



NEMO|etc.

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ENGINEER

EVALUATE

TEST

CONSULT

P.E. EVALUATION REPORT (PEER)

Johns Manville Corporation

717 17th Street
Denver, CO 80202
(303) 978-4879

PEER-JM-002.A.R9

FL1046-R12 (NON-HVHZ)

Date of Issuance: 07/08/2008

Revision 9: 10/20/2023

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C. 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 **8th Edition (2023) Florida Building Code** [sections noted herein](#).

DESCRIPTION: Johns Manville APP Modified Bitumen Roof Systems (NON-HVHZ)

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

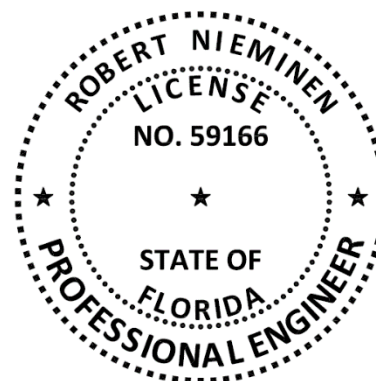
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO 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 PEER relative to updated Code requirements with each Code Cycle.

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

INSPECTION: Upon request, a copy of this entire PEER 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 PEER consists of pages 1 through 5, plus a 25-page Appendix.

Prepared by:



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 PEERs 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 PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING SYSTEMS EVALUATION:
1. SCOPE:

Product Category: Roofing
Sub-Category: Modified Bitumen Roof Systems
Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer
Compliance Statement: Johns Manville APP Modified Bitumen Roof Systems, as produced by Johns Manville Corporation, have demonstrated compliance with the following sections of the 8th Edition (2023) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the [Installation Requirements](#) and [Limitations of Use](#) set forth herein.

2. STANDARDS:

SECTION	PROPERTY	STANDARD
1504.3.1	Wind resistance	FM 4474
1504.6	Accelerated weathering	ASTM G155
1504.7	Impact resistance	FM 4470
1507.10.2	Material standard	ASTM D2178
1507.10.2	Material standard	ASTM D4601
1507.10.2	Material standard	ASTM D4897
1507.11.2	Material standard	ASTM D6162
1507.11.2	Material standard	ASTM D6163
1507.11.2	Material standard	ASTM D6164
1507.11.2	Material standard	ASTM D6222
1507.11.2	Material standard	ASTM D6223
1507.11.2	Material standard	ASTM D6509

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
NEMO	PEER	PEER-JM-005.A.R16	10-20-23
PRI (TST5878)	ASTM D6222	JMC-330-02-01	10-17-18
PRI (TST5878)	ASTM D6222	JMC-330-02-02	10-17-18
PRI (TST5878)	ASTM D6222	JMC-330-02-03	10-17-18
PRI (TST5878)	ASTM D6222	507T0157	05-12-21
PRI (TST5878)	ASTM D6222	507T0223	02-08-22
PRI (TST5878)	ASTM D6509	507T0190	05-02-22
PRI (TST5878)	ASTM D6223	507T0209	05-02-22
ERD (TST6049)	FM 4470/4474	J45020.05.13-1	05-16-13
ERD (TST6049)	FM 4470/4474	J45020.05.13-2	05-20-13
ERD (TST6049)	FM 4470/4474	4674.11.01-1-R4	10-06-15
FM (TST1867)	FM 4470	125A6.AM	10-25-96
FM (TST1867)	FM 4470	0D3A3.AM	04-04-97
FM (TST1867)	FM 4470	4D2A3.AM	09-14-99
FM (TST1867)	FM 4470	3006646	01-04-00
FM (TST1867)	FM 4470/4474	3022038	04-05-06
FM (TST1867)	FM 4470/4474	3024594	05-19-06
FM (TST1867)	FM 4470/4474	3015484	03-26-07
FM (TST1867)	FM 4470/4474	3025185	05-22-07
FM (TST1867)	FM 4470/4474	PR454790	04-02-20
FM Approvals (TST1867)	FM 4470	0W6A2.AM	02-05-93
FM Approvals (TST1867)	FM 4470	0X7A4.AM	08-26-93
FM Approvals (TST1867)	FM 4470	0X0A9.AM	03-25-94
FM Approvals (TST1867)	FM 4470	3001482	08-11-98
FM Approvals (TST1867)	FM 4470	3002823	04-01-99
FM Approvals (TST1867)	FM 4470	3003468	02-02-00
FM Approvals (TST1867)	FM 4470	3007148	04-19-00

ENTITY	EXAMINATION	REFERENCE	DATE
FM Approvals (TST1867)	FM 4470	3009499	04-04-01
FM Approvals (TST1867)	FM 4470	3012974	06-03-02
FM Approvals (TST1867)	FM 4470	3012321	07-29-02
FM Approvals (TST1867)	FM 4470	3011248	11-01-02
FM Approvals (TST1867)	FM 4470	3014692	08-05-03
FM Approvals (TST1867)	FM 4470/4474	3023458	07-18-06
FM Approvals (TST1867)	FM 4470/4474	3026128	08-04-06
FM Approvals (TST1867)	FM 4470/4474	3024311	11-01-06
FM Approvals (TST1867)	FM 4470/4474	3028879	10-28-07
FM Approvals (TST1867)	FM 4470/4474	3034810	09-10-09
FM Approvals (TST1867)	FM 4470/4474	3037540	10-20-10
FM Approvals (TST1867)	FM 4470/4474	3040986	09-23-11
FM Approvals (TST1867)	FM 4470/4474	3046174	04-03-13
NEMO (TST6049)	FM 4474	4a-CEL-19-LSWUS-01.C	09-01-20
PRI (TST5878)	FM 4470/4474	JMC-108-02-01	04-16-13
PRI (TST5878)	FM 4470/4474	JMC-109-02-01	04-16-13
PRI (TST5878)	FM 4470/4474	JMC-114-02-01	04-16-13
PRI (TST5878)	FM 4470/4474	JMC-118-02-01	04-16-13
PRI (TST5878)	FM 4470/4474	JMC-126-02-01	04-17-13
PRI (TST5878)	FM 4470/4474	JMC-131-02-01	04-17-13
PRI (TST5878)	FM 4470/4474	JMC-118-02-02	04-19-13
PRI (TST5878)	FM 4470/4474	JMC-141-02-01	05-13-13
UL LLC (QUA9625)	Quality Assurance	Service Confirmation	04-22-22
UL LLC (QUA9625)	Quality Assurance	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

This PEER covers **Johns Manville APP Modified Bitumen Roof Systems** installed in accordance with **Johns Manville** published installation instructions and the [Limitations of Use](#) herein.

TABLE 1: EVALUATED MEMBRANES			
TYPE	PRODUCT	MATERIAL STANDARD	PLANT(s)
BASE SHEETS	GlasBase Plus	ASTM D4601	CA
	PermaPly 28	ASTM D4601	OK
	Ventsulation Felt	ASTM D4897	OK
	JM APP Base	ASTM D6509	GA
PLY SHEETS	GlasPly IV	ASTM D2178	OK
	GlasPly Premier	ASTM D2178	OK
APP MEMBRANES, SMOOTH SURFACE	APPeX 4S	ASTM D6222	GA
	Tricor S	ASTM D6223	GA
APP MEMBRANES, GRANULE-SURFACE	APPeX 4.5M	ASTM D6222	GA
	APPeX 4.5M FR	ASTM D6222	GA
	APPeX 4.5M CR G	ASTM D6222	GA
	APPeX 4.5M FR CR G	ASTM D6222	GA

TABLE 1: EVALUATED MEMBRANES			
TYPE	PRODUCT	MATERIAL STANDARD	PLANT(S)
SBS MEMBRANES, SMOOTH-SURFACE	DynaPly T1	ASTM D6162	GA
	DynaBase	ASTM D6163	GA
	DynaBase HW	ASTM D6163	GA
	DynaBase XT	ASTM D6163	GA
	DynaWeld Base	ASTM D6163	GA
	DynaBase PR	ASTM D6164	GA
	DynaFast 180 HW	ASTM D6164	GA
	DynaFast 250 HW	ASTM D6164	GA
	DynaLastic 180 S	ASTM D6164	GA
	DynaLastic 250 S	ASTM D6164	GA
	DynaWeld 180 S	ASTM D6164	GA

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 PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER 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.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** 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 PEER does not include evaluation of roof edge termination. Refer to **FBC 1504.5** for requirements and limitations regarding edge securement for low-slope roofs.
- 5.6 Refer to **FBC 1511** 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 [ANSI/SPRI FX-1](#) or [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 [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.
- 5.6.3 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 [ASTM E907](#), [FM Loss Prevention Data Sheet 1-52](#) or [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 **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.
- 5.7.2 For mechanically attached components or partially-bonded insulation, 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 Chapter 16**. Elevated pressure zones 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 [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](#) for Zone 2/3 enhancements.
- 5.7.3 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.
- 5.8 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 PEER.

6. INSTALLATION:

Johns Manville APP Modified Bitumen Roof Systems shall be installed in accordance with **Johns Manville** published installation instructions, subject to the [Limitations of Use](#) noted below.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to 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](#): (360) 817-5512; bsai.inspections@ul.com

- THE 25-PAGES THAT FOLLOW FORM PART OF THIS PEER -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
1A	Wood	New, Reroof (Tear-Off), Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	5
1B	Wood	New, Reroof (Tear-Off)	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	5
1C	Wood	New, Reroof (Tear-Off), Recover	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	5
1D	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	6
1E	Wood	New, Reroof (Tear-Off), Recover	D-2	Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	6
1F	Wood	New, Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	7
1G	Wood	New, Reroof (Tear-Off), Recover	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	7
2A	Steel or Structural concrete	New, Reroof (Tear-Off), Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	8
2B	Steel or Structural concrete	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	9
2C	Steel or Structural concrete	New, Reroof (Tear-Off), Recover	D-2	Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	10
3A	Structural concrete	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	11
3B	Structural concrete	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	12
4A	Deck with Lightweight Concrete	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	13
4B	Deck with Lightweight Concrete	New, Reroof (Tear-Off)	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	14
4C	Deck with Lightweight Concrete	New, Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	16
4D	Deck with Lightweight Concrete	New, Reroof (Tear-Off) or Recover	E-2	LWC to Deck, Mechanically Attached Base Sheet, Bonded Roof Cover	18
4E	Deck with Lightweight Concrete	New, Reroof (Tear-Off)	E-2	Thermal Barrier to Deck, Vapor Barrier to Barrier, LWC to Vapor Barrier, Mech. Attached Base Sheet, Bonded Roof Cover	18
5A	Cementitious Wood Fiber	Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	19
5B	Cementitious Wood Fiber	Reroof (Tear-Off) or Recover	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	20
5C	Cementitious Wood Fiber	Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	21
5D	Cementitious Wood Fiber	Reroof (Tear-Off), Recover	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	21
6A	Gypsum	Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	22
6B	Gypsum	New, Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	22
6C	Gypsum	New, Reroof (Tear-Off) or Recover	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	23
6D	Gypsum	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	24
6E	Gypsum	Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	24
7A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	2525

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.
- Unless otherwise noted, fasteners and stress plates shall be as follows. Fastener shall be of sufficient length for the following engagements:

FASTENER/PLATE OPTIONS				
DECK TYPE	BY	FBC	PARTS	MINIMUM ENGAGEMENT
Wood	Johns Manville	N/A	UltraFast Fastener or All Purpose Fastener with UltraFast Metal Plate	Minimum ¾-inch plywood penetration or minimum 1-inch wood plank embedment
Steel	Johns Manville	N/A	UltraFast Fastener or All Purpose Fastener with UltraFast Metal Plate	Minimum ¾-inch steel penetration and engage the top flute of the steel deck
Structural Concrete	Johns Manville	N/A	All Purpose Fastener with UltraFast Metal Plate or Structural Concrete Fastener with UltraFast Metal Plate (flat bottom only)	Minimum 1-inch embedment. Fastener installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions

- 3 Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- 4 Minimum 200 psi, minimum 2-inch thick FBC Approved lightweight insulating concrete may be substituted for rigid insulation board for System Types B-1, C-1, C-2, D-1 or D-2, whereby fasteners are installed through the lightweight insulating concrete to engage the structural deck. The structural deck shall be of equal or greater type, thickness and strength to the steel and structural concrete deck listings. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. This is a wind uplift resistance allowance and does not purport to address non-wind-uplift-related issues, such as deck venting or moisture levels within the LWIC and the potential effect on overlying components.
- 5 Preliminary insulation attachment: Unless otherwise noted, use FBC Approved roofing fasteners and plates and refer to Section 2.2.10.1.3 of [FM Loss Prevention Data Sheet 1-29](#).
- 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.
 - JM Two Part Urethane Insulation Adhesive Canister, JM Two-Part UIA or JM Two-Part UIA Canister may be used where "JM-UIA-TWO-PART" is referenced
 - If applying hot asphalt to concrete deck, deck shall be primed with ASTM D41 primer.
 - When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.
 - 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.

INSULATION ADHESIVE REFERENCES				
By	FBC	ADHESIVE	REFERENCE	MINIMUM RATE
Johns Manville	N/A	JM MBR Bonding Adhesive	JM-MBR-BA	Continuous 0.75-inch ribbons, 12-inch o.c.
		JM One-Step Foamable Adhesive	JM-OSFA	Continuous 0.75-inch ribbons, 12-inch o.c.
		JM Roofing System Urethane Adhesive	JM-RSUA	Continuous 0.5 to 0.75-inch wide ribbons, 12-inch o.c.
		JM Two Part Urethane Insulation Adhesive	JM-UIA-TWO-PART	Continuous 0.75-inch ribbons, 12-inch o.c.
ICP Construction, Inc.	FL1365	Polyset Commercial Roof Adhesive	Polyset CRA	Continuous 2.5 to 3.5-inch wide ribbons, 12-inch o.c.
Generic, ASTM D312, Type IV	N/A	hot asphalt		Full coverage at 25-30 lbs/square

- 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.

MDP LIMITATIONS FOR TAPERED POLYISOCYANURATE INSULATIONS				
ADHESIVE	INSULATION		MIN. TAPERED THICKNESS (IN)	MDP (PSF)
	LISTED PRODUCT	FBC		
JM-OSFA	Johns Manville ENRGY 3	FL4205	0.5	-157.5
JM JM-RSUA	Johns Manville ENRGY 3	FL4205	0.5	-157.5
JM-UIA-TWO-PART	Johns Manville ENRGY 3	FL4205	0.5	-315.0
Polyset CRA	Johns Manville ENRGY 3	FL4205	1.0	-117.5

- 8 For adhered roof insulation and board-size: Unless otherwise noted, refer to Section 2.2.10.6.2 of [FM Loss Prevention Data Sheet 1-29](#).
- 9 For mechanically attached components or partially-bonded insulation, 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 Chapter 16. Elevated pressure zones 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 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](#) for Zone 2/3 enhancements.
- 10 For assemblies with all components fully bonded, 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. 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. For systems using Trufast Versa-Fast, the number of Versa-Fast Fasteners installed through the Versa-Fast Plate may be increased from the minimum noted in order to yield minimum required withdrawal resistance.
- 12 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 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. Field uplift testing shall be in accordance with ASTM E907, [FM Loss Prevention Data Sheet](#) 1-52 or [Testing Application Standard](#) TAS 124.
- 13 Refer to FBC 1511 for requirements and limitations regarding recover installations. For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and for System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC 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](#)). The separator component shall be documented as meeting FBC 1505 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 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 bonded membrane applications, unless otherwise noted, refer to the following.

MEMBRANE / ADHESIVE COMBINATIONS			
REFERENCE	LAYER	MATERIAL	APPLICATION
BP-AA	Base Ply	GlasBase Plus, PermaPly 28	Hot asphalt at 20-40 lbs/square
	Ply	GlasPly IV, GlasPly Premier, GlasBase Plus, PermaPly 28	
APP-TA	Base Ply or Ply	JM APP Base, APPEX 4S	Torch-Applied
	Cap Ply	APPEX 4S, APPEX 4.5M, APPEX 4.5M CR G, APPEX 4.5M FR, APPEX 4.5M FR CR G, Tricor S	

16 **Thermal Barrier and/or Vapor Barrier Options:**

16A **Structural Concrete Decks:** The lesser of the MDP listings below vs. that for the selected assembly applies.

VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY ADHESIVE-APPLIED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE PER TABLE 3A (NOTES 6, 7, 8)	MDP (PSF)
		TYPE	APPLICATION		
C-VB-1.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 2K, continuous 0.5-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	Hot asphalt	-75.0
C-VB-2.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 2K, continuous 0.5-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-OSFA, 12-inch o.c.	-97.5
C-VB-3.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 2K, continuous 0.5-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-RSUA, 12-inch o.c.	-97.5
C-VB-4.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 2K, continuous 0.5-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-UIA-TWO-PART, 12-inch o.c.	-97.5
C-VB-5.	ASTM D41	Two plies GlasPly IV, GlasPly Premier in hot asphalt	Hot asphalt	JM-OSFA, 12-inch o.c.	-180.0
C-VB-6.	ASTM D41	Two plies GlasPly IV, GlasPly Premier in hot asphalt	Hot asphalt	JM-RSUA, 12-inch o.c.	-180.0
C-VB-7.	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	Hot asphalt	JM-OSFA, 12-inch o.c.	-180.0
C-VB-8.	ASTM D41	DynaBase HW, DynaWeld Base, DynaWeld 180 S	Torch-applied	JM-OSFA, 12-inch o.c.	-180.0
C-VB-9.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 1K, continuous 0.75-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-OSFA, 12-inch o.c.	-232.5

VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY ADHESIVE-APPLIED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE PER TABLE 3A (NOTES 6, 7, 8)	MDP (psf)
		TYPE	APPLICATION		
C-VB-10.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 1K, continuous 0.75-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-RSUA, 12-inch o.c.	-232.5
C-VB-11.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 1K, continuous 0.75-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	JM-UIA-TWO-PART, 12-inch o.c.	-232.5
C-VB-12.	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-adhering	JM UIA-TWO-PART, 12-inch o.c.	-277.5
C-VB-13.	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-adhering	JM-RSUA, 12-inch o.c.	-277.5
C-VB-14.	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	Hot asphalt	JM UIA-TWO-PART, 12-inch o.c.	-277.5
C-VB-15.	ASTM D41	DynaBase HW, DynaWeld Base, DynaWeld 180 S	Torch-applied	JM UIA-TWO-PART, 12-inch o.c.	-277.5
C-VB-16.	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	Hot asphalt	JM-RSUA, 12-inch o.c.	-277.5
C-VB-17.	ASTM D41	DynaBase HW, DynaWeld Base, DynaWeld 180	Torch-applied	JM-RSUA, 12-inch o.c.	-292.5
C-VB-18.	None	DynaBase PR, DynaLastic 180 S, DynaLastic 250 S	DynaSet 1K, continuous 0.75-inch ribbons, 12-inch o.c. Laps sealed with DynaSet 1K.	Hot asphalt	-337.5

- 17 The following products are interchangeable within the scope of this Evaluation Report.

ACCEPTABLE ALTERNATES				
SUB-CATEGORY	MANUFACTURER	FBC	LISTED PRODUCT HEREIN	ALTERNATE
Roofing Insulation	Johns Manville	FL4205	ENRGY 3	R-Panel, ValuTherm
			ENRGY 3 25 PSI	R-Panel 25 PSI, ValuTherm 25 PSI
			ENRGY 3 AGF	ValuTherm AGF
			ENRGY 3 25 PSI AGF	ValuTherm 25 PSI AGF
			ENRGY 3 CGF	ValuTherm CGF
			ENRGY 3 25 PSI CGF	ValuTherm 25 PSI CGF

- 18 "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. ([Note 9](#), [Note 10](#))

TABLE 1A: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-3: 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	Fasteners (Note 11)	Attach	Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
W-1	Min. 19/32-inch plywood	Two plies of PermaPly 28 or Ventsulation	Note 2	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 1.5-inch Fesco Foam or DuraFoam	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-52.5

TABLE 1B: WOOD 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	Fasteners (Note 11)	Attach	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
W-2	Min. 19/32-inch plywood	Min. 1.4-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF or Min 1.5-inch Fesco Foam or DuraFoam	Note 2	1 per 2.0 ft ²	Min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 1.5-inch Fesco Foam	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
W-3	Min. 19/32-inch plywood	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF, Fesco Foam or DuraFoam	Note 2	1 per 1.3 ft ²	Min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-52.5

TABLE 1c: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: 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	Fasteners (Note 11)	Attach	Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
G-1.	Min. 19/32-inch plywood	Two plies of PermaPly 28 or Ventsulation	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 1.5-inch Fesco Foam or DuraFoam	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-52.5

**TABLE 1D: 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	Base Ply	Ply	Cap Ply	
G-2.	Min. 19/32-inch plywood	One or more layers, any combination, loose laid	Min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	Note 2	1 per 2.0 ft²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*

**TABLE 1E: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-2: PRELIMINARILY ATTACHED INSULATION, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck (Note 1)	Slip Sheet	Insulation Layer(s) (Note 13)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Type	Attach	Base	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
G-3.	Min. 19/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below or above insulation	One or more layers, any combination	Prelim Attach	JM APP Base, PermaPly 28, Glasbase Plus or Ventsulation	Note 2	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*
G-4.	Min. 15/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below or above insulation	One or more layers, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and APB Plates or High Load Plates	18-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-45.0*
G-5.	Min. 19/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below or above insulation	One or more layers, any combination	Prelim Attach	Two plies PermaPly 28 or Ventsulation	Note 2	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	-52.5
G-6.	Min. 15/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below or above insulation	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and APB Plates or High Load Plates	9-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-60.0
G-7.	Min. 15/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below or above insulation	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load LH through 1-inch wide JM Polymer Membrane Batten	6-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-82.5

TABLE 1F: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Slip Sheet	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Base	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
G-8.	Min. 19/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below	Two plies of PermaPly 28 or Ventsulation	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails	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	-52.5

TABLE 1G: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Slip Sheet	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Base	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
G-9.	Min. 19/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below	JM APP Base, PermaPly 28, Glasbase Plus or Ventsulation	Note 2	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*
G-10.	Min. 15/32-inch	(Optional) One or more layers PermaPly 28, loose laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and APB Plates or High Load Plates	18-inch o.c. within the min. min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-45.0*
G-11.	Min. 19/32-inch plywood	(Optional) One or more layers PermaPly 28, loose laid below	Two plies of PermaPly 28 or Ventsulation	Note 2	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	-52.5

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)	Base Ply	Ply	Cap Ply	
HOT OR TORCH APPLIED BASE:										
S-1	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 2.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-2	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 4.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-3	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF Fesco Foam or DuraFoam	Note 2	1 per 2.0 ft²	Min. 0.5-inch Retro-Fit Board or DuraBoard, min. 0.75-inch Fesco Board (homogeneous) or min. 1.5-inch Fesco Foam or DuraFoam	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
S-4	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF, Fesco Foam or DuraFoam	Note 2	1 per 1.3 ft²	Min. 0.5-inch Retro-Fit Board or DuraBoard, min. 0.75-inch Fesco Board (homogeneous) or min. 1.5-inch Fesco Foam or DuraFoam	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-52.5
S-5	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 1.6 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-6	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Note 2	1 per 1.45 ft²	Min. 0.5-inch Retro-Fit Board or DuraBoard or min. 1.5-inch DuraFoam	hot asphalt	3 plies BP-AA	(Optional) APP-TA	APP-TA	-75.0
S-7	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 2.0 ft²	Min. 0.5-inch DuraBoard	JM-MBR-BA	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-8	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 2.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-9	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 4.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-10	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 1.6 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-11	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 2.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	APP-TA	(Optional) APP-TA	APP-TA	-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)	Base Ply	Ply	Cap Ply	
S-12	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 2.0 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-13	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 4.0 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-14	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Note 2	1 per 1.6 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-60.0

TABLE 2B: STEEL OR STRUCTURAL CONCRETE 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	Base Ply	Ply	Cap Ply	
HOT OR TORCH APPLIED BASE:									
S-15	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch Retro-Fit Board, DuraBoard or Min. 0.75-inch Fesco Board (homogeneous)	Note 2	1 per 2.0 ft²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
S-16	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft²	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-17	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.8 ft²	BP-AA or APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-18	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.75-inch DuraBoard	Note 2	1 per 1.3 ft²	APP-TA	(Optional) APP-TA	APP-TA	-67.5
S-19	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.75-inch DuraBoard	Note 2	1 per 1.3 ft²	APP-TA	(Optional) APP-TA	APP-TA	-75.0

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

System No.	Deck (Note 1)	Insulation Layer(s) (Note 13)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Attach	Base	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
S-20	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	JM APP Base, PermaPly 28, Glasbase Plus or Ventsulation	Note 2	12-inch o.c. at the 4-inch lap and 18-inch o.c. in two, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*
S-21	Min. 22 ga., type B, Grade 33 steel	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and APB Plates or High Load Plates	18-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-45.0*
S-22	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. Attached	Two Plies of PermaPly 28 or Ventsulation	Note 2	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
S-23	Min. 22 ga., type B, Grade 33 steel	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and High Load Plates	12-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-67.5
S-24	Min. 22 ga., type B, Grade 80 steel	One or more layers, min. 1-inch, any combination	Prelim. Attached	DynaFast 180 HW or DynaFast 250 HW	High Load LH through 1-inch wide JM Polymer Membrane Batten	6-inch o.c. within min. 4-inch wide, heat-welded laps spaced 71.75-inch o.c.; intermediate 3-inch laps heat-welded	(Optional) APP-TA	APP-TA	-90.0
S-25	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1-inch, any combination	Prelim. Attached	GlasBase Plus	Note 2	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, staggered center rows	(Optional) APP-TA	APP-TA	-97.5
S-26	Min. 22 ga., type B, Grade 33 steel	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 HW or DynaFast 250 HW	High Load Fasteners and APB Plates or High Load Plates	6-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-105.0
S-27	Min. 22 ga., type EF, Grade 80 steel	One or more layers, min. 1-inch, any combination	Prelim. Attached	DynaFast 180 HW	High Load Fasteners and High Load Plates	6-inch o.c. within the min. 4-inch wide, heat welded laps	(Optional) APP-TA	APP-TA	-142.5
S-28	Min. 22 ga., type EF, Grade 80 steel	One or more layers, min. 1.5-inch, any combination	Loose laid	DynaFast 250 HW	High Load Fasteners and High Load Plates	6-inch o.c. within the min. 4-inch wide, heat welded laps	(Optional) APP-TA	APP-TA	-165.0

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

REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
HOT OR TORCH APPLIED BASE:										
C-1.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-67.5
C-2.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.75-inch FescoBoard or min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-120.0
C-3.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.4-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF or Min 1.5-inch Fesco Foam or DuraFoam or Min. 0.75-inch Fesco Board (homogeneous) or Min 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	Min 1.5-inch Fesco Foam or DuraFoam or Min. 0.75-inch Fesco Board (homogeneous) or Min 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-150.0
C-4.	Min. 2,500 psi structural concrete	ASTM D41	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
C-5.	Min. 2,500 psi structural concrete	ASTM D41	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-6.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-277.5
C-7.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF or ENRGY 3 25 PSI AGF	hot asphalt	Min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-305.0
C-8.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM-MBR-BA	Min. 0.75-inch FescoBoard or min. 0.5-inch DuraBoard	JM-MBR-BA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-120.0
C-9.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min 0.5-inch DuraBoard	UIA-TWO-PART	APP-TA	(Optional) APP-TA	APP-TA	-67.5
C-10.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.5-inch DuraBoard	UIA-TWO-PART	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-105.0
C-11.	Min. 2,500 psi structural concrete	None	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0

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

REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-12.	Min. 2,500 psi structural concrete	None	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-13.	Min. 2,500 psi structural concrete	None	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	APP-TA	(Optional) APP-TA	APP-TA	-105.0
C-14.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
C-15.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-16.	Min. 2,500 psi structural concrete	None	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
C-17.	Min. 2,500 psi structural concrete	None	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	APP-TA	(Optional) APP-TA	APP-TA	-232.5

TABLE 3B: STRUCTURAL CONCRETE 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)
			Base Ply	Ply	Cap Ply	
C-18.	Min. 2,500 psi structural concrete	ASTM D41	BP-AA	(Optional) APP-TA	APP-TA	-305.0
C-19.	Min. 2,500 psi structural concrete	ASTM D41	APP-TA	(Optional) APP-TA	APP-TA	-315.0

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

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
CELCORE (FL2037):										
LWC-1	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Celcore Cellular Concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA or APP-TA	(Optional) BP-AA or APP-TA	APP-TA	-222.5
ELASTIZELL (FL4994):										
LWC-2	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Range II Elastizell Lightweight Insulating Concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min 0.5-inch DuraBoard	UIA-TWO-PART	APP-TA	(Optional) APP-TA	APP-TA	-67.5
LWC-3	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Range II Elastizell Lightweight Insulating Concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.5-inch DuraBoard	UIA-TWO-PART	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-105.0
LWC-4	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Range II Elastizell Lightweight Insulating Concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
LWC-5	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Range II Elastizell Lightweight Insulating Concrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA or APP-TA	(Optional) BP-AA or APP-TA	APP-TA	-180.0
MEARLCRETE (FL13492):										
LWC-6	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Mearlcrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
LWC-7	Min. 2,500 psi structural concrete	Min. 200 psi, min 2-inch Mearlcrete	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	APP-TA	(Optional) APP-TA	APP-TA	-232.5

TABLE 4B: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
CELCORE (FL2037):												
LWC-8	Min. 22 ga, Type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Celcore Cellular Concrete	PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener	8-inch o.c. at the 4-inch lap and 16-inch o.c. at two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-37.5
LWC-9	Min. 22 ga, Type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Celcore Cellular Concrete	PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener	8-inch o.c. at the 4-inch lap and 16-inch o.c. at two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-37.5
LWC-10	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	DynaBase or GlasPly Premier	Trufast FM-90 Base Sheet Fastener	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-60.0
LWC-11	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	DynaBase or GlasPly Premier	Trufast FM-90 Base Sheet Fastener	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-60.0
CONCRECEL (FL5584 or FL10500):												
LWC-12	Min. 22 ga., type BV, Grade 80 steel or min. 2,500 psi structural concrete	Min. 300 psi, min. 2.25-inch thick Concrecel Concrete (FL5584 or 10500)	GlasPly Premier	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-82.5
ELASTIZELL (FL4994):												
LWC-13	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Lightweight Insulating Concrete.	DynaBase, PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener or Trufast Twin Loc-Nail Assembled Fastener	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0

TABLE 4B: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
LWC-14	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Lightweight Insulating Concrete.	DynaBase, PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener or Trufast Twin Loc-Nail Assembled Fastener	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0
PRE-EXISTENT LIGHTWEIGHT CONCRETE (Note 14):												
LWC-15	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC. <i>To qualify the LWC, the fastener shall document min. 62 lbf per Note 11</i>	JM PermaPly 28, DynaBase, GlasPly Premier or Ventsulation	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-52.5
LWC-16	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC. <i>To qualify the LWC, the fastener shall document min. 62 lbf per Note 11</i>	JM PermaPly 28, DynaBase, GlasPly Premier or Ventsulation	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-52.5
LWC-17	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 88 lbf per Note 11.</i>	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-60.0
LWC-18	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 88 lbf per Note 11.</i>	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-60.0

TABLE 4B: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
LWC-19	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 110 lbf per Note 11.</i>	DynaBase	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-75.0
LWC-20	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 110 lbf per Note 11.</i>	DynaBase	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-75.0
LWC-21	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC	JM PermaPly 28, DynaBase, GlasPly Premier or Ventsulation	Note 2 <i>Fasteners to engage structural deck below LWIC.</i>	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows.	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-75.0
LWC-22	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC	JM PermaPly 28, DynaBase, GlasPly Premier or Ventsulation	Note 2 <i>Fasteners to engage structural deck below LWIC.</i>	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows.	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-75.0

TABLE 4C: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
CELCORE (FL2037):								
LWC-23	Min. 22 ga, Type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Celcore Cellular Concrete	PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener	8-inch o.c. at the 4-inch lap and 16-inch o.c. at two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-37.5

TABLE 4c: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
LWC-24	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture	DynaBase or GlasPly Premier	Trufast FM-90 Base Sheet Fastener	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-60.0
LWC-25	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Celcore Cellular Concrete	DynaBase, GlasPly Premier, PermaPly 28 or Ventsulation	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-75.0
CONCRECEL (FL5584 OR FL10500):								
LWC-26	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, minimum 2.25-inch thick Concrecel Concrete	GlasPly Premier	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-82.5
ELASTIZELL (FL4994):								
LWC-27	Min. 22 ga, type B, Grade 33 steel or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell Lightweight Insulating Concrete.	DynaBase, PermaPly 28 or Ventsulation	Trufast FM-90 Base Sheet Fastener or Trufast Twin Loc-Nail Assembled Fastener	7½-inch o.c. at the 4-inch lap and 7½-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0
PRE-EXISTENT CELLULAR LWC (Note 14):								
LWC-28	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 60 lbf per Note 11</i>	PermaPly 28 or Ventsulation	JM LWC Pre-Assembled Base Sheet Fastener, min. 1.7-inch	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-52.5
LWC-29	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 300 psi, min. 2-inch thick cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 88 lbf per Note 11</i>	PermaPly 28 or DynaBase	JM UltraLok or Trufast Twin Loc-Nail	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
LWC-30	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 88 lbf per Note 11</i>	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-60.0
LWC-31	Min. 22 ga, type BV, Grade 33 steel or structural concrete	Min. 350 psi, min. 2-inch thick pre-existent cellular LWIC. <i>Note: To qualify the LWC, the fastener shall document min. 110 lbf per Note 11</i>	DynaBase	Trufast Twin Loc-Nail Assembled Fastener	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-75.0
LWC-32	Min. 22 ga. steel or min. 2,500 psi structural concrete	Pre-existent, Min. 200 psi, min. 2-inch thick cellular LWIC	PermaPly 28 or Ventsulation	Note 2 <i>Fasteners to engage structural deck below LWC.</i>	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows.	(Optional) APP-TA	APP-TA	-75.0

TABLE 4D: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Type	Fastener (Note 11)	Attach	Base Ply	Cap Ply	
CELCORE (FL2037):								
LWC-33	Min. 22 ga, type BV, Grade 40 steel or structural concrete	Deck Treatment: Celcore S-1 Deck Preparation Slurry LWC: Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture LWC Treatment: Celcore PVA Curing Compound	DynaFast 180 HW or DynaFast 250 HW	Trufast Versa-Fast Fasteners with Versa-Fast Plates; four (4) fasteners per plate; Fasteners of sufficient length for min. 2.25-inch embedment into LWC or sufficient to provide required withdrawal resistance capacity	10-inch o.c. within the 5-inch wide, heat-welded side laps	(Optional) APP-TA	APP-TA	-67.5
LWC-34	Min. 22 ga, type BV, Grade 40 steel or structural concrete	Deck Treatment: Celcore S-1 Deck Preparation Slurry LWC: Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture LWC Treatment: Celcore PVA Curing Compound	DynaLastic 180 S or DynaLastic 250 S	Trufast Versa-Fast Fasteners with Versa-Fast Plates; four (4) fasteners per plate; Fasteners of sufficient length for min. 2.25-inch embedment into LWC or sufficient to provide required withdrawal resistance capacity	10-inch o.c. within the 5-inch wide, heat-welded side laps	BP-AA	APP-TA	-67.5
PRE-EXISTENT LIGHTWEIGHT CONCRETE (NOTE 14) :								
LWC-35	Min. 22 ga, type B, 50 ksi steel	Min. 430 psi, min. 2-inch thick cellular lightweight concrete.	DynaFast 180 HW or DynaFast 250 HW	High Load Fastener and High Load Plate (engage steel deck)	12-inch o.c. within the min. 5-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-60.0
LWC-36	Min. 22 ga, type B, 60 ksi steel	Min. 180 psi, min. 2-inch thick cellular lightweight concrete.	DynaFast 180 HW or DynaFast 250 HW	High Load Fastener and High Load Plate (engage steel deck)	6-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) APP-TA	APP-TA	-97.5

TABLE 4E: DECK WITH LIGHTWEIGHT CONCRETE – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: THERMAL BARRIER TO DECK, VAPOR BARRIER TO THERMAL BARRIER, LWC TO VAPOR BARRIER, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Thermal Barrier			Vapor Barrier (Note 15)	LWC (Note 14)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Fasten (Note 11)	Attach			Base	Fasten	Spacing	Base Ply	Cap	
CELCORE (FL2037):												
LWC-37	Min. 22 ga. type B, Grade 33 steel	Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft ²	DynaBase HW, DynaWeld Base or DynaWeld 180 S, torch-applied	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound.	DynaBase, DynaLastic 180 S, GlasBase Plus, GlasPly Premier or Ventsulation	Trufast FM-90 Base Sheet Fastener	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	APP-TA	APP-TA	-60.0

TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS –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	Fastener (Note 11)	Attach	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
CWF-1.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-37.5*
CWF-2.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-37.5*
CWF-3.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM Polymer Auger Fastener & Plate (Field W/D $\geq$ 270 lbf)	1 per 3.0 ft ²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-4.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM Polymer Auger Fastener & Plate (Field W/D $\geq$ 270 lbf)	1 per 3.0 ft ²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
CWF-5.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-6.	Existing Tectum	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*

TABLE 5B: CEMENTITIOUS WOOD FIBER DECKS – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
CWF-7.	Existing Tectum	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D ≥ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-8.	Existing Tectum	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D ≥ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam, min. 0.5-inch DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
CWF-9.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-10.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam, min. 0.5-inch DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
CWF-11.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 133 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-75.0
CWF-12.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 146 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-82.5

**TABLE 5c: CEMENTITIOUS WOOD FIBER DECKS – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fastener (Note 11)	Attach	Base Ply	Ply	Cap Ply	
CWF-13.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	0.5-inch Retro-Fit Board, RetroPlus Board, DuraBoard or SECUROCK Gypsum-Fiber Roof Board or min. 0.75-inch Fesco Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-37.5*
CWF-14.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	0.5-inch DuraBoard or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-37.5*
CWF-15.	Existing Tectum	One or more layers, any combination, loose laid	Min. 1.5-inch Fesco Foam or DuraFoam	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 240 lbf)	1 per 2.7 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-16.	Existing Tectum	One or more layers, any combination, loose laid	Min. 1.5-inch DuraFoam	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 240 lbf)	1 per 2.7 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
CWF-17.	Existing Tectum	One or more layers, any combination, loose laid	Min. 0.75-inch Fesco Board (homogeneous) or DuraBoard	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-18.	Existing Tectum	One or more layers, any combination, loose laid	Min. 0.75-inch DuraBoard	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
CWF-19.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	0.5-inch Retro-Fit Board, RetroPlus Board, DuraBoard or SECUROCK Gypsum-Fiber Roof Board or min. 0.75-inch Fesco Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
CWF-20.	Existing Tectum	(Optional) One or more layers, any combination, loose laid	0.5-inch DuraBoard or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*

**TABLE 5d: CEMENTITIOUS WOOD FIBER DECKS – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Fasteners (Note 11)	Attach	Base Ply	Cap Ply	
CWF-21.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM Polymer Auger Fastener & Plate (Field W/D $\geq$ 159 lbf)	12-inch o.c. at the 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
CWF-22.	Existing Tectum	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D $\geq$ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
CWF-23.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D $\geq$ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
CWF-24.	Existing Tectum	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D $\geq$ 133 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	BP-AA	APP-TA	-82.5

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

System No.	Deck (Notes 1 & 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)	Base Ply	Ply	Cap Ply	
G-1.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min 0.5-inch DuraBoard	UIA-TWO-PART	APP-TA	(Optional) APP-TA	APP-TA	-67.5
G-2.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.5-inch DuraBoard	UIA-TWO-PART	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-105.0
G-3.	Existing gypsum deck	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) BP-AA or APP-TA	APP-TA	-112.5
G-4.	Existing gypsum deck	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
G-5.	Existing gypsum deck	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	APP-TA	(Optional) APP-TA	APP-TA	-232.5

TABLE 6B: GYPSUM DECKS –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	Fastener (Note 11)	Attach	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
G-6.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D ≥ 134 lbf)	1 per 1.78 ft²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-37.5*
G-7.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D ≥ 134 lbf)	1 per 1.78 ft²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-37.5*
G-8.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM Polymer Auger Fastener & Plate (Field W/D ≥ 270 lbf)	1 per 3.0 ft²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-9.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM Polymer Auger Fastener & Plate (Field W/D ≥ 270 lbf)	1 per 3.0 ft²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
G-10.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D ≥ 180 lbf)	1 per 2.0 ft²	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-11.	Existing gypsum deck	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D ≥ 180 lbf)	1 per 2.0 ft²	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*

TABLE 6C: GYPSUM – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Anchor Sheet			Insulation			Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
G-12.	Existing gypsum deck	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D ≥ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-13.	Existing gypsum deck	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D ≥ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam, min. 0.5-inch DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
G-14.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous), min. 0.5-inch Retro-Fit Board or DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-15.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam, min. 0.5-inch DuraBoard or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
G-16.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 133 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch DuraFoam or min. 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-75.0
G-17.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D ≥ 146 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	(Optional) Min. 1-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Min. 1.5-inch Fesco Foam or DuraFoam, min. 0.75-inch Fesco Board (homogeneous) or min. 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-82.5

TABLE 6D: GYPSUM DECKS –REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fastener (Note 11)	Attach	Base Ply	Ply	Cap Ply	
G-18.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	0.5-inch Retro-Fit Board, RetroPlus Board, DuraBoard or SECUROCK Gypsum-Fiber Roof Board or min. 0.75-inch Fesco Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-37.5*
G-19.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	0.5-inch DuraBoard or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 134 lbf)	1 per 1.78 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-37.5*
G-20.	Existing gypsum deck	One or more layers, any combination, loose laid	Min. 1.5-inch Fesco Foam or DuraFoam	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 240 lbf)	1 per 2.7 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-21.	Existing gypsum deck	One or more layers, any combination, loose laid	Min. 1.5-inch DuraFoam	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 240 lbf)	1 per 2.7 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
G-22.	Existing gypsum deck	One or more layers, any combination, loose laid	Min. 0.75-inch Fesco Board (homogeneous) or DuraBoard	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-23.	Existing gypsum deck	One or more layers, any combination, loose laid	Min. 0.75-inch DuraBoard	JM Polymer Auger Fastener & Plate or JM UltraLok Fastener (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
G-24.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	0.5-inch Retro-Fit Board, RetroPlus Board, DuraBoard or SECUROCK Gypsum-Fiber Roof Board or min. 0.75-inch Fesco Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	BP-AA	(Optional) APP-TA	APP-TA	-45.0*
G-25.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	0.5-inch DuraBoard or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener, min. 1.3-inch embedment (Field W/D $\geq$ 180 lbf)	1 per 2.0 ft ²	APP-TA	(Optional) APP-TA	APP-TA	-45.0*

TABLE 6E: GYPSUM DECKS – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

System No.	Deck (Note 1)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Fasteners (Note 11)	Attach	Ply	Cap	
G-26.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM Polymer Auger Fastener & Plate (Field W/D $\geq$ 159 lbf)	12-inch o.c. at the 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
G-27.	Existing gypsum deck	PermaPly 28 or Ventsulation	Trufast Twin Loc-Nail Assembled Fastener (Field W/D $\geq$ 96 lbf)	9-inch o.c. at the 2-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
G-28.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D $\geq$ 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	BP-AA or APP-TA	APP-TA	-45.0*
G-29.	Existing gypsum deck	DynaBase, GlasBase Plus, GlasPly Premier, PermaPly 28 or Ventsulation	JM UltraLok Fastener (Field W/D $\geq$ 133 lbf)	9-inch o.c. at the 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	BP-AA	APP-TA	-82.5

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

^A The reported MDP documents the allowable maximum design pressure of the new insulation and roof cover when installed atop the substrate, irrespective of the deck type [\(See Note 1\)](#) or performance of the substrate [\(See Note 12\)](#). The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction.

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf) ^A
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base	Ply	Cap	
R-1.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min 0.5-inch DuraBoard	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-67.5
R-2.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.75-inch FescoBoard or min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-120.0
R-3.	Existing asphaltic BUR	Min. 1.4-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF, ENRGY 3 25 PSI CGF or Min 1.5-inch Fesco Foam or DuraFoam or Min. 0.75-inch Fesco Board (homogeneous) or Min 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	Min 1.5-inch Fesco Foam or DuraFoam or Min. 0.75-inch Fesco Board (homogeneous) or Min 0.5-inch Retro-Fit Board or DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-150.0
R-4.	Existing asphaltic BUR	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
R-5.	Existing asphaltic BUR	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	APP-TA	(Optional) APP-TA	APP-TA	-232.5
R-6.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 25 PSI CGF	hot asphalt	Min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-277.5
R-7.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF or ENRGY 3 25 PSI AGF	hot asphalt	Min. 0.5-inch DuraBoard	hot asphalt	BP-AA	(Optional) APP-TA	APP-TA	-305.0
R-8.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	JM-MBR-BA, full	Min. 0.75-inch FescoBoard or min. 0.5-inch DuraBoard	JM-MBR-BA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-112.5
R-9.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min 0.5-inch DuraBoard	UIA-TWO-PART	APP-TA	(Optional) APP-TA	APP-TA	-67.5
R-10.	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.5-inch DuraBoard	UIA-TWO-PART	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-105.0
R-11.	Existing asphaltic BUR	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA or APP-TA	(Optional) BP-AA or APP-TA	APP-TA	-120.0
R-12.	Existing asphaltic BUR	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polysat CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polysat CRA	BP-AA	(Optional) BP-AA or APP-TA	APP-TA	-225.0
R-13.	Existing asphaltic BUR	Min. 2-inch ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 25 PSI AGF, ENRGY 3 CGF or ENRGY 3 25 PSI CGF	Polysat CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polysat CRA	APP-TA	(Optional) APP-TA	APP-TA	-232.5