG Flat Bottom Plates (square) with Roofgrip #14, Dekfast Hex with Dekfast #14 or Trufast 3" Metal Insulation Plate with Trufast HD	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
W-14	Min. 19/32-inch plywood	One or more layers, any combination	Prelim. Attached	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
W-15	Min. 15/32-inch plywood	One or more layers, any combination	Prelim. Attached	Polyglass G2 Base, Nail Base	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	10-inch o.c. in 4-inch lap and 10-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-75.0
W-16	Min. 15/32-inch plywood	One or more layers, any combination	Prelim. Attached	Polyglass G2 Base, Nail Base	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	9-inch o.c. in 4-inch lap and 9-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
SELF-ADHERING BASE PLY:									
W-17	Min. 19/32-inch plywood	One or more layers, any combination	Prelim. Attached	Nail Base	Dekfast Hex with Dekfast #14 or Mule-Hide 3" Insulation Plate with Mule-Hide HDP Fastener	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA, APP-TA	-52.5*
W-18	Min. 19/32-inch plywood	One or more layers, any combination	Prelim. Attached	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA, APP-TA	-60.0*

TABLE 1E-1: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET (NAILS), BONDED ROOF COVER

System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Base	Fasten	Attach	Base Ply	Cap	
TORCH-APPLIED BASE PLY:							
W-19	Min. 15/32-inch plywood	Nail Base	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*
W-20	Min. 15/32-inch plywood	Nail Base	Simplex MAXX Cap	9-inch o.c. at 2-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
W-21	Min. 15/32-inch plywood	APP Torch Base, Nail Base	Original Simplex Cap Nails (1-inch metal head diameter, 11 gauge x min. 1.25-inch long annular grooved shank)	6-inch o.c. at 3-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
W-22	Min. 19/32-inch plywood	Nail Base, Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 4-inch lap and 8-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
W-23	Min. 15/32-inch plywood	Polyglass G2 Base, Nail Base	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 4-inch lap and 8-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-67.5
W-24	Min. 15/32-inch plywood	Polyglass G2 Base, Nail Base	Simplex MAXX Cap	10-inch o.c. in 4-inch lap and 10-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-75.0
W-25	Min. 15/32-inch plywood	Polyglass G2 Base, Nail Base	Simplex MAXX Cap	9-inch o.c. in 4-inch lap and 9-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
W-26	Min. 15/32-inch plywood	Nail Base	Simplex MAXX Cap	6-inch o.c. at 2-inch lap and 6-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
W-27	Min. 15/32-inch plywood	Elastobase	Simplex MAXX Cap	6-inch o.c. at 2-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-105.0
W-28	Min. 19/32-inch plywood	Elastobase or Elastobase Poly	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	6-inch o.c. in 4-inch lap and 6-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-112.5
SELF-ADHERING BASE PLY:							
W-29	Min. 15/32-inch plywood	Nail Base	Original Simplex Cap Nails (1-inch metal head diameter, 11 gauge x min. 1.25-inch long annular grooved shank)	6-inch o.c. at 3-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA, APP-SA, APP-TA	-52.5
W-30	Min. 19/32-inch plywood	Nail Base	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	8-inch o.c. in 4-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA, APP-SA, APP-TA	-60.0
W-31	Min. 19/32-inch plywood	Nail Base	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails.	4-inch o.c. in 4-inch lap and 4-inch o.c. in four, equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA, APP-SA, APP-TA	-97.5
W-32	Min. 19/32-inch plywood	Nail Base	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails. Note: Tin caps are to be primed with Mule-Hide 121 or ASTM D41 primer.	6-inch o.c. in 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	(Optional) SBS-SA	SBS-SA, APP-SA, APP-TA	-112.5

TABLE 1E-2: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER

SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET (SCREWS & PLATES), BONDED ROOF COVER

System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Base	Fasten	Attach	Base Ply	Cap	
TORCH-APPLIED BASE PLY:							
W-33	Min. 19/32-inch plywood	Nail Base, Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with Roofgrip #14, Dekfast Hex with Dekfast #14 or Trufast 3" Metal Insulation Plate with Trufast HD	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
W-34	Min. 19/32-inch plywood	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
W-35	Min. 15/32-inch plywood	Polyglass G2 Base, Nail Base	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	10-inch o.c. in 4-inch lap and 10-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-75.0
W-36	Min. 15/32-inch plywood	Polyglass G2 Base, Nail Base	Dekfast Hex Plates with Dekfast #14, OMG 3" Round Metal Plate with OMG HD, OMG Flat Bottom Plate (Accutrac) with Roofgrip #14 or Trufast 3" Metal Insulation Plate with Trufast HD.	9-inch o.c. in 4-inch lap and 9-inch o.c. in four (4), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
W-37	Min. 15/32-inch plywood	APP Torch Base or Nail Base	OMG #12 Standard Roofgrip or OMG #14 Heavy Duty (min. 1-5/8-inch long) with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates	6-inch o.c. at 4-inch lap and 6-inch o.c. in three (3), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
W-38	Min. 15/32-inch plywood	APP Torch Base or Nail Base	OMG #12 Standard Roofgrip or OMG #14 Heavy Duty (min. 1-5/8-inch long) with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates	6-inch o.c. at 4-inch lap and 6-inch o.c. in five (5), equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-120.0
SELF-ADHERING BASE PLY:							
W-39	Min. 19/32-inch plywood	Nail Base	Dekfast Hex with Dekfast #14 or Mule-Hide 3" Insulation Plate with Mule-Hide HDP Fastener	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA, APP-TA	-52.5*
W-40	Min. 19/32-inch plywood	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA, APP-TA	-60.0*

TABLE 1F: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (Note 1)	Primer	Roof Cover (Note 15)			MDP (psf)	
			Joint Treatment	Base Ply	Ply		Cap
W-41	Min. 15/32-inch plywood	(Optional) Mule-Hide 121	None	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-90.0
W-42	Min. 15/32-inch plywood	(Optional) Mule-Hide 121	Plywood joints are covered with minimum 4-inch wide strips of SA Base Sheet, rolled into place to create continuous bond.	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-135.0

TABLE 2A: STEEL OR CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Cap	
SC-1.	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 ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	Dekfast Galvalume Steel Hex with Dekfast #12 DP (steel only) or Dekfast #14, OMG AccuTrac Flat Bottom Plate with #12 Roofgrip (steel only) or OMG #14 Heavy Duty, Trufast 3" Metal Insulation Plate with Trufast #12 DP (steel only) or Trufast #14 HD	1 per 2.67 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-30.0
SC-2.	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 H-Shield, Poly ISO 1, Polytherm	OMG AccuTrac Flat Bottom Plate with #12 Roofgrip (steel only) or OMG #14 Heavy Duty Trufast 3" Metal Insulation Plate with Trufast #12 DP (steel only) or Trufast #14 HD	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-45.0*
SC-3.	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 H-Shield, Poly ISO 1, Polytherm	Dekfast Galvalume Steel Hex with Dekfast #12 DP (steel only) or Dekfast #14	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-60.0
SC-4.	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 ENRGY 3, H-Shield, Poly ISO 1, Polytherm	Dekfast Galvalume Steel Hex with Dekfast #12 (steel only) or #14 or Mule-Hide 3" Insulation Plate with Mule-Hide Drill Point Fastener (steel only) or Mule-Hide HDP Fastener	1 per 1.33 ft ²	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-82.5

TABLE 2B: STEEL OR CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D: PRELIMINARILY ATTACHED INSULATION, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

NOTE: INSULATION IS OPTIONAL FOR RECOVER APPLICATIONS

System No.	Deck (Note 1)	Insulation Layer(s)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Attach	Base	Fasten	Attach	Base Ply	Cap	
SC-5.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Nail Base or JM Perma-Ply 28	OMG Flat Bottom Plates (square) with Roofgrip #14, Dekfast Hex with Dekfast #14 or Trufast 3" Metal Insulation Plate with Trufast HD	12-inch o.c. in 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*
SC-6.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Nail Base, Polyglass G2 Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with Roofgrip #14, Dekfast Hex with Dekfast #14 or Trufast 3" Metal Insulation Plate with Trufast HD	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
SC-7.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #14, Dekfast Hex with Dekfast #14 or Mule-Hide 3" Insulation Plate with Mule-Hide HDP Fastener	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA	-52.5*
SC-8.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12 (steel only) or #14	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
SC-9.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Nail Base	OMG Flat Bottom Plates (square) with Roofgrip #12 (steel only) or #14	12-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA	-60.0*
SC-10.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	APP Torch S	Dekfast isofast IF-2.375-AT Plates with Dekfast #15 HS	12-inch o.c. within the 5-inch wide, heat-welded side lap	(Optional) APP-TA	APP-TA	-82.5
SC-11.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	APP Torch S	Trufast 2.4 in. Barbed Seam Plates with Trufast EHD Fasteners	12-inch o.c. within the 6-inch wide, heat-welded side lap	(Optional) APP-TA	APP-TA	-82.5
SC-12.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	APP Torch S	Dekfast Hex with Dekfast #14 or OMG Flat Bottom Plates with OMG Roofgrip #14	12-inch o.c. within the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-112.5

TABLE 3A: CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: FOR VAPOR BARRIER OPTIONS REFER TO NOTE 17

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Base Ply	Roof Cover (Note 15)		MDP (psf)
			Type	Attach	Type	Attach		Ply	Cap	
SELF-ADHERING BASE PLY WITH BASE INSULATION AND OPTIONAL TOP INSULATION OF THE SAME TYPE:										
C-1	Concrete	(Optional) Mule-Hide 121	Min. 1.5-inch H-Shield, Poly ISO 1, Multi-Max FA3	D-IS	(Optional) additional layers(s) of base insulation	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-67.5
C-2	Concrete	(Optional) Mule-Hide 121	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3	D-IS	(Optional) additional layers(s) of base insulation	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-135.0
C-3	Concrete	None	Min. 1.5-inch, min. 1.5 pcf EPS insulation board	D-IS	(Optional) additional layers of base insulation	D-IS	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-157.5
C-4	Concrete	None	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	OB500	(Optional) additional layers of base insulation	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-120.0
C-5	Concrete	None	Min. 1.5-inch ENRGY 3	OB500	(Optional) additional layers(s) of base insulation	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-127.5
C-6	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	OB500	(Optional) additional layers(s) of base insulation	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-150.0
C-7	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1, Multi-Max FA3	M-OSFA	(Optional) additional layers(s) of base insulation	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-232.5
C-8	Concrete	None	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	CR-20	(Optional) additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-240.0
C-9	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3, ISO 95+ GL	CR-20	(Optional) additional layers(s) of base insulation	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-270.0
C-10	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	OB Classic	(Optional) additional layers(s) of base insulation	OB Classic	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-270.0
C-11	Concrete	Mule-Hide 121	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	Hot asphalt	(Optional) additional layers(s) of base insulation	Hot asphalt	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-480.0
SELF-ADHERING BASE PLY WITH BASE INSULATION AND COVERBOARD:										
C-12	Concrete	None	Min. 1.5-inch Multi-Max FA3	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-67.5
C-13	Concrete	None	Min. 1.5-inch, min. 2.0 pcf ASTM C578 Expanded Polystyrene, ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1	D-IS	Min. 0.25-inch Dens Deck Prime	D-IS	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-72.5
C-14	Concrete	None	Min. 1.5-inch, min. 2.0 pcf ASTM C578 Expanded Polystyrene	D-IS	Min. 0.25-inch Dens Deck, Dens Deck Prime	D-IS	SBS-SA	(Optional) APP-TA	APP-TA	-120.0
C-15	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 1	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-247.5

TABLE 3A: CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: FOR VAPOR BARRIER OPTIONS REFER TO NOTE 17

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach	Type	Attach	Base Ply	Ply	Cap	
C-16	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or ISO 95+GL	OB500	Min. 0.25-inch Dens Deck Prime	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-72.5
C-17	Concrete	None	Min. 1.5-inch ENRGY 3	OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime	OB500	SBS-SA	(Optional) APP-TA	APP-TA	-127.5
C-18	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1, ISO 95+GL	OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime	OB500	SBS-SA	(Optional) APP-TA	APP-TA	-150.0
C-19	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 1	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-247.5
C-20	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1, Multi-Max FA3	M-OSFA	Min. 0.25-inch Dens Deck Prime	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
C-21	Concrete	None	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1, Multi-Max FA3	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-232.5
C-22	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 1	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-247.5
C-23	Concrete	None	Min. 1.5-inch, min. 2.0 pcf ASTM C578 Expanded Polystyrene	CR-20	Min. 0.25-inch Dens Deck Prime	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-72.5
C-24	Concrete	None	Min. 1.5-inch, min. 2.0 pcf ASTM C578 Expanded Polystyrene	CR-20	Min. 0.25-inch Dens Deck, Dens Deck Prime	CR-20	SBS-SA	(Optional) APP-TA	APP-TA	-240.0
C-25	Concrete	None	Min. 1.5-inch Ultra-Max, Multi-Max FA-3, min. 1.3-inch ACFoam III or min. 1.0-inch ISO 95+GL, H-Shield, Poly ISO 1, H-Shield CG, ENRGY 3	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-240.0
C-26	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, ENRGY-3, H-Shield, Poly ISO 1	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-247.5
C-27	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	OB Classic	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB Classic	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-350.0
C-28	Concrete	Mule-Hide 121	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-350.0
TORCH APPLIED BASE PLY:										
C-29	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-30	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-31	Concrete	None	Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	APP-TA	(Optional) APP-TA	APP-TA	-232.5

TABLE 3A: CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: FOR VAPOR BARRIER OPTIONS REFER TO NOTE 17

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach	Type	Attach	Base Ply	Ply	Cap	
C-32	Concrete	None	Min. 1.5-inch Ultra-Max or Multi-Max FA-3, min. 1.3-inch ACFoam III or min. 1.0-inch ISO 95+GL, H-Shield, Poly ISO 1, H-Shield CG or ENRGY 3	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-33	Concrete	None	(Optional) Min. 2-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1	OB Classic	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB Classic	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-34	Concrete	Mule-Hide 121	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	Hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-232.5

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

System No.	Deck (Note 1)	Primer	Roof Cover (Note 15)			MDP (psf)
			Base Ply	Ply	Cap	
C-35	Concrete	Mule-Hide 121	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-315.0

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)		Base Insulation Layer		Coverboard		Roof Cover (Note 15)			MDP (psf)
	Struct. Deck	LWC	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
SELF-ADHERING BASE PLY WITH BASE INSULATION AND OPTIONAL TOP INSULATION OF THE SAME TYPE:										
LWC-1	Concrete	Min. 200 psi, min 2-inch Elastizell	Min. 1.5-inch, min. 2.0 pcf ASTM C578 expanded polystyrene	OB500	(Optional) Additional layers of base insulation	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-120.0
LWC-2	Concrete	Min. 200 psi, min 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1	OB500	(Optional) Additional layers of base insulation	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-225.0
LWC-3	Concrete	Min. 200 psi, min. 2-inch Elastizell	Min. 1.5-inch, min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	(Optional) Additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-180.0
LWC-4	Concrete	Min. 200 psi, min. 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	CR-20	(Optional) Additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-180.0
LWC-5	Concrete	Min. 200 psi, min. 2-inch Celcore or Mearlcrete	Min. 1.5-inch, min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	(Optional) Additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-222.5
LWC-6	Concrete	Min. 200 psi, min. 2-inch Celcore or Mearlcrete	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3	CR-20	(Optional) Additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-222.5
SELF-ADHERING BASE PLY WITH BASE INSULATION AND COVERBOARD:										
LWC-7	Concrete	Min. 200 psi, min 2-inch Elastizell	Min. 1.5-inch, min. 2.0 pcf ASTM C578 expanded polystyrene	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-120.0
LWC-8	Concrete	Min. 200 psi, min 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-225.0
LWC-9	Concrete	Min. 200 psi, min. 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3 or min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-180.0
LWC-10	Concrete	Min. 200 psi, min. 2-inch Celcore or Mearlcrete	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3 or min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-222.5
TORCH APPLIED BASE PLY:										
LWC-11	Concrete	Min. 200 psi, min 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	BP-AA, SBS-AA, APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA	-225.0
LWC-12	Concrete	Min. 200 psi, min. 2-inch Elastizell	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3 or min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	BP-AA, SBS-AA, APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA	-180.0

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)		Base Insulation Layer		Coverboard		Roof Cover (Note 15)			MDP (psf)
	Struct. Deck	LWC	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
LWC-13	Concrete	Min. 200 psi, min. 2-inch Celcore or Mearlcrete	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, ISO 95+ GL, H-Shield, Poly ISO 1, H-Shield CG, Multi-Max FA3 or min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	BP-AA, SBS-AA, APP-TA	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA	-222.5

TABLE 4B: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)		Anchor Sheet			Base Insulation		Top Insulation		Roof Cover (Note 15)			MDP (psf)
	Struct	LWC	Type	Fasten	Attach	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
LWC-14	Min. 22 ga., Type B, vented steel at max. 5 ft spans	Min. 300 psi Approved cellular LWC	GAFGLAS #75	OMG CR BSF	7-inch o.c. at 4-inch lap and 7-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ACFoam II, Poly ISO 2, H-Shield, Poly ISO 1, Multi-Max FA3, Polytherm	Hot asphalt	None	N/A	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-45.0

TABLE 4C: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
	Structural Deck	Lightweight Concrete	Type	Fasten	Attach	Base Ply	Cap	
CELCORE CELLULAR LIGHTWEIGHT INSULATING CONCRETE:								
LWC-15	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 225 psi, min. 2-inch thick Celcore MF	Polyglass G2 Base, Nail Base	Trufast Twin Loc-Nail	9-inch o.c. in a 4-inch lap and 18-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	(Optional) APP-TA	APP-TA	-45.0
LWC-16	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 225 psi, min. 2-inch thick Celcore MF	Nail Base	Trufast Twin Loc-Nail	9-inch o.c. in a 4-inch lap and 18-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-45.0
LWC-17	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF	Nail Base	Trufast FM-90	8-inch o.c. in a 4-inch lap and 8-inch o.c. in three equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
LWC-18	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF	Nail Base	Trufast FM-90	8-inch o.c. in a 4-inch lap and 8-inch o.c. in three equally spaced, staggered center rows	SBS-SA	SBS-SA, APP-SA, APP-TA	-60.0
LWC-19	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Celcore	Polyglass G2 Base, Nail Base, GAFGLAS #75, GAFGLAS Stratavent Nailable Venting Base Sheet, GAFGLAS Ply 4, GAFGLAS FlexPly 6, JM Perma Ply No. 28, JM Vensulation, JM GlasPly IV. GlasPly Premier. Tamko Glass-Base, Tamko Vapor-Chan	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 3-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	APP-TA	APP-TA	-75.0
LWC-20	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF	Nail Base	Trufast FM-290	10-inch o.c. in a 4-inch lap and 10-inch o.c. in three equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-90.0
ELASTIZELL CELLULAR LIGHTWEIGHT INSULATING CONCRETE:								
LWC-21	Min. 0.0179-inch Tensiform S-75 or min. 0.0205-inch Tensiform 75 at max. 5 ft spans or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Range II	Polyglass G2 Base, Nail Base, GAFGLAS #75, GAFGLAS Stratavent Nailable Venting Base Sheet, GAFGLAS Ply 4, GAFGLAS FlexPly 6, JM Perma Ply No. 28, JM Vensulation, JM GlasPly IV. GlasPly Premier. Tamko Glass-Base, Tamko Vapor-Chan	Trufast FM-90 or OMG CR BPF	7.5-inch o.c. in a 3-inch lap and 7.5-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	APP-TA	APP-TA	-30.0
LWC-22	Min. 0.0179-inch Tensiform S-75 or min. 0.0205-inch Tensiform 75 at max. 5 ft spans or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Range II	Nail Base	Trufast FM-90 or OMG CR BPF	7.5-inch o.c. in a 3-inch lap and 7.5-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-30.0
LWC-23	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Range II	Polyglass G2 Base, Nail Base, GAFGLAS #75, GAFGLAS Stratavent Nailable Venting Base Sheet, GAFGLAS Ply 4, GAFGLAS FlexPly 6, JM Perma Ply No. 28, JM Vensulation, JM GlasPly IV. GlasPly Premier. Tamko Glass-Base, Tamko Vapor-Chan	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 3-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	APP-TA	APP-TA	-45.0

TABLE 4C: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
	Structural Deck	Lightweight Concrete	Type	Fasten	Attach	Base Ply	Cap	
LWC-24	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Range II	Nail Base	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 3-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-45.0
LWC-25	Min. 22 ga., type B vented steel at max 5 ft spans or structural concrete	Min. 350 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers, supplemental attached with Roofgrip #21 and 3-inch plates at 1 per 8 ft ²	Nail Base	Trufast FM-290	8-inch o.c. in a 4-inch lap and 8-inch o.c. in three, equally spaced, staggered rows in the field of the sheet	(Optional) APP-TA	APP-TA	-52.5
LWC-26	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 350 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers, supplemental attached with Roofgrip #21 and 3-inch plates at 1 per 8 ft ²	Nail Base	Trufast Twin Loc-Nails (min. 1.8-inch)	6-inch o.c. in a 4-inch lap and 6-inch o.c. in three, equally spaced, staggered rows in the field of the sheet	APP-TA	APP-TA	-60.0
LWC-27	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 350 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers, supplemental attached with Roofgrip #21 and 3-inch plates at 1 per 8 ft ²	Nail Base	Trufast Twin Loc-Nails (min. 1.8-inch)	6-inch o.c. in a 4-inch lap and 6-inch o.c. in three, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-60.0
MEARLCRETE CELLULAR LIGHTWEIGHT INSULATING CONCRETE:								
LWC-28	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Mearlcrete	Polyglass G2 Base, Nail Base, Tamko Vapor Chan	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 4-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	APP-TA	APP-TA	-45.0
LWC-29	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Mearlcrete	Nail Base	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 4-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-45.0
LWC-30	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Mearlcrete	Polyglass G2 Base, Nail Base, GAFGLAS #75, JM Perma Ply No. 28, Tamko Glass-Base	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 4-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	BP-AA, SBS-AA, SBS-TA, or APP-TA	SBS-AA, SBS-TA, or APP-TA	-52.5
LWC-31	Min. 22 ga., type B steel at max 5 ft spans or structural concrete	Min. 300 psi, min. 2-inch thick Mearlcrete	Nail Base	Trufast FM-90 or OMG CR BPF	7-inch o.c. in a 4-inch lap and 7-inch o.c. in two, equally spaced, staggered rows in the field of the sheet	SBS-SA	SBS-SA, APP-SA, APP-TA	-52.5

TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)									
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER									
System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Cap	
CWF-1	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Min. 1.5-inch ACFoam II, Poly ISO 2, ISO 95+GL, H-Shield, Poly ISO 1, Polytherm, ENRGY-3	D-IS or OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	D-IS or OB500	SBS-SA, APP-TA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-45.0
CWF-2	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Min. 1.5-inch ACFoam II, Poly ISO 2, ISO 95+GL, H-Shield, Poly ISO 1, Polytherm, ENRGY-3	CR-20	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA, APP-TA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-52.5

TABLE 5B: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)												
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER												
System No.	Deck (Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover (Note 15)			MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach	Base Ply	Ply	Cap	
CWF-3	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Nail Base, Polyglass G2 Base	Trufast Inuldek Loc-Nail	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ISO95+GL, H-Shield, Poly ISO 1, ENRGY 3, Polytherm or Multi-Max FA3,	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	SBS-SA, APP-TA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-30.0*
CWF-4	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Nail Base, Polyglass G2 Base	Trufast Twin Loc-Nail	9-inch o.c. in 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ISO95+GL, H-Shield, Poly ISO 1, ENRGY 3, Polytherm or Multi-Max FA3,	Hot asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	SBS-SA, APP-TA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-45.0*

TABLE 5C: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)									
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER									
System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)		
		Base	Fasten	Attach	Base Ply	Cap			
CWF-5	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Nail Base, Polyglass G2 Base	Trufast Inuldek Loc-Nail	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-30.0*		
CWF-6	Min. 2.5-inch Tectum Plank or Tectum LS Plank	Nail Base, Polyglass G2 Base	Trufast Twin Loc-Nails	9-inch o.c. in 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*		

TABLE 6A: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Cap	
G-1	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or min. 2.0 pcf, ASTM C578 expanded polystyrene	OB500	Min. 0.25-inch Dens Deck Prime	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
G-2	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch min. 2.0 pcf, ASTM C578 expanded polystyrene	OB500	(Optional) additional layers(s) of base insulation	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-112.5
G-3	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3 or H-Shield, Poly ISO 1	OB500	(Optional) additional layers(s) of base insulation	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-112.5
G-4	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3 or H-Shield, Poly ISO 1 or min. 2.0 pcf, ASTM C578 expanded polystyrene	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-112.5
G-5	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or Multi-Max FA3	M-OSFA	Min. 0.25-inch Dens Deck Prime	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
G-6	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or Multi-Max FA3	M-OSFA	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-202.5
G-7	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch, min. 2.0 pcf EPS insulation board, ACFoam II, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG or Multi-Max FA3	CR-20	Min. 0.25-inch Dens Deck Prime	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
G-8	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	CR-20	(Optional) additional layers of base insulation	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-240.0
G-9	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-240.0
G-10	Existing, sound poured gypsum or gypsum plank deck	Min. 1.5-inch ACFoam II, Poly ISO 2, ACFoam III, ENRGY 3, H-Shield, Poly ISO 1, H-Shield CG or Multi-Max FA3	CR-20	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-257.5

TABLE 6B: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Base	Fasten	Attach	Base Ply	Cap	
G-11	Existing sound poured gypsum or gypsum plank deck	Nail Base, Polyglass G2 Base	Trufast FM-75 or FM-90 or Twin Loc-Nails	9-inch o.c. in 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 11)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Cap	
SELF-ADHERING BASE PLY:									
R-1	Existing asphaltic roof	Min. 1.5-inch Multi-Max FA3	D-IS	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-67.5
R-2	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3 or Multi-Max FA3 or min. 2.0 pcf EPS insulation board	D-IS	Min. 0.25-inch Dens Deck Prime	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
R-3	Existing asphaltic roof	Min. 1.5-inch min. 2.0 pcf EPS insulation board	D-IS	(Optional) additional layers(s) of base insulation	D-IS	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-90.0
R-4	Existing asphaltic roof	Min. 1.5-inch min. 2.0 pcf EPS insulation board	D-IS	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA	-90.0
R-5	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2 or ENRGY 3	D-IS	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	D-IS	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-90.0
R-6	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or min. 2.0 pcf EPS insulation board	OB500	Min. 0.25-inch Dens Deck Prime	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
R-7	Existing asphaltic roof	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	OB500	(Optional) additional layers of base insulation	OB500	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-120.0
R-8	Existing asphaltic roof	Min. 1.5-inch, min. 2.0 pcf EPS insulation board	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-120.0
R-9	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3 or H-Shield, Poly ISO 1	OB500	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-127.5
R-10	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or Multi-Max FA3	M-OSFA	Min. 0.25-inch Dens Deck Prime	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
R-11	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or Multi-Max FA3	M-OSFA	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-157.5

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 11)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Cap	
R-12	Existing asphaltic roof	Min. 1.5-inch min. 2.0 pcf ASTM C578 expanded polystyrene, Min. 2-inch ACFoam II, Poly ISO 2, min. 1.5-inch Ultra-Max or Multi-Max FA-3, min. 1.3-inch ACFoam III or min. 1.0-inch ISO 95+GL, H-Shield, Poly ISO 1, H-Shield CG or ENRGY 3	CR-20	Min. 0.25-inch Dens Deck Prime	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-72.5
R-13	Existing asphaltic roof	Min. 1.5-inch min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	(Optional) additional layers(s) of base insulation	CR-20	SBS-SA	(Optional) SBS-SA	SBS-SA, APP-SA	-240.0
R-14	Existing asphaltic roof	Min. 1.5-inch min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-240.0
R-15	Existing asphaltic roof	Min. 1.5-inch Ultra-Max or Multi-Max FA-3, min. 1.3-inch ACFoam III or min. 1.0-inch ISO 95+GL, H-Shield, Poly ISO 1, H-Shield CG or ENRGY 3	CR-20	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-240.0
R-16	Existing asphaltic roof	Min. 2-inch ACFoam II, Poly ISO 2, ENRGY-3 or H-Shield, Poly ISO 1	CR-20	(Optional) additional layers(s) of base insulation and/or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	SBS-SA	(Optional) SBS-SA, APP-TA	SBS-SA, APP-SA, APP-TA	-247.5
TORCH-APPLIED BASE PLY:									
R-17	Existing asphaltic roof	Min. 1.5-inch Multi-Max FA3	D-IS	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	D-IS	APP-TA	(Optional) APP-TA	APP-TA	-67.5
R-18	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3 or min. 2.0 pcf EPS insulation board	D-IS	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	D-IS	APP-TA	(Optional) APP-TA	APP-TA	-90.0
R-19	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or ISO 95+GL	OB500	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	APP-TA	(Optional) APP-TA	APP-TA	-127.5
R-20	Existing asphaltic roof	Min. 1.5-inch ACFoam II, Poly ISO 2, ENRGY 3, H-Shield, Poly ISO 1 or Multi-Max FA3	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	APP-TA	(Optional) APP-TA	APP-TA	-157.5
R-21	Existing asphaltic roof	Min. 1.5-inch Ultra-Max or Multi-Max FA-3, min. 1.3-inch ACFoam III or min. 1.0-inch ISO 95+GL, H-Shield, Poly ISO 1, H-Shield CG or ENRGY 3 or min. 2.0 pcf ASTM C578 expanded polystyrene	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	APP-TA	(Optional) APP-TA	APP-TA	-232.5