



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

Tremco, Inc.
3735 Green Road
Beachwood, OH 44122

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: TremPly 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 consists of pages 1 through 92.

The submitted documentation was reviewed by Hamley Pacheco, P.E.



NOA No.: 18-0119.07
Expiration Date: 05/12/21
Approval Date: 05/10/18
Page 1 of 92

ROOFING SYSTEM APPROVAL

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

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
TremPly TPO	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced single-ply membrane.
TremPly Max TPO	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced single-ply membrane designed for advanced protection against heat aging and UV degradation.
TremPly TPO FB	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced, fleece back single-ply membrane
TremPly Max TPO FB	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced fleece back single-ply membrane designed for advanced protection against heat aging and UV degradation.
TremPly Bonding Adhesive	5 Gallons	Proprietary	Adhesive for fully adhered systems and membrane flashing.
TremPly WB Bonding Adhesive	5 Gallons	Proprietary	A water based adhesive for TPO based membranes.
TremPly TPO LV Bonding Adhesive	5 Gallons	Proprietary	A contact type bonding adhesive for TPO single ply roofing membranes and flashings.
Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive	1:1 Applicator	Proprietary	A dual component foamable adhesive.
Tremco Low Rise Foam Insulation Adhesive	1:1 Applicator	Proprietary	A dual component polyurethane adhesive used to adhere single ply roof covers.
TremPly TPO Cover Tape	6" x 100' 10" x 100'	Proprietary	Tremco TPO laminated to white butyl tape primarily used for edge metal details.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
TremPly TPO Cover Tape Heat-Welded	6" x 100'	Proprietary	Flashing strip manufactured from unreinforced Tremco 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.
TremPly Max TPO Cover Tape Heat-Welded	6" x 100'	Proprietary	Flashing strip manufactured from unreinforced Tremco 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.
TremPly TPO Detailing Membrane	24" x 50'	Proprietary	Unreinforced flashing material manufactured from Tremco TPO.
TremPly Max TPO Detailing Membrane	24" x 50'	Proprietary	Unreinforced flashing material manufactured from Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from Tremco TPO.
TremPly Max TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO Pourable Sealer Pocket	9" X 6" X 4" Oval With 3" Base Flange	Proprietary	Pourable sealer pocket is molded with Tremco TPO compound to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
TremPly Max TPO Pourable Sealer Pocket	9" X 6" X 4" Oval With 3" Base Flange	Proprietary	Pourable sealer pocket is molded from Tremco 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.
TremPly TPO RTA(Roof Transition Anchor) Strip™	6" x 100' Roll	Proprietary	Reinforced Tremco TPO membrane with pressure sensitive adhesive primarily used to secure membrane transitions from the field to vertical surfaces.
TremPly TPO Split Pipe Boot	1"- 2" 3" - 5" 6" - 8"	Proprietary	Reinforced Tremco TPO membrane split to accommodate most common pipes and conduits.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
TremPly Max TPO Split Pipe Boot	1'' - 2'' 3'' - 5'' 6'' - 8''	Proprietary	Reinforced Tremco TPO designed for advanced protection against heat aging and UV degradation split to accommodate most common pipes and conduits.
TremPly TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced Tremco TPO with split design overlap to be wrapped around square or rectangular tubing.
TremPly Max TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced Tremco TPO designed for advanced protection against heat aging and UV degradation with split design overlap to be wrapped around square or rectangular tubing.
TremPly TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced Tremco TPO.
TremPly Max TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO T-Joint Cover Patch	100 Patches Per Box	Proprietary	T-Joint patch manufactured from unreinforced Tremco TPO.
TremPly Max TPO T-Joint Cover Patch	100 Patches Per Box	Proprietary	T- Joint patch manufactured from unreinforced Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO Walkway Rolls	Rolls 1/8'' x 30'' x 50'	Proprietary	Standard duty TPO walkway rolls.
TremPly TPO Inside Corner	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from unreinforced Tremco TPO.
TremPly Max TPO Inside Cover	6" x 6" x 5¼"	Proprietary	Inside corner manufactured from unreinforced Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO Universal Corners	Various	Proprietary	Universal corners manufactured from Tremco TPO that are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from Tremco TPO.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
TremPly Max TPO Universal Corners	Various	Proprietary	Universal corners manufactured from Tremco TPO that are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from Tremco TPO designed for advanced protection against heat aging and UV degradation.
TremPly TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from Tremco TPO and supplied with stainless steel clamping rings.
TremPly Max TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from Tremco TPO designed for advanced protection against heat aging and UV degradation and supplied with stainless steel clamping rings.
TremPly TPO Expansion Joint Cover	Various	Proprietary	Low profile joint cover manufactured from reinforced Tremco TPO.
TremPly TPO Cut Edge Sealant	1 Quart Squeeze Tube	Proprietary	Clear solvent based sealant for TPO cut edges.
TremPly TPO Drain	Various	Proprietary	Spun aluminum drain pre-flashed with unreinforced Tremco TPO.
TremPly TPO Seam Cleaner	1 Gallon	Proprietary	Solvent based seam cleaner.
TremPly TPO Primer	1 gallon	Proprietary	Solvent based TPO primer.
TremPly LV TPO Primer	1 gallon	Proprietary	Low VOC, solvent based TPO primer.
TremPly TPO Fluted Corner	8" Diameter Nominal .05" Non-Reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced Tremco TPO.
TremPly Max TPO Fluted Corner	8" Diameter Nominal .05" Non-Reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced Tremco TPO designed for advanced protection against heat aging and UV degradation.



APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
H-Shield HD	High density polyisocyanurate foam insulation	Hunter Panels, LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
ENRGY 3 Tapered	Polyisocyanurate foam insulation	Johns Manville Corp.
Retro-Fit Board	Perlite insulation board.	Johns Manville Corp.
FescoBoard	Perlite insulation board.	Johns Manville Corp.
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

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	#12 Standard Roofgrip	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	OMG, Inc.
2.	#14 Roofgrip	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.	OMG, Inc.
3.	#15 Roofgrip	Truss head, self-drilling, pinch point, high thread fastener for use in wood or steel decks.	#15 x 16" Max. Length, #3 Phillips Head	OMG, Inc.
4.	OMG 2-3/8" Barbed XHD Plate	Round galvanized steel stress plates for use with OMG fasteners.	2-3/8" Round	OMG, Inc.
5.	OMG 2-3/4" Super XHD Barbed Plate	Round galvanized steel stress plates for use with OMG fasteners.	2-3/4" Round	OMG, Inc.
6.	OMG Super XHD	Truss head, self-drilling, drill point, high thread fastener for use in steel decks.	#21 x 16" Max. Length, #3 Phillips Head	OMG, Inc.
7.	AccuTrac Flat Bottom	A2-SS aluminized steel plate for use with OMG fasteners.	3" Square; .017" Thick	OMG, Inc.
8.	AccuTrac Plate	Galvalume® steel plate with recess for use with OMG fasteners.	3" Square; .017" Thick	OMG, Inc.
9.	Stainless ASAP RoofGrip Pre-Assembled System	#12 Standard Roofgrip Fastener with 3 in. Round Metal Plate.	See Components	OMG, Inc.
10.	RhinoBond TPO/PVC SXHD Plate	Gold primer coated plate for use with TPO membranes.	3" Round	OMG, Inc.
11.	RhinoBond Insulation Plate (TPO & PVC)	Gold primer coated plate for use with TPO membranes.	3" Round	OMG, Inc.



APPROVED FASTENERS:**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
12.	3 in. Round Metal Plate	Round Galvalume® steel stress plate with reinforcing ribs and recessed for use with OMG fasteners.	3" Round	OMG, Inc.
13.	3 in. Ribbed Galvalume Plate	Galvalume® coated steel stress plate for use with approved OMG fasteners.	3" Round	OMG, Inc.
14.	OMG Eyehook Accuseam Plate	Round Galvalume® steel plate for use with OMG fasteners.	2-3/8" Round	OMG, Inc.
15.	3 in. Ribbed Galvalume Plate (Flat)	Round Galvalume® plated steel stress plate with reinforcing ribs for use with OMG fasteners.	3" Round	OMG, Inc.
16.	RhinoBond TreadSafe Plate (TPO & PVC)	Round, coated Galvalume® plate (Gold primer coating) used for TPO membranes	3" Round	OMG, Inc.
17.	OMG Purlin	Hex head, ¾ in. drill point fastener used to attach single-ply to structural steel purlins.	4" - 10" Max. Length, With #3 Square Head	OMG, Inc.



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>
FM Approvals	3020681	4470	01/09/05
	3014955	4470	01/28/05
	3022136	4470	03/17/05
	3024051	4470	03/28/06
	3023458	4470	07/18/06
	3029832	4470	05/11/07
	3026964	4470	07/25/07
	3031350	4470	09/27/07
	3030813	4470	11/05/07
	3034749	4470	10/16/08
	3032856	4470	11/24/08
	3033135	4470	11/24/08
	3034394	4470	02/27/09
	3036614	4470	06/09/09
	3032172	4470	06/12/09
	3036141	4470	08/10/09
	3035658	4470	09/16/09
	3038318	4470	12/10/10
	3040234	4470	02/23/11
	3040377	4470	03/08/11
	3041685	4470	03/24/11
	3041535	4470	06/08/11
	3041769	4470	09/27/11
	3038278	4470	11/18/11
	3042905	4470	01/10/12
	3045166	4470	07/24/12
	3045863	4470	08/16/12
	3046328	4470	09/13/12
	3046388	4470	09/24/12
	3046054	4470	12/21/12
	3046081	4470	02/13/13
	3048122	4470	04/29/13
	3047636	4470	08/08/13
	3048066	4470	12/13/13
	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-369-02-01	ASTM C1289	10/22/12
	GAF-411-02-01	ASTM C1289	05/02/13
	GAF-412-02-01	ASTM C1289	05/02/13
	GAF-417-02-01	ASTM C1289	05/28/13



EVIDENCE SUBMITTED: (CONTINUED)

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>
PRI Construction Materials Technologies, LLC	GAF-421-02-01	ASTM D6878/TAS 131	10/23/13
	GAF-422-02-01	ASTM D6878/TAS 131	10/29/13
	GAF-424-02-01	ASTM D6878/TAS 131	11/11/13
	GAF-425-02-01	ASTM D6878/TAS 131	11/11/13
	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-464-02-01	ASTM C1289	02/06/14
	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-510-02-04	TAS 114	04/08/14
	GAF-511-02-02	TAS 114	04/08/14
	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-516-02-03	TAS 114	05/13/14
	GAF-516-02-02	TAS 114	06/06/14



EVIDENCE SUBMITTED: (CONTINUED)

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>
PRI Construction Materials Technologies, LLC	GAF-525-02-01	TAS 114	06/23/14
	GAF-525-02-02	TAS 114	06/23/14
	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
	GAF-510-02-04		
	Addendum	TAS 114	12/02/15
	GAF-511-02-02		
	Addendum	TAS 114	12/02/15
	GAF-525-02-02		
	Addendum	TAS 114	12/02/15
	GAF-584-02-01	ASTM D6878	12/07/15
	GAF-585-02-01	ASTM D6878	12/07/15
	GAF-586-02-01	ASTM D6878	12/07/15
Underwriters Laboratories Inc. Exterior Research & Design, LLC Trinity ERD	R1306	09CA55838	11/04/10
	18029.12.02-1	TAS 131	12/06/02
	01509.03.04-2	TAS 114	03/16/04
	G31360.03.10	ASTM D6164	05/31/10
	G34140.04.11-2	ASTM D6163	04/25/11
	G34140.04.11-4-R2	ASTM D6401	06/04/15
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
	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



DECK STRESS ANALYSIS CALCULATIONS/REPORTS

<u>Engineer/Agency</u>	<u>Identifier</u>	<u>Assemblies</u>	<u>Date</u>
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), D(6), C(12), 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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) TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.

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 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield, ENRGY 3 Minimum 1" thick	N/A	N/A

Adhere insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO FB or TremPly Max TPO FB is fully adhered to the insulation using hot asphalt applied at the EVT at a rate of 20- 25 lbs./sq. Seams 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. The top surface of the membrane is broomed per manufacturer's installation instructions to ensure proper bonding.

Maximum Design Pressure: -187.5 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.

One or more layers of any of the following insulations.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, AC Foam-II, H-Shield Minimum 1" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive 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:**

-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(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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, AC Foam-II, H-Shield 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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: TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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: -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 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
H-Shield HD 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.

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



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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 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II 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: TremPly TPO or TremPly Max TPO is adhered to the insulation with TremPly WB 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.

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(7): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL Minimum 0.5" thick	N/A	N/A
H-Shield Minimum 1.5" 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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. 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL Minimum 0.5" thick	N/A	N/A
H-Shield Minimum 1.5" 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 Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly 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. TremPly Bonding Adhesive applied at a total rate of 1.67 gal./sq. per manufacturer's installation instructions. One half of the adhesive is applied to the back of the roof cover and one half of the adhesive is applied to the substrate.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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(9): 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.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, H-Shield, ENRGY 3 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® 500 Adhesive, OlyBond® 500 Green, Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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: -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 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.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, H-Shield, ENRGY 3, Minimum 0.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
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 Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive applied in 0.75" – 1.0" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive 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: -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(11): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ISO 95+ GL, H-Shield, 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: TremPly TPO FB or TremPly Max TPO FB is adhered to the insulation with Tremco Low Rise Foam Insulation Adhesive 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.

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(12): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
SECUROCK® Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: Insulation is adhered to the existing roof cover with Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO FB or TremPly Max TPO FB is adhered to the insulation with Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive 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.

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(13): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, H-Shield 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.



**Membrane:
(Continued)**

OR

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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(14): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.



**Membrane:
(Continued)**

OR

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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:**

-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(15): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
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: TremPly TPO FB or TremPly Max TPO FB is adhered to the insulation with Tremco Low Rise Foam Insulation Adhesive 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.

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(16): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield HD 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 Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive applied in 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.

Maximum Design Pressure:

-145 psf. (See General Limitation #9)



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Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(17): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ISO 95+ GL, AC Foam-II, H-Shield 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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: -387.5 psf. (See General Limitation #9)



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Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, Insulated

Deck Description: Gypsum Concrete Deck

System Type A(18): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II 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: TremPly TPO or TremPly Max TPO is adhered to the insulation with TremPly WB 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.

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(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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, ISO 95+ GL, H-Shield 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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.



**Membrane:
(Continued)**

OR

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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:**

-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(20): 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Structodek® High Density Fiberboard Roof Insulation, H-Shield HD 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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) TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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:**

-215 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 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield		
Minimum 1" thick	N/A	N/A
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: TremPly TPO FB or TremPly Max TPO FB is partially adhered to the insulation with Tremco Low Rise Foam Insulation Adhesive 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.

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, Tek 4 or Tek 5 fasteners spaced 6" o.c. at each bearing. Deck side laps are secured 24" o.c. with ICH Traxx/1 or Stitch Tek 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	1, 2, 7, 9, 13	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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.

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



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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 [#12 Standard Roofgrip fasteners (steel deck only) or #14 Roofgrip 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)

ISO 95+ GL, ACFoam-II, ENRGY 3
Minimum 1.0" thick

Insulation Fasteners
(Table 3)

N/A

Fastener
Density/ft²

N/A

Top Insulation Layer

DensDeck® Prime® Roof Board, SECUROCK® Gypsum-Fiber
Roof Board
Minimum 0.25" thick

Insulation Fasteners
(Table 3)

1, 2, 7, 15

Fastener
Density/ft²

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: TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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.



**Membrane:
(Continued)**

OR

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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:**

-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/ft²**

SECUROCK® Gypsum-Fiber Roof Board
Minimum 0.375" thick

1, 2, 7, 9, 13, 15

1:1.33 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: TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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
TremPly TPO or TremPly Max TPO fully adhered in TremPly 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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 (#12 Standard Roofgrip fasteners or #14 Roofgrip 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)

ISO 95+ GL, AC Foam-II, ENRGY 3
Minimum 1.0" thick

Insulation Fasteners
(Table 3)

Fastener
Density/ft²

N/A

N/A

Top Insulation Layer

SECUROCK® Gypsum-Fiber Roof Board
Minimum 3/8" thick

Insulation Fasteners
(Table 3)

Fastener
Density/ft²

1, 2, 7, 15

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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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
TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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

TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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 (#12 Standard Roofgrip fasteners or #14 Roofgrip 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, H-Shield Minimum 2.0" thick	1, 2, 7, 8, 9, 12, 13, 15	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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



**Membrane:
(Continued)**

OR

(Only for use with ISO 95+ GL) TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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 ISO 95+ GL) TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Structodek® High Density Fiberboard Roof Insulation Minimum 0.5" thick	1, 2, 7, 8, 9, 12, 13, 15	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: TremPly TPO or fully adhered in TremPly Max TPO TremPly WB 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

TremPly TPO or TremPly Max TPO fully adhered in TremPly 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.



**Membrane:
(Continued)**

OR

TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.

**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 [#12 Standard Roofgrip fasteners (steel deck only) or #14 Roofgrip 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, H-Shield, Minimum 2.0" thick	1, 2, 7, 8, 9, 12, 13, 15	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: TremPly TPO or TremPly Max TPO fully adhered in TremPly 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
TremPly TPO or TremPly Max TPO fully adhered in TremPly TPO LV 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.



Membrane:
(Continued)

OR

(Only for use with ISO 95+ GL) TremPly TPO or TremPly Max TPO fully adhered in TremPly WB 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

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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 ISO 95+ GL) TremPly TPO FB or TremPly Max TPO FB fully adhered with TremPly WB 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.

**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 (#12 Standard Roofgrip fasteners or #14 Roofgrip 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.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL, ACFoam-II, ENRGY 3 Minimum 1.0" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	1, 2, 7	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: TremPly TPO FB or TremPly Max TPO FB 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.

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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
ISO 95+ GL, ACfoam-II, H-Shield Minimum 1" thick	N/A	N/A
ENRGY 3, ENRGY 3 Tapered, H-Shield HD, Structodek® High Density Fiberboard Roof 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 RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TPO/PVC 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.



Membrane: TremPly TPO or TremPly Max TPO is secured with RhinoBond TPO/PVC SXHD Plates, RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) and OMG Super XHD 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.

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.

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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board, Minimum 0.25" thick	N/A	N/A
ISO 95+ GL, ACfoam-II, H-Shield Minimum 1" thick	N/A	N/A
ENRGY 3, ENRGY 3 Tapered, H-Shield HD, Structodek® High Density Fiberboard Roof 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 RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TPO/PVC 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.



Membrane: TremPly TPO or TremPly Max TPO is secured with RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) with #15 Roofgrip fasteners (steel deck only) or with #14 Roofgrip 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.

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:

<u>Membrane Fastening</u>	<u>Fastener</u>	<u>Deck</u>	<u>MCRF</u>
Fastening #1	#15 Roofgrip fasteners	Steel	480 lbf
	#14 Roofgrip fasteners	Structural Concrete	
Fastening #2	#15 Roofgrip fasteners	Steel	360 lbf
	#14 Roofgrip fasteners	Structural Concrete	

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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
ISO 95+ GL, ACfoam-II, H-Shield Minimum 1" thick	N/A	N/A
ENRGY 3, ENRGY 3 Tapered, H-Shield HD, Structodek® High Density Fiberboard Roof 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 RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TPO/PVC 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.



Membrane: TremPly TPO or TremPly Max TPO is secured with RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) and #15 Roofgrip fasteners (steel deck only) or with #14 Roofgrip 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)

Fastening #2: The fasteners are applied at a rate of 2.67 ft² per fastener.
Maximum Design Pressure: -67.5 psf. (General Limitation #7)

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 #15 Roofgrip 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(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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
ISO 95+ GL, ACFoam-II, H-Shield Minimum 1" thick	N/A	N/A
ENRGY 3, ENRGY 3 Tapered, H-Shield HD, Structodek® High Density Fiberboard Roof 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 RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TPO/PVC 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.

Membrane: TremPly TPO or TremPly Max TPO is secured with RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) and #15 Roofgrip 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.

Maximum Design

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



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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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
ISO 95+ GL Minimum 1.0" thick	N/A	N/A
ACFoam-II, H-Shield, ENRGY 3 Minimum 1.5 " thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, H-Shield HD 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 RhinoBond Insulation Plate (TPO & PVC) Plates or RhinoBond TPO/PVC 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.



- Membrane:** TremPly TPO or TremPly Max TPO is secured with RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) and OMG 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)
- 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 #14 Roofgrip fasteners installed through to the lumber supports or structural concrete in accordance with TAS 105:

<u>Membrane Fastening</u>	<u>MCRF</u>
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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, AC Foam-II, H-Shield, ENRGY 3 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8” diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.

Membrane: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the lumber supports or structural concrete with #14 Roofgrip fasteners and RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) 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)

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 #14 Roofgrip 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, AC Foam-II, H-Shield, ENRGY 3 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 RhinoBond TreadSafe Plates (TPO & PVC). A 5/8" diameter pilot hole is required when using RhinoBond TreadSafe Plates (TPO & PVC) with wood fiber or gypsum top layer insulation.

Membrane: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the plywood deck with #14 Roofgrip fasteners and RhinoBond Insulation Plates (TPO & PVC) or RhinoBond TreadSafe Plates (TPO & PVC) applied within a contributory area of 2.67 ft² 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.

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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, Retro-Fit Board, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, ACFoam-II, H-Shield, ENRGY 3 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: TremPly TPO, TremPly Max TPO, TremPly TPO FB or TremPly Max TPO FB attached through the preliminary attached insulation as follows.

Fastening: OMG 2-3/8" Barbed XHD Plates or OMG Eyehook Accuseam Plates and #15 Roofgrip fasteners spaced 6" o.c. within laps spaced 14" 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.

Maximum Design Pressure: -52.5 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 Tek 4, Tek 5, ICH Traxx/5 fasteners spaced at maximum 6" o.c. at the support. The deck side laps are secured with Stitch Tek 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

ACFoam-II, ENGRY 3

Minimum 1.5" thick

**Insulation Fasteners
(Table 3)**

N/A

**Fastener
Density/ft²**

N/A

ISO 95+ GL, H-Shield

Minimum 1.0" thick

DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,

SECUROCK® Gypsum-Fiber Roof Board

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board, H-Shield HD

Minimum 0.5" thick

N/A

N/A

FescoBoard

Minimum 0.75" thick

N/A

N/A

Top Insulation Layer (Optional)

**Insulation Fasteners
(Table 3)**

DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,

SECUROCK® Gypsum-Fiber Roof Board

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board

Minimum 0.5" thick

FescoBoard

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: TremPly TPO, TremPly Max TPO, TremPly TPO FB or TremPly Max TPO FB attached through the insulation to the deck as described below.

Fastening: Membrane is secured with OMG 2-3/4" Super XHD Barbed Plates and OMG Super XHD 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.

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

ACFoam-II, ENGRY 3

Minimum 1.5" thick

**Insulation Fasteners
(Table 3)**

N/A

**Fastener
Density/ft²**

N/A

ISO 95+ GL, H-Shield

Minimum 1.0" thick

**DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,
SECUROCK® Gypsum-Fiber Roof Board**

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board, , H-Shield HD

Minimum 0.5" thick

N/A

N/A

FescoBoard

Minimum 0.75" thick

N/A

N/A

Top Insulation Layer (Optional)

**Insulation Fasteners
(Table 3)**

**DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,
SECUROCK® Gypsum-Fiber Roof Board,**

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board

Minimum 0.5" thick

FescoBoard

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: TremPly TPO TremPly Max TPO, TremPly TPO FB or TremPly Max TPO FB attached through the insulation to the deck as described below.

Fastening #1: Membrane is secured with OMG 2-3/8" Barbed XHD Plates and #15 Roofgrip 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 OMG 2-3/8" Barbed XHD Plates and #15 Roofgrip fasteners or OMG 2-3/4" Super XHD Barbed Plates and OMG Super XHD 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)

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

ACFoam-II, ENGRY 3

Minimum 1.5" thick

**Insulation Fasteners
(Table 3)**

N/A

**Fastener
Density/ft²**

N/A

ISO 95+ GL, H-Shield,

Minimum 1.0" thick

DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,

SECUROCK® Gypsum-Fiber Roof Board

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board, , H-Shield HD

Minimum 0.5" thick

N/A

N/A

FescoBoard

Minimum 0.75" thick

N/A

N/A

Top Insulation Layer (Optional)

**Insulation Fasteners
(Table 3)**

**Fastener
Density/ft²**

DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board,

SECUROCK® Gypsum-Fiber Roof Board

Minimum 0.25" thick

N/A

N/A

Retro-Fit Board

Minimum 0.5" thick

FescoBoard

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: TremPly TPO, TremPly Max TPO, TremPly TPO FB or TremPly Max TPO FB attached through the insulation to the deck as described below.

Fastening: Membrane is secured with OMG 2-3/8" Barbed XHD Plates and #15 Roofgrip 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.

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 Tek 4, Tek 5, ICH Traxx/5 fasteners spaced at maximum 6" o.c. at the support. The deck side laps are secured with Stitch Tek 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, Retro-Fit Board, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, H-Shield 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: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the deck as follows.

Fastening: The membrane is secured with, OMG 2-3/8" Barbed XHD Plates or OMG Eyehook Accuseam Plates and #15 Roofgrip fasteners (steel deck only) or #14 Roofgrip 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.

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



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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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, Retro-Fit Board, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, H-Shield 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: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the deck as follows.

Fastening: The membrane is secured with OMG 2-3/8" Barbed XHD Plates and #15 Roofgrip fasteners (steel deck only) or with #14 Roofgrip 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.

Maximum Design Pressure: -60 psf. (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 (#15 Roofgrip fasteners or OMG Super XHD 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, Retro-Fit Board, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, H-Shield 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: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the deck with OMG 2-3/4" Super XHD Barbed Plates and #15 Roofgrip fasteners or OMG Super XHD 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.

Maximum Design Pressure: -45 psf. (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.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
ISO 95+ GL Minimum 1.0" thick	N/A	N/A
ACFoam-II, H-Shield, ENRGY 3 Minimum 1.5 " thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, H-Shield HD 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: TremPly TPO or TremPly Max 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 OMG Purlin fasteners and OMG 2-3/8" Barbed XHD Plates or OMG 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 OMG Purlin fasteners and OMG 2-3/4" Super XHD Barbed 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)

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 #14 Roofgrip 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.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
DensDeck® Roof Board, SECUROCK® Glass-Mat Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation, Retro-Fit Board, H-Shield HD Minimum 0.5" thick	N/A	N/A
ISO 95+ GL, H-Shield, 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: TremPly TPO or TremPly Max TPO is secured through the insulation, existing roof cover and into the plywood deck with OMG 2-3/8" Barbed XHD Plates or OMG Eyehook Accuseam Plates and #14 Roofgrip 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.

Maximum Design Pressure: -45 psf. (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 #14 Roofgrip 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**

ISO 95+ GL, AC Foam-II,
H-Shield, ENRGY 3,
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: TremPly TPO, TremPly Max TPO mechanically fastened using #14 Roofgrip fasteners and OMG 2-3/8" Barbed XHD Plates or OMG 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.

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.

Membrane: TremPly TPO or TremPly Max TPO is secured through the slip sheet and into the deck as follows.

Fastening: The membrane is secured with OMG 2-3/8" Barbed XHD Plates and #15 Roofgrip fasteners (steel deck only) or with #14 Roofgrip 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.

Maximum Design Pressure: -60 psf. (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 (#15 Roofgrip fasteners or OMG Super XHD plates) 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.

Membrane: TremPly TPO or TremPly Max TPO is secured through the slip sheet and into the steel deck with OMG 2-3/4" Super XHD Barbed Plates and #15 Roofgrip fasteners or OMG Super XHD 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.

Maximum Design Pressure: -45 psf. (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 #14 Roofgrip 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.

Membrane: TremPly TPO or TremPly Max TPO is secured through the slip sheet and into the roof deck with OMG 2-3/8" Barbed XHD Plates or OMG Eyehook Accuseam Plates and #14 Roofgrip 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.

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



Membrane Type: Single Ply, TPO

Deck Type 7I: Recover, 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 #14 Roofgrip 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.

Membrane: TremPly TPO, TremPly Max TPO mechanically fastened through the slip sheet and into the roof deck using #14 Roofgrip fasteners and OMG 2-3/8" Barbed XHD Plates or OMG 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.

Maximum Design Pressure: -52.5 psf. (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: TremPly TPO FB or TremPly Max TPO FB 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.

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: TremPly TPO FB or TremPly Max TPO FB partially adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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.

Maximum Design Pressure: -142.5 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(3): 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: TremPly TPO FB or TremPly Max TPO FB is fully adhered to the existing roof cover with Tremco Low Rise Foam Insulation Adhesive, Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive 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.

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(4): 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: TremPly TPO FB or TremPly Max TPO FB partially adhered in Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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.

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(5): 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: TremPly TPO FB or TremPly Max TPO FB is partially adhered to the existing roof cover with Tremco Low Rise Foam Insulation Adhesive or Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive 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.

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(6): 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: TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive (BG) or Tremco LR Adhesive 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)

OR

TremPly TPO FB or TremPly Max TPO FB fully adhered in Tremco Low Rise Foam Insulation Adhesive 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: -120 psf. (See General Limitation #9)

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(7): 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: TremPly TPO FB or TremPly Max TPO FB is adhered to the existing roof cover with Tremco Low Rise Foam Insulation Adhesive (BG), Tremco LR Adhesive or Tremco Low Rise Foam Insulation Adhesive 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.

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



NOA No.: 18-0119.07
Expiration Date: 05/12/21
Approval Date: 05/10/18
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