



**NEMO | etc.**

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ENGINEER

EVALUATE

TEST

CONSULT

**P.E. EVALUATION REPORT (PEER)**

**Flex Membrane International Corp**

2670 Leiscz's Bridge Road  
Leesport, PA 19533  
**(610) 916-9500**

**PEER-FMI-001.A.R4**

**FL15889-R4 (NON-HVHZ)**

**Date of Issuance: 08/22/2012**

**Revision 4: 08/29/2023**

**SCOPE:**

This P.E. Evaluation Report (henceforth 'PEER') is issued under [Rule 61G20-3](#) and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **8<sup>th</sup> Edition (2023) Florida Building Code** [sections noted herein](#).

**DESCRIPTION: Flex TPO II Single-Ply Roof Systems (NON-HVHZ)**

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

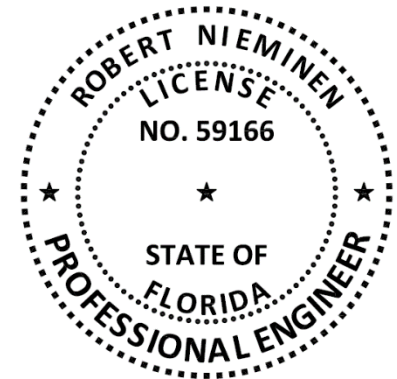
**CONTINUED COMPLIANCE:** This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify 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 3, plus a 22-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.

**ROOFING SYSTEMS EVALUATION:**

**1. SCOPE:**

**Product Category:** Roofing  
**Sub-Category:** Single Ply Roof Systems  
**Product Approval Method:** Method 1, Option D: Codified Material, Evaluation by Engineer  
**Compliance Statement:** **Flex TPO II Single-Ply Roof Systems**, as produced by **Flex Membrane International Corp**, have demonstrated compliance with the following sections of the **8<sup>th</sup> 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	Year
1504.3.1	Wind resistance	FM 4474	2011
1504.6	Physical properties	ASTM G155	2013
1504.7	Impact resistance	FM 4470	2016
1507.12.2	Material standard	ASTM D6878	2021

**3. REFERENCES:**

Entity	Examination	Reference	Date
NEMO	PEER	PEER-GAF-009.A.R58	08/04/2023
UL LLC (QUA9625)	Quality Control	MLA, R9228	03/15/2012
UL LLC (QUA9625)	Quality Control	Service confirmation	01/10/2018
UL LLC (QUA9625)	Quality Control	Florida BCIS	Current

**4. PRODUCT DESCRIPTION:**

This PEER covers **Flex TPO II Single-Ply Roof Systems** installed in accordance with **Flex Membrane International Corp** published installation instructions and the [Limitations of Use](#) herein.

TABLE 1: EVALUATED MEMBRANES			
Product	Nominal Thickness (mil)	Material Standard	Plant(s)
Flex TPO II	45, 60, 80	ASTM D6878	IN, PA, TX, UT
Flex TPO II FB	45, 60, 80	ASTM D6878	IN, PA, UT
Flex TPO II SA	45, 60	ASTM D6878	IN

**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](#) or [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 \(February 2020\)](#) 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:

**Flex TPO II Single-Ply Roof Systems** shall be installed in accordance with **Flex Membrane International Corp** published installation instructions, subject to the [Limitations of Use](#) noted herein.

## 7. BUILDING PERMIT REQUIREMENTS:

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

## 8. MANUFACTURING PLANTS:

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

## 9. QUALITY ASSURANCE ENTITY:

[UL, LLC – QUA9625](#): (360) 817-5512; [bsai.inspections@ul.com](mailto:bsai.inspections@ul.com)

- THE 22-PAGES THAT FOLLOW FORM PART OF THIS PEER -

**APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE**

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
<a href="#">1A</a>	Wood	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	4
<a href="#">1B</a>	Wood	New or Reroof (Tear-Off)	C-2	Induction-Welded Roof Cover	4
<a href="#">1C</a>	Wood	New, Reroof (Tear-Off) or Recover	D-1	Insulated, Mechanically Attached Roof Cover	4
<a href="#">1D</a>	Wood	New, Reroof (Tear-Off) or Recover	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	4
<a href="#">2A</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	5
<a href="#">2B</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	B-2	Mech. Attached Thermal Barrier, Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover	6
<a href="#">2C</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	7
<a href="#">2D</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	C-2	Mechanically Attached Insulation, Induction-Welded Roof Cover	11
<a href="#">2E</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	D-1	Insulated, Mechanically Attached Roof Cover	11
<a href="#">2F</a>	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	12
<a href="#">3A</a>	Structural concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	13
<a href="#">3B</a>	Structural concrete	New, Reroof (Tear-Off) or Recover	F	Non-Insulated, Bonded Roof Cover	15
<a href="#">4A</a>	Deck with Lightweight concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	16
<a href="#">4B</a>	Deck with Lightweight concrete	New or Reroof (Tear-Off)	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	17
<a href="#">4C</a>	Deck with Lightweight concrete	New or Reroof (Tear Off)	E-2	Non-Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	18
<a href="#">4D</a>	Deck with Lightweight concrete	New or Reroof (Tear Off)	F	Non-Insulated, Bonded Roof Cover	18
<a href="#">5A</a>	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	19
<a href="#">5B</a>	Wood or Steel	Recover	C-2	Induction-Welded Roof Cover	21
<a href="#">5C</a>	Steel	Recover	D-1	Insulated, Mechanically Attached Roof Cover	22
<a href="#">5D</a>	Various	Recover	F	Non-Insulated, Bonded Roof Cover	22

**The following notes apply to the systems outlined herein:**

- The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- Unless otherwise noted, fasteners and stress plates shall be as follows. Fasteners shall be of sufficient length for the following engagements:
  - Wood Deck: OMG #12 Standard or OMG #14 Heavy Duty with OMG 3 in. Galvalume Steel Plate or OMG Accutrac Plate, OMG Standard Steel ASAP or OMG Heavy Duty Steel ASAP. Min. 0.75-inch plywood penetration or minimum 1-inch wood plank embedment.
  - Steel Deck: OMG #12 Standard or OMG #14 Heavy Duty or OMG XHD Screw with OMG 3 in. Galvalume Steel Plate or OMG Accutrac Plate, OMG Standard Steel ASAP or OMG Heavy Duty Steel ASAP. Minimum 0.75-inch steel penetration, engage the top flute of the steel deck.
  - Structural Concrete: OMG #14 Heavy Duty or OMG CD-10 with OMG 3 in. Galvalume Steel Plate or OMG Accutrac Plate or OMG Heavy Duty Steel ASAP. Minimum 1-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.
- Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- Minimum 200 psi, minimum 2-inch thick FBC Approved lightweight insulating concrete may be substituted for, or installed below, 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.  
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.
- Hot asphalt: Full Coverage at 25-30 lbs/square. If applying to concrete deck; deck shall be primed with ASTM D41 primer.
  - H.B. Fuller "Millennium PG-1 Pump Grade Adhesive: (henceforth 'M-PG1)': Continuous ribbons, 12-inch o.c.
  - OMG "OlyBond 500 Adhesive Fastener" or "OlyBond 500 Green" (henceforth 'OB500'): Continuous ribbons, 12-inch o.c. using OMG PaceCart, SpotShot or Canister delivery methods.
- 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.
- Hot asphalt: MDP = -240.0 psf (Min. 0.5-inch thick)
  - OB500: MDP = -315.0 psf (Min. 0.5-inch thick Johns Manville "ENRGY 3")
  - OB500: MDP = -487.5 psf (Min. 0.5-inch thick Flex ISO II or Atlas Roofing "ACFoam II")
- 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](#).
- 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			
MEMBRANE	ADHESIVE	APPLICATION	RATE
Flex TPO II	Ashland Pliobond 2825 TPO Adhesive	Contact (both sides)	0.8 to 1.0 gal/square/surface. For use over SECUROCK Gypsum-Fiber Roof Board, the application rate changes to 1.2 to 1.67 gal/sq/surface
Flex TPO II	GAF "EverGuard WB181 Bonding Adhesive" (WB181)	Contact (both sides)	To polyisocyanurate or Structodek HD with Primed Red Coating at 0.63 gal/square and roof cover underside at 0.21 gal/square. To Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board at 0.63 to 0.75 gal/square and roof cover underside at 0.21 to 0.25 gal/square
Flex TPO II	ITW TACC "LA505"	Contact (both sides)	0.46 gal/square/surface
Flex TPO II FB	Hot asphalt	Wet lay (substrate)	25 lbs/square
Flex TPO II FB	GAF "EverGuard WB181 Bonding Adhesive" (WB181)	Wet lay (substrate)	0.83 to 1.0 gal/square
Flex TPO II FB	H.B. Fuller "Millennium PG-1 Pump Grade Adhesive" or GAF "LRF Adhesive O" (LRF-O)	Wet lay (substrate)	1-inch wide ribbons spaced as noted in tables herein. Note: The adhesive ribbons are located directly over the adhesive ribbons used to secure the insulation when the cover is bonded to insulation less than 1.5-inch thick.

15A For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.

15B For System Type C-2 (induction weld), care shall be taken to ensure that the plates do not line-up with membrane seams. This condition may preclude proper induction welding of the membrane to the plates.

15C The "Triposite Roofing System" noted herein consists of loose-laid GAFGLAS Stratavent Perforated Venting Base Sheet, followed by asphalt-applied one (1) or two (2) plies of Ruberoid 20 Smooth or three (3) plies of GAFGLAS FlexPly 6 or GAFGLAS FlexPly 6 M, followed by asphalt-applied EverGuard TPO Fleece-Back Membrane or EverGuard TPO Fleece-Back Membrane 100, 115 or 135 with 1-5/8" heat welded side laps.

15D Unless otherwise noted, the "Hybrid Roofing System" noted herein consists of asphalt-applied Ruberoid 20 Smooth, Ruberoid Mop Smooth, Ruberoid Mop Smooth 1.5, GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet or GAFGLAS #80 Ultima Base Sheet followed by asphalt-applied EverGuard TPO Fleece-Back Membrane or EverGuard TPO Fleece-Back Membrane 100, 115 or 135.

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					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE PER TABLE 3A (NOTES 6, 7, 8)	MDP (PSF)
		TYPE	APPLICATION		
C-VB-1.	ASTM D41 primer	One or two plies, GAF "GAFGLAS #75 Base Sheet", "GAFGLAS Ply 4" "GAFGLAS FlexPly 6"	Hot asphalt applied	Hot asphalt	-360.0
C-VB-2.	ASTM D41 primer	GAF "Ruberoid HW 25 Smooth" or "Ruberoid HW Smooth"	Torch-applied	M-PG1	-180.0
C-VB-3.	GAF "SA Primer"	GAF "SA Vapor Retarder"	Self-adhering	M-PG1	-202.5
C-VB-4.	ASTM D41 primer	One or two plies, GAF "GAFGLAS #75 Base Sheet", "GAFGLAS Ply 4" "GAFGLAS FlexPly 6"	Hot asphalt applied	M-PG1	-495.0
C-VB-5.	ASTM D41 primer	GAF "Ruberoid Torch Granule"	Torch-applied	OB500	-165.0
C-VB-6.	ASTM D41 primer	GAF "Ruberoid HW 25 Smooth"	Torch-applied	OB500	-180.0
C-VB-7.	ASTM D41 primer	GAF "Liberty SBS Self-Adhering Cap Sheet"	Self-adhering	OB500	-187.5
C-VB-8.	ASTM D41 primer	GAF "Ruberoid 20 Smooth"	GAF "Matrix 102 SBS Membrane Adhesive" at 1.5 gal/square	OB500	-202.5
C-VB-9.	GAF "SA Primer"	GAF "SA Vapor Retarder"	Self-adhering	OB500	-202.5
C-VB-10.	ASTM D41 primer	GAF "Ruberoid Torch Granule"	Torch-applied	OB500	-225.0
C-VB-11.	ASTM D41 primer	GAF "Ruberoid HW Smooth"	Torch-applied	OB500	-232.5
C-VB-12.	ASTM D41 primer	One or two plies, GAF "GAFGLAS #75 Base Sheet", "GAFGLAS Ply 4" "GAFGLAS FlexPly 6"	Hot asphalt applied	OB500	-352.5

17 "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. [\(Notes 9 and 10\)](#)



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

System No.	Deck <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
			Type	Fasteners <a href="#">(Note 11)</a>	Attach		
W-1.	Min. 19/32-inch plywood at max. 24-inch span	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OMG #12 with OMG Accutrac Plate	1 per 1.3 ft <sup>2</sup>	Flex TPO II FB / Hot asphalt	-82.5

**TABLE 1B: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)  
SYSTEM TYPE C-2: INDUCTION-WELDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation Layer <a href="#">(Note 3, Note 13)</a>	Attachment		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
			Fasteners <a href="#">(Note 11)</a>	Spacing		
W-2.	Min. 15/32-inch plywood atop nominal 2 x 8 inch lumber supports spaced max. 96-inch o.c.	One or more layers, any combination, prelim. attached <a href="#">(Note 5)</a> (Treadsafe = min. 2" thick)	OMG #14 (min. 1-inch embedment) and OMG RHINO BOND Insulation Plate (TPO) or RHINO BOND Treadsafe Plate (TPO) are fastened through to wood supports	12-inch o.c. along wood supports, 96-inch o.c.	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-30.0
W-3.	Min. 15/32-inch plywood atop nominal 2 x 8 inch lumber supports spaced max. 48-inch o.c.	One or more layers, any combination, prelim. attached <a href="#">(Note 5)</a> (Treadsafe = min. 2" thick)	OMG #14 (min. 1-inch embedment) and OMG RHINO BOND Insulation Plate (TPO) or RHINO BOND Treadsafe Plate (TPO) are fastened through to wood supports	24-inch o.c. along wood supports, 48-inch o.c.	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-37.5

**TABLE 1C: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER  
SYSTEM TYPE D-1: MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation <a href="#">(Note 3, Note 13)</a>		Roof Cover <a href="#">(Note 15)</a>			MDP <a href="#">(psf)</a>
		Type	Attach <a href="#">(Note 5)</a>	Membrane	Fasteners <a href="#">(Note 11)</a>	Attachment	
W-4.	Min. 19/32-inch plywood atop supports spaced 2 ft o.c. in the grain-direction and blocked 4 ft o.c. in the cross-grain direction.	(Optional) One or more layers, any combination	Prelim. attached	Flex TPO II	OMG #14 Fasteners with OMG AccuTrac Flat Plates	6-inch o.c. within 12-inch wide laps spaced 48-inch o.c. and sealed with a 1.5-inch heat weld. Fasteners penetrate through the plywood to engage the cross-blocking of the deck	-97.5

**TABLE 1D: 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 <a href="#">(Note 1)</a>	Base Sheet			Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Base	Fasteners <a href="#">(Note 11)</a>	Attach		
W-5.	Min. 19/32-inch plywood; 24" spans	GAF "StormSafe Anchor Sheet" (Max. 40-inch wide or lapped to produce max. 36-inch wide lap-to-lap spacing)	32 ga., 1-5/8-inch diameter tin caps with 11 ga. annular ring shank nails (new or reroof only; no recover)	9-inch o.c. at min. 4-inch lap and 9-inch o.c. at two, equally spaced, staggered center rows	Flex TPO II SA / self adhered	-45.0
W-6.	Min. 19/32-inch plywood; 24" spans	GAF "StormSafe Anchor Sheet" (Max. 40-inch wide or lapped to produce max. 36-inch wide lap-to-lap spacing)	OMG #12 with OMG 3" Steel Plates	8-inch o.c. at min. 4-inch lap and 8-inch o.c. at three, equally spaced, staggered center rows	Flex TPO II SA / self adhered	-105.0

**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 <a href="#">(Note 1)</a>	Base Insulation Layer			Top Insulation Layer		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Type	Fasten <a href="#">(Note 11)</a>	Attach	Type	Attach <a href="#">(Notes 6,7,8)</a>		
<b>FLEX TPO II SA / SELF-ADHERED:</b>								
S-1.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 2.0 ft <sup>2</sup>	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA/ self adhered	-45.0*
S-2.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 4.0 ft <sup>2</sup>	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA/ self adhered	-45.0*
S-3.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 1.6 ft <sup>2</sup>	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA/ self adhered	-60.0
<b>FLEX TPO II:</b>								
S-4.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II or ENRGY 3	Note 2	1 per 2.0 ft <sup>2</sup>	Additional layers of base insulation	Hot asphalt	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive, EverGuard WB 181 BA	-45.0*
S-5.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2.0-inch Flex ISO II, ACFoam II or ENRGY 3	Note 2	1 per 4.0 ft <sup>2</sup>	Additional layers of base insulation	Hot asphalt	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive, EverGuard WB 181 BA	-45.0*
S-6.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / EverGuard TPO # 1121, EverGuard WB 181 or TACC LA505	-37.5*
S-7.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.0 ft <sup>2</sup>	Min. 0.5-inch Structodek HD with Primed Red Coating	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive or TACC LA505	-45.0*
S-8.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 4.0 ft <sup>2</sup>	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive or TACC LA505	-45.0*
S-9.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 1.6 ft <sup>2</sup>	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive, EverGuard WB 181 or TACC LA505	-60.0
<b>HYBRID ROOFING SYSTEM <a href="#">(Note 15)</a>:</b>								
S-10.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 4.0 ft <sup>2</sup>	Optional layers of base insulation (flat or tapered) followed by Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	Hybrid System / Note 15C	-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 <a href="#">(Note 1)</a>	Base Insulation Layer			Top Insulation Layer		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Type	Fasten <a href="#">(Note 11)</a>	Attach	Type	Attach <a href="#">(Notes 6,7,8)</a>		
S-11.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2.0-inch Flex ISO II or ACFoam II	Note 2	1 per 5.3 ft <sup>2</sup>	Optional layers of min. 1.5-inch base insulation (flat or tapered) followed by Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	Hybrid System / Note 15C	-45.0*
S-12.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch Flex ISO II, ACFoam II or ENRGY 3	Note 2	1 per 2.0 ft <sup>2</sup>	Optional layers of base insulation (flat or tapered) followed by Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Hybrid System / Note 15C	-45.0*
S-13.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2.0-inch Flex ISO II, ACFoam II or ENRGY 3	Note 2	1 per 4.0 ft <sup>2</sup>	Optional layers of min. 1.5-inch base insulation (flat or tapered) followed by Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Hybrid System / Note 15C	-45.0*
<b>FLEX TPO II FB:</b>								
S-14.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II FB / EverGuard WB 181 BA	-37.5*
S-15.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.0 ft <sup>2</sup>	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II FB / EverGuard WB 181 BA	-45.0*

**TABLE 2B: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)**  
**SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Thermal Barrier			Temp Roof		Insulation Layer(s)		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Type	Fasten <a href="#">(Note 11)</a>	Attach	Type	Attach	Type	Attach		
S-16.	Min. 22 ga., Grade 33 steel or min. 2,500 psi structural concrete	Min. 0.625-inch DensDeck	Note 2	1 per 4.0 ft <sup>2</sup>	Two plies GAFGLAS Ply 4	Hot asphalt	Min. 1.5-inch Flex ISO II or ACFoam II	Hot asphalt or OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive or TACC LA505	-45.0*

**TABLE 2C: 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 <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
			Type	Fasten <a href="#">(Note 11)</a>	Attach		
<b>FLEX TPO II SA:</b>							
S-17.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, AC Foam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II SA / self adhered	-45.0*
S-18.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, AC Foam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 1.3 ft <sup>2</sup>	Flex TPO II SA / self adhered	-52.5
S-19.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, AC Foam II, ENRGY 3 or Multi-Max FA3	Note 2 (#14 only)	1 per 2.0 ft <sup>2</sup>	Flex TPO II SA / self adhered	-52.5
<b>FLEX TPO II / ASHLAND PLIOBOND 2825 TPO ADHESIVE:</b>							
S-20.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, AC Foam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-30.0*
S-21.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, AC Foam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-37.5*
S-22.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-37.5*
S-23.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-24.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch DensDeck or DensDeck Prime	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-25.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.625-inch DensDeck or DensDeck Prime	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-26.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-27.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-28.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 7/16-inch OSB	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-29.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 7/16-inch OSB	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-30.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, AC Foam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-31.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, AC Foam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0*
S-32.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 1.45 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-52.5

**TABLE 2C: 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 <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
			Type	Fasten <a href="#">(Note 11)</a>	Attach		
S-33.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-52.5
S-34.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.3 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-67.5
S-35.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch Structodek HD with Primed Red Coating	Note 2	1 per 1.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-67.5
S-36.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.0 ft <sup>2</sup>	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-97.5
<b>FLEX TPO II / EVERGUARD WB 181 BONDING ADHESIVE:</b>							
S-37.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-30.0*
S-38.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-37.5*
S-39.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-40.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch DensDeck Prime	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-41.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.625-inch DensDeck Prime	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-42.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-43.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-44.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or H-Shield	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-45.0*
S-45.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 1.45 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-52.5
S-46.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-52.5
S-47.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch Structodek HD with Primed Red Coating	Note 2	1 per 1.0 ft <sup>2</sup>	Flex TPO II / EverGuard WB 181 BA	-67.5
<b>FLEX TPO II / TACC LA505:</b>							
S-48.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / TACC LA505	-30.0*

**TABLE 2C: 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 <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
			Type	Fasten <a href="#">(Note 11)</a>	Attach		
S-49.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II / TACC LA505	-37.5*
S-50.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II / TACC LA505	-37.5*
S-51.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-52.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch DensDeck Prime	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-53.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.625-inch DensDeck Prime	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-54.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-55.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-56.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 1.45 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0
S-57.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-58.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-45.0*
S-59.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft <sup>2</sup>	Flex TPO II / TACC LA505	-52.5
S-60.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.3 ft <sup>2</sup>	Flex TPO II / TACC LA505	-60.0
S-61.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.5-inch Structodek HD with Primed Red Coating	Note 2	1 per 1.0 ft <sup>2</sup>	Flex TPO II / TACC LA505	-67.5
<b>TRIPPOSITE ROOFING SYSTEM <a href="#">(Note 15)</a>:</b>							
S-62.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 2.0 ft <sup>2</sup>	Triposite System / <a href="#">Note 15C</a>	-45.0*
S-63.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 3.2 ft <sup>2</sup>	Triposite System / <a href="#">Note 15C</a>	-45.0*
<b>HYBRID ROOFING SYSTEM <a href="#">(Note 15)</a>:</b>							
S-64.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft <sup>2</sup>	Hybrid System / <a href="#">Note 15D</a>	-45.0*
<b>FLEX TPO II FB:</b>							

**TABLE 2C: 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 <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
			Type	Fasten <a href="#">(Note 11)</a>	Attach		
S-65.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 1.8 ft <sup>2</sup>	Flex TPO II FB / Hot asphalt	-45.0*
S-66.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 3.2 ft <sup>2</sup>	Flex TPO II FB / EverGuard WB 181 BA	-30.0*
S-67.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II FB / EverGuard WB 181 BA	-37.5*
S-68.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / EverGuard WB 181 BA	-45.0*
S-69.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft <sup>2</sup>	Flex TPO II FB / EverGuard WB 181 BA	-52.5
S-70.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-37.5*
S-71.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch H-Shield	Note 2	1 per 2.7 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-37.5*
S-72.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-37.5*
S-73.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch H-Shield	Note 2	1 per 4.0 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-37.5*
S-74.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.75-inch ACFoam Composite/GB	Note 2	1 per 5.3 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5*
S-75.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5*
S-76.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0*
S-77.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.5-inch H-Shield	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0*
S-78.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA-3	Note 2	1 per 2.9 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0*
S-79.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 2-inch H-Shield	Note 2	1 per 2.9 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0*
S-80.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination	Min. 1.75-inch ACFoam Composite/GB	Note 2	1 per 5.3 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0*
S-81.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0*



**TABLE 2C: 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 <a href="#">(Note 1)</a>	Base Insulation Layer <a href="#">(Note 3, Note 13)</a>	Top Insulation Layer			Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
			Type	Fasten <a href="#">(Note 11)</a>	Attach		
S-82.	Min. 22 ga., Type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.0 ft <sup>2</sup>	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0*

**TABLE 2D: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER  
SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION-WELDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation Layer <a href="#">(Note 3, Note 13)</a>	Attachment		Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
			Fasteners <a href="#">(Note 11)</a>	Density		
S-83.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, 4 x 8 ft board; (Treadsafe = min. 2-inch thick insulation)	OMG XHD screws and OMG RHINOBOND Insulation Plate (TPO) or RHINOBOND Treadsafe Plate (TPO)	1 per 5.3 ft <sup>2</sup> (6 parts per 4 x 8 ft board) Fasteners located in each of the four corners of the board and at mid-span of the 96-inch length. Fasteners are 12-inch from the board edges.	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0*
S-84.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, 4 x 4 ft board; (Tread Safe = min. 2-inch thick insulation)	OMG XHD screws and OMG RHINOBOND Insulation Plate (TPO) or RHINOBOND Treadsafe Plate (TPO)	1 per 4.0 ft <sup>2</sup> (6 parts per 4 x 8 ft board) Fasteners located in each of the four corners of the board. Fasteners are 12-inch from the board edges.	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0*
S-85.	Min. 2,500 psi struct conc.	One or more layers, any combination, 4 x 4 ft board	OMG #14 HD screws and OMG RHINOBOND Insulation Plate (TPO)	1 per 4.0 ft <sup>2</sup> (4 parts per 4 x 4 ft board) Fasteners located in each of the four corners of the board. Fasteners are 12-inch from the board edges.	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0*
S-86.	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, preliminarily attached	OMG Super XHD screws and OMG RHINOBOND Insulation Plate (TPO)	24 x 24 inch grid	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-60.0
S-87.	Min. 2,500 psi structural concrete	One or more layers, any combination, preliminarily attached	OMG #14 HD screws and OMG RHINOBOND Insulation Plate (TPO)	24 x 24 inch grid	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-60.0

**TABLE 2E: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER  
SYSTEM TYPE D-1: MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation <a href="#">(Note 3, Note 13)</a>		Roof Cover <a href="#">(Note 15)</a>			MDP (psf)
		Type	Attach <a href="#">(Note 5)</a>	Membrane	Fasteners <a href="#">(Note 11)</a>	Attachment	
<b>FLEX TPO II:</b>							
S-88.	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within 5-inch wide laps spaced 114.5-inch o.c. and sealed with a 1.75-inch heat weld.	-45.0
S-89.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. and sealed with a 1.5-inch heat weld.	-45.0



**TABLE 2E: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER  
SYSTEM TYPE D-1: MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation <a href="#">(Note 3, Note 13)</a>		Roof Cover <a href="#">(Note 15)</a>			MDP <a href="#">(psf)</a>
		Type	Attach <a href="#">(Note 5)</a>	Membrane	Fasteners <a href="#">(Note 11)</a>	Attachment	
S-90.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates; or OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	Fastened 12-inch o.c. within 6-inch wide laps spaced 54-inch o.c. and sealed with a 1.5-inch heat weld.	-45.0
S-91.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	Fastened 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. and sealed with a 1.5-inch heat weld.	-45.0
S-92.	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	Fastened 12-inch o.c. within 5.5-inch wide laps spaced 114.5-inch o.c. and sealed with a 1.5-inch heat weld.	-45.0
S-93.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates or OMG Eyehook AccuSeam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.625-inch heat weld.	-52.5
S-94.	Min. 2,500 psi structural concrete	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG #14 or OMG CD-10 fasteners with OMG 2 3/8 XHD Barbed Stress Plates or OMG Eyehook AccuSeam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.5-inch heat weld.	-52.5
S-95.	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within 5-inch wide laps spaced 115-inch o.c. and sealed with a 1.5-inch heat weld.	-52.5
S-96.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 54-inch o.c. and sealed with a 1.5-inch heat weld.	-60.0
S-97.	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.5-inch heat weld.	-60.0
S-98.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II	OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.875-inch heat weld.	-60.0
<b>FLEX TPO II FB:</b>							
S-99.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II FB	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within min. 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.625-inch heat weld.	-45.0
S-100.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch	Prelim. attach	Flex TPO II FB	OMG XHD with OMG 2 3/8 XHD Barbed Stress Plates	Fastened 6-inch o.c. within min. 6-inch wide laps spaced 112.5-inch o.c. and sealed with a 1.625-inch heat weld.	-60.0

**TABLE 2F: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER  
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Insulation Layer(s) <a href="#">(Note 3, Note 13)</a>		Base or Anchor Sheet			Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Type	Attach	Base	Fasteners <a href="#">(Note 11)</a>	Attach		
S-101.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Loose-laid	GAF StormSafe Anchor Sheet (48-inch wide)	Note 2	12-inch o.c. at min. 4-inch laps and 12-inch o.c. in two, equally spaced, staggered center rows	Flex TPO II SA / self adhered	-45.0
S-102.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination	Loose-laid	GAF StormSafe Anchor Sheet (48-inch wide)	Note 2	18-inch o.c. at min. 4-inch laps and 18-inch o.c. in two, equally spaced, staggered center rows	Flex TPO II SA / self adhered	-52.5

**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 <a href="#">(Note 1)</a>	Base Insulation Layer		Top Insulation Layer		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
		Type	Attach <a href="#">(Notes 6,7,8)</a>	Type	Attach <a href="#">(Notes 6,7,8)</a>		
<b>FLEX TPO II SA:</b>							
C-1.	Min. 2,500 psi structural concrete	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A	Flex TPO II SA / self adhered	-230.0
C-2.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA / self adhered	-347.5
C-3.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA / self adhered	-382.5
<b>FLEX TPO II / ASHLAND PLIOBOND 2825 TPO ADHESIVE:</b>							
C-4.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot Asphalt	(Optional) Min. 0.25-inch DensDeck Prime or min. 7/16-inch OSB	Hot asphalt	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0
C-5.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulfoam	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0
C-6.	Min. 2,500 psi structural concrete	Min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-120.0
C-7.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-130.0
C-8.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-240.0
C-9.	Min. 2,500 psi structural concrete	Min. 2-inch Flex ISO II, ACFoam II, H-Shield or ENRGY 3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-247.5
C-10.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II	OB500	None	N/A	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-502.5
C-11.	Min. 2,500 psi structural concrete	Min. 1-inch H-Shield	M-PG1	(Optional) Additional layer of base insulation	M-PG1	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-162.5
<b>FLEX TPO II / EVERGUARD WB 181 BONDING ADHESIVE:</b>							
C-12.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot asphalt	(Optional) Additional layer of base insulation	Hot asphalt	Flex TPO II / EverGuard WB 181 BA	-135.0
C-13.	Min. 2,500 psi structural concrete	Min. 1.5-inch Insulfoam	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-45.0
C-14.	Min. 2,500 psi structural concrete	Min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-120.0

**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 <a href="#">(Note 1)</a>	Base Insulation Layer		Top Insulation Layer		Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
		Type	Attach <a href="#">(Notes 6,7,8)</a>	Type	Attach <a href="#">(Notes 6,7,8)</a>		
C-15.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-130.0
C-16.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-135.0
C-17.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II	OB500	None	N/A	Flex TPO II / EverGuard WB 181 BA	-215.0
C-18.	Min. 2,500 psi structural concrete	Min. 1-inch H-Shield	M-PG1	(Optional) Additional layer of base insulation	M-PG1	Flex TPO II / EverGuard WB 181 BA	-162.5
<b>FLEX TPO II / TACC LA505:</b>							
C-19.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot Asphalt	(Optional) Min. 0.25-inch DensDeck Prime	Hot asphalt	Flex TPO II / TACC LA505	-45.0
C-20.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3, min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / TACC LA505	-45.0
C-21.	Min. 2,500 psi structural concrete	Min. 1-inch H-Shield	M-PG1	(Optional) Additional layer of base insulation	M-PG1	Flex TPO II / TACC LA505	-162.5
<b>TRIPPOSITE ROOFING SYSTEM <a href="#">(Note 15)</a>:</b>							
C-22.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Flex ISO II, ACFoam II or ENRGY 3	Hot Asphalt	(Optional) Additional layers of base insulation	Hot asphalt	Triposite System / <a href="#">Note 15C</a>	-172.5
<b>FLEX TPO II FB:</b>							
C-23.	Min. 2,500 psi structural concrete (primed)	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot Asphalt	Min. 0.25-inch DensDeck	Hot asphalt	Flex TPO II FB / Hot asphalt	-45.0
C-24.	Min. 2,500 psi structural concrete (primed)	Min. 1-inch H-Shield	Hot asphalt	None	N/A	Flex TPO II FB / Hot asphalt	-470.0
C-25.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck	OB500	Flex TPO II FB / Hot asphalt	-45.0
C-26.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	(Optional) Additional layers base insulation	OB500	Flex TPO II FB / EverGuard WB 181 BA	-225.0
C-27.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II FB / EverGuard WB 181 BA	-240.0

**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 <a href="#">(Note 1)</a>	Base Insulation Layer		Top Insulation Layer		Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
		Type	Attach <a href="#">(Notes 6,7,8)</a>	Type	Attach <a href="#">(Notes 6,7,8)</a>		
C-28.	Min. 2,500 psi structural concrete	(Optional) Min. 1-inch Flex ISO II, ACFoam II	OB500 or M-PG1	Min. 1.75-inch ACFoam Composite/GB	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5
C-29.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 0.25-inch Temple Green Glass Primed Roof Board	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-37.5
C-30.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	OB500 or M-PG1	Min. 0.25-inch DensDeck Prime	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5
C-31.	Min. 2,500 psi structural concrete	Min. 1.5-inch Flex ISO II, ACFoam II, H-Shield, Multi-Max FA3 or ENRGY 3	OB500 or M-PG1	(Optional) Additional layers base insulation	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0
C-32.	Min. 2,500 psi structural concrete	(Optional) Min. 1-inch Flex ISO II, ACFoam II	OB500 or M-PG1	Min. 1.75-inch ACFoam Composite/GB	OB500 or M-PG1	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0
C-33.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	OB500 or M-PG1	Min. 0.25-inch DensDeck Prime	OB500 or M-PG1	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0
C-34.	Min. 2,500 psi structural concrete	Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	OB500 or M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0

**TABLE 3B: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)**  
**SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Roof Cover <a href="#">(Note 15)</a>	MDP (psf)
C-35.	Min. 2,500 psi structural concrete	Flex TPO II FB / EverGuard WB 181 BA	-300.0
C-36.	Min. 3,000 psi structural concrete (primed)	Flex TPO II FB / Hot asphalt	-390.0
C-37.	Min. 3,000 psi structural concrete primed with GAF Top-Coat Surface Seal SB	Flex TPO II SA / self adhered	-410.0

**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)  
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Lightweight Concrete <a href="#">(Note 14)</a>	Base Insulation Layer		Coverboard		Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
			Type	Attach <a href="#">(Notes 6,7,8)</a>	Type	Attach <a href="#">(Notes 6,7,8)</a>		
<b>FLEX TPO II SA:</b>								
LWC-1.	Min. 2,500 psi structural concrete	Min. 250 psi Mearlcrete (FL13492)	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	None	N/A	Flex TPO II SA / self adhered	-75.0
LWC-2.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA / self adhered	-225.0
<b>FLEX TPO II / ASHLAND PLIOBOND 2825 TPO ADHESIVE:</b>								
LWC-3.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	Min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-120.0
LWC-4.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-130.0
LWC-5.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-180.0
<b>FLEX TPO II / EVERGUARD WB 181 BONDING ADHESIVE:</b>								
LWC-6.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	Min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-120.0
LWC-7.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-130.0
<b>FLEX TPO II / TACC LA505:</b>								
LWC-8.	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell (FL4994)	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3, min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / TACC LA505	-45.0

**TABLE 4B: LIGHTWEIGHT CONCRETE 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)	LWC (Note 14)	Anchor Sheet			Insulation			Roof Cover (Note 15)	MDP (psf)
			Type	Fasteners (Note 11)	Attach	Base	Top	Attach (Notes 6,7,8)		
LWC-9.	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, minimum 2-inch thick Celcore (FL2037) Cellular Concrete	GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet or GAFGLAS Stratavent Nailable Venting Base Sheet	OMG C-R Assembled Base Sheet Fastener (1.7 in.) or Trufast FM-90 Assembled Base Ply Fastener	9-inch o.c. at the 2-inch side lap and 9-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch Flex ISO II, ACfoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA / Self-adhered	-45.0
LWC-10.	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, minimum 2-inch thick Celcore (FL2037) Cellular Concrete	GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet or GAFGLAS Stratavent Nailable Venting Base Sheet	OMG C-R Assembled Base Sheet Fastener (1.7 in.) or Trufast FM-90 Assembled Base Ply Fastener	9-inch o.c. at the 2-inch side lap and 9-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch Flex ISO II, ACfoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 0.5-inch Structodek HD with Primed Red Coating	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive or TACC LA505	-45.0
LWC-11.	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, minimum 2-inch thick Celcore (FL2037) Cellular Concrete	GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet or GAFGLAS Stratavent Nailable Venting Base Sheet	OMG C-R Assembled Base Sheet Fastener (1.7 in.) or Trufast FM-90 Assembled Base Ply Fastener	9-inch o.c. at the 2-inch side lap and 9-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch Flex ISO II, ACfoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / EverGuard WB 181 BA	-45.0
LWC-12.	Min. 22 ga. steel or min. 2,500 psi structural concrete	Min. 300 psi, minimum 2-inch thick Celcore (FL2037) Cellular Concrete	GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet or GAFGLAS Stratavent Nailable Venting Base Sheet	OMG C-R Assembled Base Sheet Fastener (1.7 in.) or Trufast FM-90 Assembled Base Ply Fastener	9-inch o.c. at the 2-inch side lap and 9-inch o.c. at two, equally spaced, staggered rows in the center of the sheet	Min. 1.5-inch Flex ISO II, ACfoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II FB / EverGuard WB 181 BA	-45.0



**TABLE 4C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)  
SYSTEM TYPE E-2: MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Lightweight Concrete <a href="#">(Note 14)</a>	Base Sheet			Roof Cover <a href="#">(Note 15)</a>	MDP <a href="#">(psf)</a>
			Type	Fasteners <a href="#">(Note 11)</a>	Attach		
LWC-13.	Min. 22 ga., type B, Grade 33 vented steel at max. 6 ft spans	Min. 250-300 psi, min. 2-inch thick cellular lightweight concrete	GAF "StormSafe Anchor Sheet"	OMG #12 screws and 3" OMG AccuTrac Plates (engage steel deck)	12-inch o.c. at the 4-inch lap and 12-inch o.c. in three, equally spaced, staggered rows in the center of the sheet	Flex TPO II SA / self adhered	-45.0
LWC-14.	Min. 22 ga., type B, Grade 33 vented steel at max. 5 ft spans	Min. 200 psi, min. 2-inch thick Celcore (FL2037)	Tri-Flex 30	OMG C-R Assembled Base Sheet Fastener (1.7 in.)	9-inch o.c. in the 4-inch lap and 9-inch o.c. in three, equally spaced, staggered rows in the center of the sheet	Flex TPO II SA / self adhered	-52.5
LWC-15.	Min. 22 ga., type B, Grade 33 vented steel at max. 6 ft spans	Min. 300 psi, min. 2-inch thick Mearlcrete (FL13492)	GAF "StormSafe Anchor Sheet"	OlyLok Locking Impact Nail, min. 1.8-inch	7.5-inch o.c. in the 4-inch lap and 12-inch o.c. in three, equally spaced, staggered rows in the center of the sheet	Flex TPO II SA / self adhered	-52.5

**TABLE 4D: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)  
SYSTEM TYPE F: BONDED ROOF COVER**

System No.	Deck <a href="#">(Note 1)</a>	Lightweight Concrete <a href="#">(Note 14)</a>			Roof Cover <a href="#">(Note 15)</a>		MDP <a href="#">(psf)</a>
		Type	Min. Compressive Strength (psi)	Min. Thickness (in)	Membrane	Adhesive	
LWC-16.	Struct concrete	Elastizell (FL4994)	222	2	Flex TPO II FB	WB181 at 0.84 gal/square	-200.0
LWC-17.	Struct concrete	Mearlcrete (FL13492)	297	2	Flex TPO II FB	WB181 at 0.84 gal/square	-205.0
LWC-18.	Struct concrete	Concrecel (FL5584)	200	2	Flex TPO II FB	WB181 at 0.84 gal/square	-225.0
LWC-19.	Struct concrete	Mearlcrete (FL13492)	737	2	Flex TPO II FB	Millennium PG-1, ribbons 6-inch o.c.	-45.0
LWC-20.	Struct concrete	Elastizell (FL4994)	200	2	Flex TPO II FB	Millennium PG-1 or LRF Adhesive O, ribbons 4-inch o.c.	-210.0
LWC-21.	Struct concrete	Concrecel (FL5584)	200	2	Flex TPO II FB	Millennium PG-1 or LRF Adhesive O, ribbons 4-inch o.c.	-225.0
LWC-22.	Struct concrete	Mearlcrete (FL13492) or Insulcel (NOA 22-1020.11)	200	2	Flex TPO II FB	Millennium PG-1 or LRF Adhesive O, ribbons 4-inch o.c.	-270.0
LWC-23.	Struct concrete	Celcore (FL2037)	200	2	Flex TPO II FB	Millennium PG-1 or LRF Adhesive O, ribbons 4-inch o.c.	-300.0

**TABLE 5A: RECOVER APPLICATIONS**  
**SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

<sup>A</sup> The reported MDP documents the allowable maximum design pressure of the new insulation, coverboard and roof cover when adhered to 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 ( <a href="#">Note 1</a> , <a href="#">Note 12</a> )	Base Insulation Layer		Top Insulation Layer		Roof Cover ( <a href="#">Note 15</a> )	MDP (psf) <sup>A</sup>
		Type	Attach ( <a href="#">Notes 6,7,8</a> )	Type	Attach ( <a href="#">Notes 6,7,8</a> )		
<b>FLEX TPO II SA:</b>							
R-1.	Existing asphalt BUR or mineral surface cap sheet over structural concrete deck	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II SA / self adhered	-120.0
<b>FLEX TPO II / ASHLAND PLIOBOND 2825 TPO ADHESIVE</b>							
R-2.	Existing asphalt BUR or mineral surface cap sheet	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot Asphalt	(Optional) Min. 0.25-inch DensDeck Prime or min. 7/16-inch OSB	Hot asphalt	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0
R-3.	Existing asphalt BUR or mineral surface cap sheet	Min. 1.5-inch , Insulfoam	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-45.0
R-4.	Existing asphalt BUR or mineral surface cap sheet over structural concrete deck	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3 , min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / Ashland Pliobond 2825 TPO Adhesive	-120.0
<b>FLEX TPO II / EVERGUARD WB 181 BONDING ADHESIVE:</b>							
R-5.	Existing asphalt BUR or mineral surface cap sheet	Min. 1.5-inch Insulfoam	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-45.0
R-6.	Existing asphalt BUR or mineral surface cap sheet over structural concrete deck	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3, Multi-Max FA3 , min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime	OB500	Flex TPO II / EverGuard WB 181 BA	-120.0
<b>FLEX TPO II / TACC LA505</b>							
R-7.	Existing asphalt BUR or mineral surface cap sheet	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	Hot Asphalt	(Optional) Min. 0.25-inch DensDeck Prime	Hot asphalt	Flex TPO II / TACC LA505	-45.0
R-8.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3 , min. 2.0-inch, min. 1.0 pcf, Insulfoam EPS	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II / TACC LA505	-45.0
<b>FLEX TPO II FB:</b>							
R-9.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II	OB500 or M-PG1	Min. 1.75-inch ACFoam Composite/GB	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5
R-10.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 0.25-inch Temple Green Glass Primed Roof Board	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-37.5
R-11.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 0.25-inch DensDeck Prime	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1, 12-inch o.c.	-37.5
R-12.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, Multi-Max FA3	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0

**TABLE 5A: RECOVER APPLICATIONS**  
**SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

<sup>A</sup> The reported MDP documents the allowable maximum design pressure of the new insulation, coverboard and roof cover when adhered to 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 ( <a href="#">Note 1</a> , <a href="#">Note 12</a> )	Base Insulation Layer		Top Insulation Layer		Roof Cover ( <a href="#">Note 15</a> )	MDP (psf) <sup>A</sup>
		Type	Attach ( <a href="#">Notes 6,7,8</a> )	Type	Attach ( <a href="#">Notes 6,7,8</a> )		
R-13.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 1.5-inch H-Shield	OB500 or M-PG1	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0
R-14.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 0.25-inch DensDeck Prime	OB500 or M-PG1	Flex TPO II FB / LRF Adhesive O, 12-inch o.c.	-45.0
R-15.	Existing asphalt BUR or mineral surface cap sheet	(Optional) Min. 1-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500 or M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500 or M-PG1	Flex TPO II FB / Millennium PG-1 or LRF Adhesive O, 12-inch o.c.	-45.0
R-16.	Existing asphalt BUR or mineral surface cap sheet over structural concrete deck	Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	(Optional) Additional layers base insulation	OB500	Flex TPO II FB / EverGuard WB 181 BA	-120.0
R-17.	Existing asphalt BUR or mineral surface cap sheet over structural concrete deck	(Optional) Min. 1.5-inch Flex ISO II, ACFoam II, ENRGY 3, H-Shield or Multi-Max FA-3	OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	Flex TPO II FB / EverGuard WB 181 BA	-120.0

FBC NON-HVHZ

**TABLE 5B: WOOD OR STEEL - RECOVER  
SYSTEM TYPE C-2: INDUCTION-WELDED ROOF COVER**

(All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)

System No.	Substrate (Note 1)	Insulation Layer (Note 5)	Attachment		Roof Cover (Note 15)	MDP (psf)
			Fasteners (Note 11)	Spacing		
R-18.	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	18-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-30.0
R-19.	Existing min. 15/32-inch plywood atop min. Nominal 2 x 8 inch lumber supports spaced max. 96-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG #14 (min. 1.05-inch embedment) and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to wood supports	12-inch o.c. along wood supports	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-30.0
R-20.	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	12-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-37.5
R-21.	Existing standing seam or lap seam metal roof covers having min. 14 gauge (0.0747 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	18-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-37.5
R-22.	Existing min. 15/32-inch plywood atop min. Nominal 2 x 8 inch lumber supports spaced max. 48-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG #14 (min. 1.05-inch embedment) and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to wood supports	24-inch o.c. along wood supports	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-37.5
R-23.	Existing standing seam or lap seam metal roof covers having min. 14 gauge (0.0747 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	12-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0
R-24.	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 72-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	6-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-67.5
R-25.	Existing standing seam or lap seam metal roof covers having min. 14 gauge (0.0747 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 72-inch o.c.	One or more layers, any combination, preliminarily fastened; (Treadsafe = min. 2-inch thick insulation)	OMG Purlin Fasteners and OMG RHINO BOND Insulation Plate (TPO) or OMG RHINO BOND Treadsafe Plate (TPO) are fastened through to purlins	6-inch o.c. along purlins	Flex TPO II induction-welded using RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-97.5

**TABLE 5C: STEEL - RECOVER**
**SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER**

(All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)

System No.	Substrate (Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach (Note 5)	Membrane	Fasteners (Note 11)	Attachment	
R-26.	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 84-inch o.c.	One or more layers, any combination	Prelim. attached	Flex TPO II	OMG Purlin Fasteners and OMG Eyehook AccuSeam Plates or Eyehook Reel-Fast Plates	12-inch o.c. within min. 6-inch wide laps spaced max. 84-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-30.0
R-27.	Existing standing seam or lap seam metal roof covers having min. 14 gauge (0.0747 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 84-inch o.c.	One or more layers, any combination	Prelim. attached	Flex TPO II	OMG Purlin Fasteners and OMG 2 3/8 XHD Barbed Stress Plates	12-inch o.c. within min. 6-inch wide laps spaced max. 84-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-37.5
R-28.	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 84-inch o.c.	One or more layers, any combination	Prelim. attached	Flex TPO II	OMG Purlin Fasteners and OMG 2 3/8 XHD Barbed Stress Plates, OMG Eyehook AccuSeam Plates or Eyehook Reel-Fast Plates	6-inch o.c. within min. 6-inch wide laps spaced max. 84-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-52.5
R-29.	Existing standing seam or lap seam metal roof covers having min. 14 gauge (0.0747 inch), 50 ksi or min. 12 gauge (0.105 in.), 36 ksi steel purlins spaced max. 84-inch o.c.	One or more layers, any combination	Prelim. attached	Flex TPO II	OMG Purlin Fasteners and OMG 2-3/4 in. Barbed SXHD Plates	6-inch o.c. within min. 6-inch wide laps spaced max. 84-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-60.0

**TABLE 5D: RECOVER APPLICATIONS**
**SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

^ The reported MDP documents the allowable maximum design pressure of the new roof cover when adhered to 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 (Note 1, Note 12)	Primer / Treatment	Roof Cover (Note 15)	MDP (psf) ^
R-30.	Existing fully adhered, granule-surfaced asphaltic roof cover	None	Flex TPO II FB / Hot Asphalt	-405.0