MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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Miami, Florida 33175-2474
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

GAF
1 Campus Drive
Parsippany, NJ 07054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF EverGuard® TPO Single Ply Roofing Systems over Recover Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA 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 NOA renews NOA# 20-1105.03 and consists of pages 1 through 110.
The submitted documentation was reviewed by Alex Tigera.

05/21/26

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	TPO
Deck Type:	Recover
Maximum Design Pressure:	See Specific Deck Type

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced single-ply membrane.
EverGuard Extreme® TPO	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced single-ply membrane designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Fleece-Back Membrane	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced, fleece back single-ply membrane
EverGuard Extreme® TPO Fleece-Back Membrane	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced fleece back single-ply membrane designed for advanced protection against heat aging and UV degradation.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	A smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	A smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	A smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	A smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	A smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	A smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
Ruberoid® 20 Smooth	39.37" (1 meter) Wide	ASTM D6163	A SBS polymer-modified asphalt base or ply sheet reinforced with a fiberglass mat.
Ruberoid® Mop Smooth 1.5	39.37" (1 meter) Wide	ASTM D6164	Smooth surfaced mop applied SBS base or ply sheet reinforced with a polyester mat.
Matrix™ 307 Premium Asphalt Primer	1, 5 or 55 Gallons	ASTM D41	Asphalt concrete primer used to promote adhesion of all types of asphalt-based roofing materials.
EverGuard® #1121 Bonding Adhesive	5 Gallons	Proprietary	Adhesive for fully adhered systems and membrane flashing.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® WB181 Bonding Adhesive	5 Gallons	Proprietary	A water based adhesive for TPO based membranes.
EverGuard® Low VOC TPO Bonding Adhesive	5 Gallons	Proprietary	A contact type bonding adhesive for TPO single ply roofing membranes and flashings.
LRF Adhesive M	1:1 Applicator	Proprietary	A dual component foamable adhesive.
LRF Adhesive O	1:1 Applicator	Proprietary	A dual component polyurethane adhesive used to adhere single ply roof covers.
GAF 2-Part Roofing Adhesive	1:1 Applicator	Proprietary	A dual component, low-rise, polyurethane froth adhesive.
EverGuard® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing.
EverGuard Extreme® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing and designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Cover Tape	6" x 100′ 10" x 100′	Proprietary	GAF TPO laminated to white butyl tape primarily used for edge metal details.
EverGuard® TPO Cover Tape Heat-Weld	6" x 100′	Proprietary	Flashing strip manufactured from unreinforced GAF TPO laminated to a six-inch-wide strip, half the strip with a self-adhered side and half the strip with a heat-weldable edge; used for edge metal details.
EverGuard Extreme® TPO Cover Tape Heat-Weld	6" x 100′	Proprietary	Flashing strip manufactured from unreinforced GAF TPO designed for advanced protection against heat aging and UV degradation. Laminated to a six-inch-wide strip, half the strip with a self-adhered side and half the strip with a heat-weldable edge; used for edge metal details.
EverGuard® TPO Detailing Membrane	24" x 50'	Proprietary	Unreinforced flashing material manufactured from GAF TPO.
EverGuard Extreme® TPO Detailing Membrane	24" x 50'	Proprietary	Unreinforced flashing material manufactured from GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO.
EverGuard Extreme® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO designed for advanced protection against heat aging and UV degradation.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO Pourable Sealer Pocket	9" X 6" X 4" Oval With 3" Base Flange	Proprietary	Pourable sealer pocket is molded with GAF TPO compound to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
EverGuard Extreme® TPO Pourable Sealer Pocket	9" X 6" X 4" Oval With 3" Base Flange	Proprietary	Pourable sealer pocket is molded from GAF TPO designed for advanced protection against heat aging and UV degradation compounded to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
EverGuard® TPO RTA Strip™	6" x 100′ Roll	Proprietary	Reinforced GAF TPO membrane with pressure sensitive adhesive primarily used to secure membrane transitions from the field to vertical surfaces.
EverGuard® TPO Split Pipe Boot	1”- 2” 3” - 5” 6” - 8”	Proprietary	Reinforced GAF TPO membrane split to accommodate most common pipes and conduits.
EverGuard Extreme® TPO Split Pipe Boot	1”- 2” 3” - 5” 6” - 8”	Proprietary	Reinforced GAF TPO designed for advanced protection against heat aging and UV degradation split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO with split design overlap to be wrapped around square or rectangular tubing.
EverGuard Extreme® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO designed for advanced protection against heat aging and UV degradation with split design overlap to be wrapped around square or rectangular tubing.
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO.
EverGuard Extreme® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Scupper	4" x 6" x 12" 8” x 10” x 12”	Proprietary	Scupper manufactured from coated metal and unreinforced GAF TPO.
EverGuard® TPO T-Joint Cover Patch	100 Patches Per Box	Proprietary	T-Joint patch manufactured from unreinforced GAF TPO.
EverGuard Extreme® TPO T-Joint Cover Patch	100 Patches Per Box	Proprietary	T- Joint patch manufactured from unreinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Vent	2 Vents Per Carton	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.
EverGuard® TPO Walkway Rolls	Rolls 1/8" x 30" x 50'	Proprietary	Standard duty TPO walkway rolls.
EverGuard® TPO Inside Corner	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from unreinforced GAF TPO.
EverGuard Extreme® TPO Inside Corner	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from unreinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Universal Corners	Various	Proprietary	Universal corners manufactured from GAF TPO that are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from GAF TPO.
EverGuard Extreme® TPO Universal Corners	Various	Proprietary	Universal corners manufactured from GAF TPO that are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from GAF TPO and supplied with stainless steel clamping rings.
EverGuard Extreme® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from GAF TPO designed for advanced protection against heat aging and UV degradation and supplied with stainless steel clamping rings.
EverGuard® TPO Expansion Joint Cover	Various	Proprietary	Low profile joint cover manufactured from reinforced GAF TPO.
EverGuard® TPO Cut Edge Sealant	1 Quart Squeeze Tube	Proprietary	Clear solvent based sealant for TPO cut edges.
EverGuard® TPO Drain	Various	Proprietary	Spun aluminum drains pre-flashed with unreinforced GAF TPO.
EverGuard® TPO Seam Cleaner	1 Gallon	Proprietary	Solvent based seam cleaner.
EverGuard® TPO Primer	1 gallon	Proprietary	Solvent based TPO primer.
EverGuard® Low VOC TPO Primer	1 gallon	Proprietary	Low VOC, solvent based TPO primer.
EverGuard® TPO Fluted Corner	8" Diameter Nominal .05" Non-Reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® Extreme® TPO Fluted Corner	8" Diameter Nominal .05" Non-Reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® Polymat Separation Layer	3 oz./yd.^{2} polyester mat	Proprietary	A non-woven polyester mat for use as a slip sheet below mechanically secured single ply roof membranes.
EverGuard® Polymat Cushioning Layer	6 oz./yd.^{2} polyester mat	Proprietary	A non-woven polyester mat for use as a slip sheet below mechanically secured single ply roof membranes.
Topcoat® TPO Red Primer	1 Gallon	Proprietary	Solvent-based primer for TPO membranes.
Topcoat® FlexSeal	1 or 5 gallons or 1 qt. tube	TAS 139	Solvent-based elastomeric sealant.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ HD Polyiso Insulation	High density polyisocyanurate foam insulation	GAF
EnergyGuard™ HD Plus Polyiso Insulation	High density polyisocyanurate foam insulation	GAF
EnergyGuard™ Ultra Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
Securock® Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corp.
Securock® Glass-Mat Roof Board	Gypsum board	United States Gypsum Corp.
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® Prime Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
Structodek® High Density Fiberboard Roof Insulation	High-density fiberboard	Blue Ridge FiberBoard, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ #12 Fastener	Phillips head, modified buttress thread, pinch point, carbon steel fastener for use in steel or wood decks. With CR-10 coating. Available with a pinch point or drill point.	#12 x 8" Max. Length, #3 Phillips Head	GAF
2.	Drill-Tec™ #14 Fastener	Truss head, self-drilling, pinch point, high thread fastener for use in steel, wood or concrete decks.	#14 x 16" Max. Length, #3 Phillips Head.	GAF
3.	Drill-Tec™ XHD Fastener	Truss head, self-drilling, pinch point, high thread fastener for us in wood or steel decks.	#15 x 16" Max. Length, #3 Phillips Head	GAF
4.	Drill-Tec™ 2-3/8 in. Barbed XHD Plate	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.	2-3/8" Round	GAF
5.	Drill-Tec™ 2 in. Double Barbed XHD Plate	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.	2" Round	GAF
6.	Drill-Tec™ 2-3/4 in. Barbed SXHD Plate	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.	2-3/4" Round	GAF
7.	Drill-Tec™ SXHD	Truss head, self-drilling, drill point, high thread fastener for use in steel decks.	#21 x 16" Max. Length, #3 Phillips Head	GAF
8.	Drill-Tec™ AccuTrac® Flat Plate	A2-SS aluminized steel plate for use with Drill-Tec™ fasteners.	3" Square; .017" Thick	GAF
9.	Drill-Tec™ AccuTrac® Recessed Plate	Galvalume® steel plate with recess for use with Drill-Tec™ fasteners.	3" Square; .017" Thick	GAF
10.	Drill-Tec™ ASAP 3S	Drill-Tec™ #12 Fastener with Drill-Tec™ 3" Standard Steel Plate.	See Components	GAF
11.	Drill-Tec™ RhinoBond® TPO SXHD Plate	Gold primer coated plate for use with TPO membranes.	3" Round	GAF
12.	Drill-Tec™ RhinoBond® TPO XHD Plates	Gold primer coated plate for use with TPO membranes.	3" Round	GAF
13.	Drill-Tec™ 3" Steel Plates	Round Galvalume® steel stress plate with reinforcing ribs and recessed for use with Drill-Tec™ fasteners.	3" Round	GAF

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
14.	Drill-Tec™ 3" Standard Steel Plate	Galvalume® coated steel stress plate for use with approved Drill-Tec™ fasteners.	3" Round	GAF
15.	Drill-Tec™ Eyehook AccuSeam Plates	Round Galvalume® steel plate for use with Drill-Tec™ fasteners.	2-3/8" Round	GAF
16.	Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat)	Round Galvalume® plated steel stress plate with reinforcing ribs for use with Drill-Tec™ fasteners.	3" Round	GAF
17.	Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plate	Round, coated Galvalume® plate (Gold primer coating) used for TPO membranes	3" Round	GAF
18.	Drill-Tec™ Purlin Fastener	Hex head, ¾ in. drill point fastener used to attach single-ply to structural steel purlins.	4" - 10" Max. Length, With #3 Square Head	GAF

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
FM Approvals	3014955	4470	01/28/05
	3020681	4470	01/09/05
	3022136	4470	03/17/05
	3023458	4470	07/18/06
	3024051	4470	03/28/06
	3026964	4470	07/25/07
	3029832	4470	05/11/07
	3030813	4470	11/05/07
	3031350	4470	09/27/07
	3032172	4470	06/12/09
	3032856	4470	11/24/08
	3033135	4470	11/24/08
	3034394	4470	02/27/09
	3034749	4470	10/16/08
	3035658	4470	09/16/09
	3036141	4470	08/10/09
	3036614	4470	06/09/09
	3038278	4470	11/18/11
	3038318	4470	12/10/10
	3040234	4470	02/23/11
	3040377	4470	03/08/11
	3041535	4470	06/08/11
	3041685	4470	03/24/11
	3041769	4470	09/27/11
	3042905	4470	01/10/12
	3045166	4470	07/24/12
	3045863	4470	08/16/12
	3046054	4470	12/21/12
	3046081	4470	02/13/13
	3046328	4470	09/13/22
	3046388	4470	09/24/12
	3047636	4470	08/08/13
	3048122	4470	04/29/13
	797-03825-267	4470	07/14/08
	797-05045-267	4470	10/12/09
	797-05204-267	4470	01/11/09
	797-05550-267	4470	05/10/10
	797-05593-267	4470	05/26/10
	797-06178-267	4470	12/09/10
	797-06254-267	4470	12/10/10
	797-07183-267	4470	11/09/11
	797-09594-267	4470	06/24/14
	797-10123-283	4470	12/09/14
	797-10153-267	4470	12/11/14
	797-10212-267	4470	02/05/15
FM Approvals	797-RR200108	4470	02/13/15
	FM Letter	4470	10/28/09

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
	FM Letter	4470	12/06/11
	FM Letter Report 3048066	4470	12/13/13
	FM Letter Report 3051973	4470	08/06/14
PRI Construction Materials Technologies, LLC	GAF-122-02-01	TAS-139	05/07/06
	GAF-314-02-01	ASTM D2178	08/23/11
	GAF-315-02-01	ASTM D2178	08/23/11
	GAF-435-02-01	TAS 117	01/29/14
	GAF-435-02-08	TAS 114	01/29/14
	GAF-435-02-08 Addendum	TAS 114	12/02/15
	GAF-435-02-09	TAS 114	01/29/14
	GAF-435-02-09 Addendum	TAS 114	12/02/15
	GAF-435-02-10	TAS 114	01/29/14
	GAF-435-02-10 Addendum	TAS 114	12/02/15
	GAF-435-02-11	TAS 114	01/29/14
	GAF-435-02-11 Addendum	TAS 114	12/02/15
	GAF-457-02-02	FM 4470	01/20/14
	GAF-457-02-06	TAS 114	02/05/14
	GAF-457-02-08	TAS 114	02/05/14
	GAF-462-02-01	ASTM D413	11/18/13
	GAF-462-02-02	TAS 117	11/18/13
	GAF-462-02-05	ASTM D1761	11/18/13
	GAF-462-02-09	TAS 114	07/01/14
	GAF-499-02-01	ASTM D6083	03/12/14
	GAF-506-02-10	TAS 114	03/06/14
	GAF-506-02-10 Addendum	TAS 114	12/02/15
	GAF-506-02-14	TAS 114	04/14/14
	GAF-506-02-14 Addendum	TAS 114	12/02/15
	GAF-508-02-01	ASTM D1475	03/12/14
	GAF-510-02-02	TAS 114	04/08/14
	GAF-510-02-02 Addendum	TAS 114	12/02/15
	GAF-510-02-04	TAS 114	04/08/14
	GAF-510-02-04 Addendum	TAS 114	12/02/15
	GAF-511-02-02	TAS 114	04/08/14
	GAF-511-02-02 Addendum	TAS 114	12/02/15
	GAF-511-02-03	TAS 114	05/08/14
	GAF-515-02-01	TAS 114	05/13/14
	GAF-516-02-01	TAS 114	05/13/14
	GAF-516-02-02	TAS 114	06/06/14
	GAF-516-02-03	TAS 114	05/13/14
	GAF-525-02-01	TAS 114	06/23/14
	GAF-525-02-02	TAS 114	06/23/14
	GAF-525-02-02 Addendum	TAS 114	12/02/15
	GAF-525-02-03	TAS 114	06/23/14
	GAF-540-02-02	FM 4470	08/06/14
	GAF-540-02-03	FM 4470	08/06/14
	GAF-540-02-04	FM 4470	08/06/14
	GAF-559-02-03	TAS 117	10/16/14

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
	MCRF Letter	TAS 105	01/22/15
	GAF-671-02-01	TAS 139	06/30/16
UL LLC	R1306	UL 790	01/28/21
Exterior Research & Design, LLC	01509.03.04-2	TAS 114	03/16/04
	18029.12.02-1	TAS 131	12/06/02
Trinity | ERD	MCRF Letter	TAS 105	01/12/15
	SC9700.08.15-R1	ASTM D2178	08/31/15
	SC13105.03.17-R1	ASTM D6164	03/23/17
NEMO | etc.	4S-GAF-18-001.01.19-1	ASTM D2178	01/02/19
	4q-GAF-19-SSMBB-02.A	ASTM D6163	04/08/19
	4r-GAF-SSTHP-006.A	ASTM D6878	01/09/26
Atlantic & Caribbean Roof Consulting, LLC	07-030	TAS 114	05/09/07
	08-032	TAS 114	05/19/08
	11-004	TAS 114	03/21/11
	11-005	TAS 114	03/22/11
	11-011	TAS 114	03/24/11
	11-012	TAS 114	04/06/11
	11-013	TAS 114	04/06/11
	11-019	TAS 114	04/08/11
	11-020	TAS 114	04/08/11
	11-042-R1	TAS 114	01/27/12
	11-047	TAS 114	08/09/11
	11-056-R2	TAS 114	01/26/15
	11-067	TAS 114	11/21/11
	12-008	TAS 114	04/10/12
	12-012	TAS 114	04/23/12
	12-013	TAS 114	04/23/12
	12-014	TAS 114	04/24/12
	12-016	TAS 114	04/24/12
	12-024	TAS 114	05/09/12
	12-033	TAS 114	08/10/12
	MCRF Letter	TAS 105	01/26/15

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
FM Approval Deck Limitations	N/A	C(1), C(3), C(6), C(9), D(1), D(2), D(3), D(4), D(5)	01/01/13
Duc Thanh Nguyen, P.E.	Signed/Sealed Calculations	C(2), C(4), C(5), C(7), C(11), C(12), D(6), D(7), E(1), E(2)	12/02/15

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete deck (minimum 2500 psi)

System Type A(1): Insulation adhered to existing asphaltic roof. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: All Insulation boards are adhered to the existing asphaltic roof cover with OlyBond 500® Adhesive or OlyBond® 500 Green applied in ¾ - 1 inch wide beads spaced 12 in o.c. and walked in. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

(Only for use with SECUROCK® Gypsum-Fiber Roof Board Insulation Layer)
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -120 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(2): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-347.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(3): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued) EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -502.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(4): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq. per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -502.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(5): Insulation adhered to existing granular surfaced roof system or smooth BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulation.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is adhered to the insulation with EverGuard® WB 181 Bonding Adhesive applied at a total rate of 0.83 gal./sq. per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. Broom or roll the top surface of the membrane per manufacturer's installation instructions to ensure complete bonding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -215 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(6): Insulation adhered to existing granular surfaced roof system, smooth surfaced APP roof system or smooth BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-225 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(7): Insulation adhered to existing granular surfaced roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with LRF Adhesive M applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-225 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(8): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500Adhesive, OlyBond® 500 Green or LRF Adhesive M applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. or with GAF 2-Part Roofing Adhesive applied in 2.5" wide ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -180 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(9): Insulation adhered to existing smooth surfaced APP membrane. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with LRF Adhesive M applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -180 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(10): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with GAF 2-Part Roofing Adhesive applied in 2.5" wide ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the insulation with GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -180 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete (Minimum 2500 psi)

System Type A(11): Insulation adhered to existing granular surfaced roof system or smooth BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with GAF 2-Part Roofing Adhesive applied in 2.5" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued)

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-180 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(12): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently partially adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the insulation with LRF Adhesive O applied in 1" wide ribbons spaced 6" o.c. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -275 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(13): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR roof system. Membrane is subsequently partially adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of the following insulation.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with LRF Adhesive M applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the insulation with LRF Adhesive M applied in 1" wide ribbons spaced 6" o.c. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -165 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(14): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued)	EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:	-145 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(15): Insulation adhered to existing granular surfaced roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of the following insulation.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive, OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. or with GAF 2-Part Roofing Adhesive applied in 2.5" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)	EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:	-297.5 psf. (See General Limitation #9)

Membrane Type:	Single Ply, TPO
Deck Type 7I:	Recover, Insulated
Deck Description:	Cementitious Wood Fiber Roof Deck
System Type A(16):	Insulation adhered to existing granular surfaced roof system. Membrane is subsequently partially adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of the following insulation.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Securock® Gypsum-Fiber Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the insulation with LRF Adhesive O applied in 1" wide beads spaced 6" o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -242.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(17): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with GAF 2-Part Roofing Adhesive applied in 2.5" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)	EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:	-145 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious Wood Fiber Roof Deck

System Type A(18): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond 500 Adhesive, OlyBond 500 Green or LRF Adhesive M applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -145 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(19): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued) EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -387.5 psf. (See General Limitation #9)

Membrane Type:	Single Ply, TPO
Deck Type 7I:	Recover, Insulated
Deck Description:	Gypsum Concrete Deck
System Type A(20):	Insulation adhered to existing granular surfaced roof system or smooth BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulation.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
EnergyGuard™ RA Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is adhered to the insulation with EverGuard® WB 181 Bonding Adhesive applied at a total rate of 0.83 gal./sq. per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. Broom or roll the top surface of the membrane per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -210 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(21): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-187.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(22): Insulation adhered to existing granular surfaced roof system or existing smooth surfaced BUR roof system. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard RH HD Polyiso Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. or (only for use with Securock® Gypsum-Fiber Roof Board, DensDeck® Prime Roof Board and Structodek® High Density Fiberboard Roof Insulation) with GAF 2-Part Roofing Adhesive applied in 2.5" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)	EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR **(Only for use only with SECUROCK® Gypsum-Fiber Roof Board or Dens Deck® Prime Roof Board)** EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR **(Only for use only with SECUROCK® Gypsum-Fiber Roof Board or Dens Deck® Prime Roof Board)** EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**
1.	Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2.	Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.
Maximum Design Pressure:	-215 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(23): Insulation adhered to existing granular surfaced roof system or smooth surfaced BUR system. Membrane is subsequently partially adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board Minimum 0.25″ thick	**N/A**	**N/A**

Note: Insulation is adhered to the existing roof cover with OlyBond® 500 Adhesive or OlyBond® 500 Green applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is partially adhered to the insulation with LRF Adhesive O applied in 1" wide beads spaced 6" o.c. Roll the top surface of the membrane per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -502.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 33 steel deck secured to minimum 0.25″ thick steel structural supports spaced maximum, 72″ o.c. with ICH Traxx/5, ICH Traxx/4, Teks 4 or Teks 5 fasteners spaced 6″ o.c. at each bearing. Deck side laps are secured 24″ o.c. with ICH Traxx/1 or Stitch Teks 1 fasteners.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(1): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board Minimum 0.25″ thick	**1, 2, 8, 10, 14**	**1:1.6 ft^2**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 - 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, 33 ksi steel deck with supports spaced maximum 72″ o.c.

OR

Structural Concrete (Minimum 2500 psi), recover

*The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 175 lbf. when tested with the fastener chosen for insulation attachment [Drill-Tec™ #12 Fasteners (steel deck only) or Drill-Tec™ #14 Fasteners (steel or structural concrete deck)] installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(2): Insulation is mechanically attached to roof deck. Membrane subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1.0" thick	**N/A**	**N/A**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board		
Minimum 0.25″ thick	**1, 2, 8, 16**	**1:1.45 ft²**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
(Only for use with a SECUROCK® Gypsum-Fiber Roof Board top insulation layer) EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 33 steel deck secured to minimum 0.25″ thick steel structural supports spaced maximum, 72″ o.c. with ICH Traxx/5, ICH Traxx/4, Teks 4 or Teks 5 fasteners spaced 6″ o.c. at each bearing. Deck side laps are secured 24″ o.c. with ICH Traxx/1 or Stitch Teks 1 fasteners.
OR
Structural Concrete (Minimum 2500 psi)

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(3): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of the following insulation.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Securock® Gypsum-Fiber Roof Board Minimum 0.375″ thick	**1, 2, 8, 10, 14, 16**	**1:1.33 ft^2**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-67.5 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 20 gauge, 33 ksi steel with supports spaced maximum 84" o.c. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 218 lbf. when tested with the fastener chosen for insulation attachment (Drill-Tec™ #12 Fasteners or Drill-Tec™ #14 Fasteners) installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(4): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1.0" thick	**N/A**	**N/A**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
SECUROCK® Gypsum-Fiber Roof Board Minimum 3/8″ thick	**1, 2, 8, 16**	**1:1.45 ft²**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:

-75 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type &7I: Recover, Insulated

Deck Description: Minimum 20 gauge, 33 ksi, steel deck with supports spaced maximum 84 in. o.c. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 216 lbf. when tested with the fastener chosen for insulation attachment (Drill-Tec™ #12 Fasteners or Drill-Tec™ #14 Fasteners) installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(5): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation Minimum 2.0" thick	**1, 2, 8, 9, 10, 13, 14, 16**	**1:1.6 ft^2**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued)

(Only for use with EnergyGuard™ Polyiso Insulation) EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

(Only for use with EnergyGuard™ Polyiso Insulation) EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -67.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 33 steel deck secured to minimum 0.25″ thick steel structural supports spaced maximum, 72″ o.c. with ICH Traxx/5, ICH Traxx/4, Teks 4 or Teks 5 fasteners spaced 6″ o.c. at each bearing. Deck side laps are secured 24″ o.c. with ICH Traxx/1 or Stitch Teks 1 fasteners.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(6): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Structodek® High Density Fiberboard Roof Insulation Minimum 0.5″ thick	**1, 2, 8, 9, 10, 13, 14, 16**	**1:1 ft^2**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.
OR

Membrane: (Continued)

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -67.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, 33 ksi steel deck with supports spaced maximum 72 in. o.c.

OR

Structural Concrete (Minimum 2500 psi)

*The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 213 lbf. when tested with the fastener chosen for insulation attachment [Drill-Tec™ #12 Fasteners (steel deck only) or Drill-Tec™ #14 Fasteners (steel or structural concrete deck)] installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(7): Insulation is mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 2.0″ thick	**1, 2, 8, 9, 10, 13, 14, 16**	**1:1.78 ft^2**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be a minimum 2" for hand welding.

OR

EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal/sq per manufacturer's installation instructions. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

Membrane: (Continued)

(Only for use with EnergyGuard™ Polyiso Insulation) EverGuard® TPO or EverGuard® Extreme® TPO fully adhered in EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.83gal./sq per manufacturer's installation instructions. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate. The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

OR

(Only for use with EnergyGuard™ Polyiso Insulation) EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered with EverGuard WB 181 Bonding Adhesive applied at a total rate of 0.83 – 1.0 gal/sq. All of the adhesive is applied to the substrate and the membrane is installed into the wet adhesive as soon as practical (do not allow adhesive to string or dry). The top surface of the membrane is broomed or rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 19/32" thick CDX plywood secured to lumber supports spaced maximum 24" o.c. using 8d ring shank nails. The nails are spaced 6" o.c. along panel end and intermediate supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 220 lbf. when tested with the fastener chosen for insulation attachment (Drill-Tec™ #12 Fasteners or Drill-Tec™ #14 Fasteners) installed through to the deck in accordance with TAS 105.

System Type C(8): Insulation is mechanically attached to roof deck. Membrane fully adhered to insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1.0" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Securock® Gypsum-Fiber Roof Board		
Minimum 0.25″ thick	**1, 2, 8**	**1.33 ft²**

Note: Insulation shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is fully adhered to the substrate with hot asphalt applied at 20-25 lbs./sq. Broom the top surface of the membrane per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -82.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge steel deck, grade 80, is secured to minimum 0.25″ thick steel structural supports spaced maximum 72″ o.c. with ICH Traxx/5 fasteners spaced 6″ o.c. at each bottom rib. Deck side laps are secured 24″ o.c. with ICH Traxx/1 fasteners.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(9): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond Plate Note: When using Drill-Tec RhinoBond TPO XHD Plates or Drill-Tec RhinoBond TPO SXHD Plates over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured with Drill-Tec™ RhinoBond® TPO SXHD Plates, Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates and Drill-Tec™ SXHD fasteners. Stress plates and fasteners are placed on a 24″ x 24″ grid and fasteners are driven through the insulation and into the roof deck. The roof cover is bonded to stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -82.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 33 steel deck.

OR

Structural Concrete (minimum 2500 psi)

System Type C(10): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond Plate Note: When using Drill-Tec RhinoBond TPO XHD Plates or Drill-Tec RhinoBond TPO SXHD Plates over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured with Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with Drill-Tec™ XHD Fasteners (steel deck only) or with Drill-Tec™ #14 Fasteners (structural concrete deck only). Fasteners are applied at a rate of 6 fasteners per 48 x 96 in. board. Fasteners are located in each of the four corners of the board and at mid-span of the 96 in. length. All fasteners are 12 in. from the board edges. Fasteners are driven through the insulation and into the roof deck. The roof cover is bonded to stress plates using RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, 33 ksi steel deck with supports spaced maximum 72" o.c.

OR

Structural Concrete (minimum 2500 psi)

*The deck shall record a Minimum Characteristic Resistance Force (MCRF) as follows for each membrane fastening when tested with the fastener chosen for membrane attachment installed through to the deck in accordance with TAS 105:

Membrane Fastening	Fastener	Deck	MCRF
Fastening #1	Drill-Tec™ XHD Fastener Drill-Tec™ #14 Fastener	Steel Structural Concrete	480 lbf
Fastening #2	Drill-Tec™ XHD Fastener Drill-Tec™ #14 Fastener	Steel Structural Concrete	360 lbf

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(11): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond Plate Note: When using Drill-Tec RhinoBond TPO XHD Plates or Drill-Tec RhinoBond TPO SXHD Plates over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured with Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates and Drill-Tec™ XHD fasteners (steel deck only) or with Drill-Tec™ #14 Fasteners (structural concrete deck only) as described below. The roof cover is bonded to stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Fastening #1: The fasteners are arranged in a 24" x 24" grid.
Maximum Design Pressure: -60 psf. (General Limitation #7)
See PRI GAF-510-02-04

Fastening #2: The fasteners are applied at a rate of 2.67 ft^2 per fastener.
Maximum Design Pressure: -67.5 psf. (General Limitation #7)
See PRI GAF-510-02-02

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: See fastening options above.

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 20 gauge, 33 ksi steel deck with supports spaced maximum 84" o.c. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf. when tested with the Drill-Tec™ XHD Fastener installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(12): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond Plate Note: When using Drill-Tec RhinoBond TPO XHD Plates or Drill-Tec RhinoBond TPO SXHD Plates over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured with Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates and Drill-Tec™ XHD fasteners applied in a 24" x 24" grid. The roof cover is bonded to stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Steel (existing standing lap/seam metal roof cover over structural steel supports)

System Type C(13): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1.0″ thick	**N/A**	**N/A**
EnergyGuard™ RA Polyiso Insulation		
Minimum 1.5 ″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Insulation Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond Plate Note: When using Drill-Tec RhinoBond TPO XHD Plates or Drill-Tec RhinoBond TPO SXHD Plates over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured with Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates and Drill-Tec™ Purlin Fasteners per the fastening options below. The roof cover is bonded to the stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Fastening #1: The membrane is secured 12 in. o.c. through the insulation, existing roof assembly and into minimum 14 ga. purlins. Membrane fastener rows are spaced maximum 60 in. o.c.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Fastening #2: The membrane is secured 6 in. o.c. through the insulation, existing roof assembly and into minimum 16 ga. purlins. Membrane fastener rows are spaced maximum 72 in. o.c.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: See fastening options above.

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 15/32" plywood secured to lumber supports spaced maximum 24 in. o.c. The plywood is secured to the lumber supports with 8d ring shank nails spaced 6" o.c. along panel end supports and 12" o.c. along panel intermediate supports.

OR

Structural Concrete (minimum 2500 psi)

*The deck shall record a Minimum Characteristic Resistance Force (MCRF) as follows for each membrane fastening when tested with Drill-Tec™ #14 Fasteners installed through to the lumber supports or structural concrete in accordance with TAS 105:

Membrane Fastening	MCRF
Fastening #1	630 lbf
Fastening #2	600 lbf
Fastening #3	495 lbf

System Type C(14): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is secured through the insulation, existing roof cover and into the lumber supports or structural concrete with Drill-Tec™ #14 Fasteners and Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates applied as described below. The roof cover is bonded to stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Fastening #1: Fasteners are arranged in a 24 x 36 in. grid
Maximum Design Pressure: -52.5 psf. (General Limitation #7)

Fastening #2: Fasteners are arranged in a 24 x 24 in. grid
Maximum Design Pressure: -75 psf. (General Limitation #7)

Fastening #3: Fasteners are arranged in a 18 x 24 in. grid
Maximum Design Pressure: -82.5 psf. (General Limitation #7)

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: See Membrane Fastening options.

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Min. 15/32" thick plywood secured over lumber supports spaced maximum 24 in. o.c. The plywood is secured to the lumber supports with 8d ring shank nails spaced 6" o.c. along panel end and intermediate supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 280 lbf. when tested with Drill-Tec™ #14 Fasteners installed through to the deck in accordance with TAS 105.

System Type C(15): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to stress plates used to fasten insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation; EnergyGuard™ Ultra Polyiso Insulation Minimum 1″ thick	**N/A**	**N/A**

Insulation Note: All insulation layers shall be simultaneously, preliminarily secured with the RhinoBond® membrane fasteners installed as described below for membrane attachment. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

RhinoBond® Tread Safe Plate Note: The total insulation thickness shall be 2.0" minimum when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates. A 5/8" diameter pilot hole is required when using Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates with wood fiber or gypsum top layer insulation.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is secured through the insulation, existing roof cover and into the plywood deck with Drill-Tec™ #14 Fasteners and Drill-Tec™ RhinoBond® TPO XHD Plates or Drill-Tec™ RhinoBond® TPO XHD Tread Safe Plates applied within a contributory area of 2.67 ft^2 per fastener. The roof cover is bonded to stress plates using the RhinoBond® Portable Bonding Tool per manufacturer's installation instructions. Weighted cooling magnets are placed over the bonded membrane/plates for a minimum of 45 seconds. Side laps are minimum 3″ wide and sealed with minimum 1.5″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 80 steel deck secured to minimum 0.25″ thick structural supports spaced at maximum 60″ o.c. using Teks 4, Teks 5, ICH TRAXX/4 or ICH TRAXX/5 fasteners spaced maximum 6″ o.c. along each support. The deck side laps are fastened with Stitch Teks 1 or ICH TRAXX/1 fasteners spaced at maximum 24" o.c. along each side lap.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(1): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ Perlite Recover Board, EnergyGuard HD Polyiso Insulation, EnergyGuard HD Plus Polyiso Insulation, EnergyGuard RH HD Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO, EverGuard® Extreme® TPO, EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane attached through the preliminary attached insulation as follows.

Fastening: Drill-Tec™ 2-3/8 in. Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates and Drill-Tec™ XHD Fasteners spaced 6″ o.c. within laps spaced 114″ o.c. Side laps are minimum 6″ wide and sealed with minimum 1.625″ wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 20 gauge, Grade 80, 1.5″ deep, type B wide rib steel roof deck is secured to minimum 0.25″ thick structural supports spaced at maximum 72″ o.c. with Teks 4, Teks 5, ICH Traxx/5 fasteners spaced at maximum 6″ o.c. at the support. The deck side laps are secured with Stitch Teks 1 or ICH Traxx/1 fasteners spaced at a max 24″ o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(2): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1.0” thick		
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Recover Board Minimum 0.5″ thick		
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO, EverGuard® Extreme® TPO, EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane attached through the insulation to the deck as described below.

Fastening: Membrane is secured with Drill-Tec™ 2-3/4 in. Barbed SXHD Plates and Drill-Tec™ SXHD Fasteners spaced maximum 6″ o.c. with laps spaced at maximum 114″ o.c. Side laps are minimum 6″ wide and sealed with a minimum 1.875″ wide heat weld for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 33, 1.5″ deep, type B wide rib steel roof deck is secured to minimum 0.25″ thick structural supports spaced at maximum 72″ o.c. with Teks 4, Teks 5, ICH Traxx/5 fasteners spaced at maximum 6″ o.c. at the support. The deck side laps are secured with Stitch Teks 1 or ICH Traxx/1 fasteners spaced at a max 24″ o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(3): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Polyiso Insulation Minimum 1.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation EnergyGuard™ Ultra Polyiso Insulation Minimum 1.0” thick		
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Recover Board, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Recover Board Minimum 0.5″ thick		
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO, EverGuard® Extreme® TPO, EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane attached through the insulation to the deck as described below.

Fastening #1: Membrane is secured with Drill-Tec™ 2-3/8 in. Barbed XHD Plates and Drill-Tec™ XHD Fasteners spaced maximum 6″ o.c. with laps spaced at maximum 54″ o.c. Side laps are minimum 6″ wide and sealed with a minimum 1.5″ wide heat weld for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.
Maximum Design Pressure: -60 psf. (See General limitation #7)

Fastening #2: Membrane is secured with Drill-Tec™ 2-3/8 in. Barbed XHD Plates and Drill-Tec™ XHD Fasteners or Drill-Tec™ 2-3/4 in. Barbed SXHD Plates and Drill-Tec™ SXHD fasteners spaced maximum 12″ o.c. with laps spaced at maximum 54″ o.c. Side laps are minimum 6″ wide and sealed with a minimum 1.5″ wide heat weld for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.
Maximum Design Pressure: -45 psf. (See General limitation #7)

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: **See Fastening Option above**

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, Grade 80, 1.5″ deep, type B wide rib steel roof deck is secured to minimum 0.25″ thick structural supports spaced at maximum 72″ o.c. with Teks 4, Teks 5, ICH Traxx/5 fasteners spaced at maximum 6″ o.c. at the support. The deck side laps are secured with Stitch Teks 1 or ICH Traxx/1 fasteners spaced at a max 24″ o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(4): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Polyiso Insulation Minimum 1.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation Minimum 1.0” thick		
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Recover Board, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Perlite Recover Board Minimum 0.5″ thick		
EnergyGuard™ Perlite Roof Insulation Minimum 0.75″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO, EverGuard® Extreme® TPO, EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane attached through the insulation to the deck as described below.

Fastening: Membrane is secured with Drill-Tec™ 2-3/8 in. Barbed XHD Plates and Drill-Tec™ XHD Fasteners spaced maximum 6″ o.c. with laps spaced at maximum 90″ o.c. Side laps are minimum 6″ wide and sealed with a minimum 1.5″ wide heat weld for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 20 gauge, Grade 80, 1.5″ deep, type B wide rib steel roof deck is secured to minimum 0.25″ thick structural supports spaced at maximum 72″ o.c. with Teks 4, Teks 5, ICH Traxx/5 fasteners spaced at maximum 6″ o.c. at the support. The deck side laps are secured with Stitch Teks 1 or ICH Traxx/1 fasteners spaced at a max 24″ o.c.

OR

Structural Concrete (Minimum 2500 psi)

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(5): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ Perlite Recover Board, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured through the insulation, existing roof cover and into the deck as follows.

Fastening: The membrane is secured with Drill-Tec™ 2” Double Barbed XHD Plates, Drill-Tec™ 2-3/8” Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates and Drill-Tec™ XHD Fasteners (steel deck only) or Drill-Tec™ #14 Fasteners (structural concrete deck only) spaced maximum 6” o.c. within minimum 6” wide roof cover side laps. The roof cover side laps are spaced maximum 114” o.c. and are sealed with minimum 1.5” wide heat welds for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 22 gauge, 55 ksi steel deck with supports spaced maximum 72" o.c.

OR

Structural Concrete (Minimum 2500 psi)

*The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 450 lbf when tested with the fastener chosen for membrane attachment installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(6): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured through the insulation, existing roof cover and into the deck as follows.

Fastening: The membrane is secured with Drill-Tec™ 2-3/8" Barbed XHD Plates and Drill-Tec™ XHD Fasteners (steel deck only) or with Drill-Tec™ #14 Fasteners (structural concrete deck only) spaced maximum 6" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 90" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Minimum 20 gauge, 33 ksi steel deck with supports spaced maximum 72" o.c. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 675 lbf. when tested with the fastener chosen for membrane attachment (Drill-Tec™ XHD Fasteners or Drill-Tec™ SXHD fasteners) installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(7): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured through the insulation, existing roof cover and into the deck with Drill-Tec™ 2-3/4" Barbed SXHD Plates and Drill-Tec™ XHD Fasteners or Drill-Tec™ SXHD Fasteners spaced maximum 12" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 90" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Steel (existing standing lap/seam metal roof cover over structural steel supports)

System Type D(8): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation, standing lap/seam roof cover and into the structural steel supports (purlins).

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1.0″ thick	**N/A**	**N/A**
EnergyGuard™ RA Polyiso Insulation		
Minimum 1.5 ″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is mechanically secured per the fastening options below.

Fastening #1: The membrane is secured through the insulation, existing roof assembly and into minimum 16 ga. purlins with Drill-Tec™ Purlin Fasteners and Drill-Tec™ 2 in. Double Barbed XHD Plates, Drill-Tec™ 2-3/8 in. Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates spaced 6 in. o.c. within laps spaced maximum 84 in. o.c. The membrane side laps are minimum 6 in. wide and sealed with minimum 1.5 in. wide heat welds for automatic machine welding. Weld width shall be minimum 2” wide for hand welding.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Fastening #2: The membrane is secured through the insulation, existing roof assembly and into minimum 14 ga. purlins with Drill-Tec™ Purlin Fasteners and Drill-Tec™ 2-3/4 in. Barbed SXHD Plates spaced 6 in. o.c. within laps spaced maximum 84 in. o.c. The membrane side laps are minimum 6 in. wide and sealed with minimum 1.5 in. wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: See membrane fastening options.

Membrane Type: Single Ply, TPO

Deck Type 7I: Recover Insulated

Deck Description: Min. 19/32" thick plywood secured over lumber supports spaced maximum 24 in. o.c. The plywood is secured to the lumber supports with 8d ring shank nails spaced 4" o.c. along panel end and intermediate supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 275 lbf. when tested with Drill-Tec™ #14 Fasteners installed through to the deck in accordance with TAS 105.

System Type D(9): All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck® Roof Board, Securock® Gypsum-Fiber Roof Board, Securock® Glass-Mat Roof Board		
Minimum 0.25″ thick	**N/A**	**N/A**
Structodek® High Density Fiberboard Roof Insulation, EnergyGuard™ HD Polyiso Insulation, EnergyGuard™ HD Plus Polyiso Insulation		
Minimum 0.5″ thick	**N/A**	**N/A**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation		
Minimum 1″ thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: EverGuard® TPO or EverGuard® Extreme® TPO is secured through the insulation, existing roof cover and into the plywood deck with Drill-Tec™ 2" Double Barbed XHD Plates, Drill-Tec™ 2-3/8" Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates and Drill-Tec™ #14 Fasteners spaced maximum 8" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 54" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Membrane Type:	Single Ply, TPO
Deck Type 7I:	Recover, Insulated
Deck Description:	Min. 19/32" thick or greater plywood attached to structural wood supports spaced maximum 24" o.c. using 8d common nails spaced 6" o.c. at all panel edges and intermediary supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 241 lbf. when tested with Drill-Tec™ #14 Fasteners installed through to the deck in accordance with TAS 105.
System Type D(10):	All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of any of the following insulations.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation **Minimum 1.5" thick**		

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane:	EverGuard® TPO, EverGuard® Extreme® TPO mechanically fastened using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 in. Double Barbed XHD Plates, Drill-Tec 2-3/8 in. Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates spaced 6" o.c. in rows spaced maximum 55" o.c. The minimum 5" wide side laps are sealed with minimum 1.75" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Membrane Type:	Single Ply, TPO
Deck Type 7:	Recover Non-Insulated
Deck Description:	Minimum 22 gauge, 55 ksi steel deck with supports spaced maximum 72" o.c. OR Structural Concrete (Minimum 2500 psi) *The deck shall record a Minimum Characteristic Resistance Force (MCRF) as follows for each membrane fastening when tested with the fastener chosen for membrane attachment installed through to the deck in accordance with TAS 105. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type E(1):	Membrane mechanically fastened to roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Slip Sheet: EverGuard™ Polymat Separation Layer (3 oz/yd^2) or EverGuard™ Polymat Cushioning Layer (6 oz/yd^2) is loose-applied over the existing roof cover so that wrinkles and buckles are not formed. Slip sheet side laps and end laps shall be minimum 6" wide. Install slip sheet in accordance with manufacturer's installation instructions.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is secured through the slip sheet and into the deck as follows.

Fastening: The membrane is secured with Drill-Tec™ 2-3/8" Barbed XHD Plates and Drill-Tec™ XHD Fasteners (steel deck only) or with Drill-Tec™ #14 Fasteners (structural concrete deck only) spaced maximum 6" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 90" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7E: Recover Non-Insulated

Deck Description: Existing roof cover over min. 20 gauge steel deck with maximum 72" o.c. support spacing. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 675 lbf. when tested with the fastener chosen for membrane attachment (Drill-Tec™ XHD Fasteners or Drill-Tec™ SXHD) installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type E(2): Membrane mechanically fastened to roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Slip Sheet: EverGuard™ Polymat Separation Layer (3 oz/yd^2) or EverGuard™ Polymat Cushioning Layer (6 oz/yd^2) is loose-applied over the existing roof cover so that wrinkles and buckles are not formed. Slip sheet side laps and end laps shall be minimum 6" wide. Install slip sheet in accordance with manufacturer's installation instructions.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is secured through the slip sheet and into the steel deck with Drill-Tec™ 2-3/4" Barbed SXHD Plates and Drill-Tec™ XHD Fasteners or Drill-Tec™ SXHD fasteners spaced maximum 12" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 90" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Membrane Type:	Single Ply, TPO
Deck Type 7E:	Recover Non-Insulated
Deck Description:	Existing roof cover over min. 19/32" thick plywood roof deck. The min. 19/32" thick plywood is secured to lumber supports spaced maximum 24 in. o.c. with 8d ring shank nails spaced 4" o.c. along panel end and intermediate supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 275 lbf. when tested with Drill-Tec™ #14 Fasteners installed through to the deck in accordance with TAS 105.
System Type E(3):	Membrane mechanically fastened to roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Slip Sheet: EverGuard™ Polymat Separation Layer (3 oz/yd^2) or EverGuard™ Polymat Cushioning Layer (6 oz/yd^2) is loose-applied over the existing roof cover so that wrinkles and buckles are not formed. Slip sheet side laps and end laps shall be minimum 6" wide. Install slip sheet in accordance with manufacturer's installation instructions.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is secured through the slip sheet and into the roof deck with Drill-Tec™ 2" Double Barbed XHD Plates, Drill-Tec™ 2-3/8" Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates and Drill-Tec™ #14 Fasteners spaced maximum 8" o.c. within minimum 6" wide roof cover side laps. The roof cover side laps are spaced maximum 54" o.c. and are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #7)

Membrane Type:	Single Ply, TPO
Deck Type 7I:	Recover, Non-Insulated
Deck Description:	Existing roof cover over min. 19/32" thick plywood roof deck. The min. 19/32" plywood roof deck is attached to structural wood supports spaced maximum 24" o.c. using 8d common nails spaced 6" o.c. at all panel edges and intermediary supports. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 241 lbf. when tested with Drill-Tec™ #14 Fasteners installed through to the deck in accordance with TAS 105.
System Type E(4):	Membrane mechanically attached to roof deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Slip Sheet:	EverGuard™ Polymat Separation Layer (3 oz/yd^2) or EverGuard™ Polymat Cushioning Layer (6 oz/yd^2) is loose-applied over the existing roof cover so that wrinkles and buckles are not formed. Slip sheet side laps and end laps shall be minimum 6" wide. Install slip sheet in accordance with manufacturer's installation instructions.
Membrane:	EverGuard® TPO, EverGuard Extreme® TPO mechanically fastened through the slip sheet and into the roof deck using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 in. Double Barbed XHD Plates, Drill-Tec™ 2-3/8 in. Barbed XHD Plates or Drill-Tec™ Eyehook AccuSeam Plates spaced 6" o.c. in rows spaced maximum 55" o.c. The minimum 5" wide side laps are sealed with minimum 1.75" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure:	-52.5 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover Non-Insulated

Deck Description: Structural Concrete (minimum 2500 psi) or Min. 22 ga., Grade 33 Steel Deck

System Type F(1): Membrane fully adhered to existing granular roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is fully adhered to the existing granule surfaced roof covering using hot asphalt applied at 25 lbs./sq. The top surface of the membrane is broomed per manufacturer's installation instructions to ensure complete bonding of the adhesive. The minimum 3" wide side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" wide for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -405 psf. (See General Limitation #9)

Membrane Type:	Single Ply, TPO
Deck Type 7F:	Recover, Non-Insulated
Deck Description:	Elastizell lightweight concrete with a minimum 300 psi compressive strength, Concrecel lightweight concrete with a minimum 185 psi compressive strength , Celcore lightweight concrete with a minimum 250 psi compressive strength or Mearlcrete lightweight concrete with a minimum 300 psi compressive strength. Lightweight concrete options listed above cast over a structural concrete.
System Type F(2):	Membrane fully adhered or partially adhered to existing granular surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane:	EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane partially adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 6 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding. OR EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Surfacing: (Optional)	**Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -142.5 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Structural Concrete (minimum 2500 psi)

System Type F(3): Membrane fully adhered to existing granular surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the existing roof cover with GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. Roll the top surface of the membrane per manufacturer's installation to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -337.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Structural Concrete (minimum 2500 psi)

System Type F(4): Membrane fully adhered to existing granular surfaced roof system or existing smooth APP roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is fully adhered to the existing roof cover with LRF Adhesive O or LRF Adhesive M applied in 0.75" – 1.0" wide ribbons spaced 4" o.c. per manufacturer's installation instructions. Roll the top surface of the membrane per manufacturer's installation to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -337.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Cementitious Wood Fiber, Wood or Poured Gypsum

System Type F(5): Membrane fully adhered or partially adhered to existing granular surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane partially adhered in LRF Adhesive M or LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 12 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -45 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Min. 22 ga., Grade 33 Steel Deck or Structural Concrete deck (minimum 2500 psi)

System Type F(6): Membrane partially adhered to existing granular surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is partially adhered to the existing roof cover with LRF Adhesive O or LRF Adhesive M applied per manufacturer's installation instructions in 0.75" – 1.0" wide ribbons spaced 12" o.c. Roll the top surface of the membrane per manufacturer's installation to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -60 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Min. 22 ga., Grade 33 Steel Deck

System Type F(7): Membrane fully adhered to existing granular surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane:

EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive M applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Maximum Design Pressure: -105 psf. (See General Limitation #9)
See FM RR200108 Construction #1 (RoofNav # 373596-0-0)
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
Maximum Design Pressure: -120 psf. (See General Limitation #9)
See FM RR200108 Construction #1 (RoofNav # 373596-0-0)
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane fully adhered in LRF Adhesive O applied in 0.75 - 1.0 in. wide ribbons spaced 4 in. o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. The minimum 3" wide membrane side laps are sealed with minimum 1-1/2" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional)

Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: See membrane options above.

Membrane Type: Single Ply, TPO

Deck Type 7F: Recover, Non-Insulated

Deck Description: Structural Concrete deck (minimum 2500 psi).

System Type F(8): Membrane fully adhered or partially adhered to existing granular surfaced roof system

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is fully adhered to the existing roof cover with GAF 2-Part Roofing Adhesive applied in a spatter pattern at 3.75 lbs./sq. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.
OR
EverGuard® TPO Fleece-Back Membrane or EverGuard Extreme® TPO Fleece-Back Membrane is adhered to the existing roof cover with LRF Adhesive M or LRF Adhesive O applied in 1" wide ribbons spaced 6" o.c. per manufacturer's installation instructions. The top surface of the membrane is rolled per manufacturer's installation instructions to ensure complete bonding. Membrane side laps are minimum 3" wide and sealed with minimum 1.5" wide heat welds for automatic machine welding. Weld width shall be minimum 2" for hand welding.

Surfacing: (Optional) **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

1. Topcoat® Membrane applied at 1 to 1.5 gal./sq.

2. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

Maximum Design Pressure: -415 psf. (See General Limitation #9)

RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.
2. All assemblies listed herein shall be installed in compliance with the applicable sections of FBC 1521. Uplift performance of assemblies bonded to existing roofing system shall be verified per 1521.10. Uplift performance of assemblies mechanically attached through existing roofing system shall be verified per 1521.11.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.
   Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf. .
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE