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

NOTICE OF ACCEPTANCE (NOA)

Holcim Solutions and Products US, LLC.
26 Century Boulevard, Suite 205
Nashville, TN 37214

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: Elevate UltraPly TPO SA Single Ply Roof Systems over Steel Decks.

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

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 23-0613.34 and consists of pages 1 through 48.
The submitted documentation was reviewed by Jorge L. Acebo.

08/08/24

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	TPO SA
Deck Type:	Steel
Maximum Design Pressure:	-90 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specifications	Product Description
UltraPly TPO SA	Various	TAS 131	Reinforced TPO 0.045” or 0.060” thick membrane.
UltraPly TPO Reinforced Curb Corner	Various	TAS 131	TPO curb flashing
UltraPly 18" Curb Flashing	Various	TAS 131	TPO curb flashing
UltraPly TPO Inside/Outside Corner	Various	TAS 131	Molded TPO for corner flashing
UltraPly TPO Large Pipe Flashing	Various	TAS 131	TPO flashing for large round penetrations
UltraPly TPO T-Joint Cover	Various	TAS 131	TPO flashing for T-joints
UltraPly TPO Penetration Kit	Various	TAS 131	A penetration sealing kit for UltraPly TPO
UltraPly TPO Walkway Pad	Various	TAS 131	TPO walkway pad
UltraPly TPO Coated Metal	Various	TAS 131	TPO laminated to hot-dipped galvanized steel for flashing
UltraPly TPO Premium Walkway Pad	Various	TAS 131	TPO walkway pad
UltraPly TPO Reinforced Split Pipe Boot	Various	TAS 131	TPO flashing for round penetrations 1" to 9" in diameter
UltraPly TPO 8" Reinforced Cover Strip	Various	TAS 131	8" wide 60 mil TPO cover strip
UltraPly TPO Universal Pipe Boot	Various	TAS 131	TPO flashing for round penetrations 1" to 6" in diameter
UltraPly TPO Unsupported Flashing	Various	TAS 131	Unreinforced TPO used for flashing
V-Force	45” x 134”	Proprietary	A vapor retarder made of SBS modified bitumen adhesive laminated to a woven high density polyethylene top surface
I.S.O. Stick	5 gal & 1500 ml	Proprietary	A dual component polyurethane adhesive.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specifications	Product Description
I.S.O. Twin Pack Insulation Adhesive	1500 ml	Proprietary	A dual component polyurethane adhesive.
I.S.O. Fix II	30 lbs.	Proprietary	A single component polyurethane adhesive.
I.S.O. Spray R	15 gal pail & 55 gal drum	Proprietary	A two-part polyurethane adhesive

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ISO 95+ GL ISO 95+ GL Tapered	Polyisocyanurate foam insulation	Holcim Solutions and Products US, LLC
ISOGARD HD	Polyisocyanurate with a coated fiberglass facer	Holcim Solutions and Products US, LLC
ISOGARD HD Composite	Polyisocyanurate with a coated fiberglass facer composite insulation.	Holcim Solutions and Products US, LLC
DensDeck Prime	Silicon treated gypsum	Georgia Pacific Gypsum LLC
RESISTA RESISTA Tapered	Polyisocyanurate foam core laminated to a coated fiberglass facer	Holcim Solutions and Products US, LLC
SECUROCK Gypsum Fiber Roof Board	Rigid, gypsum-based board stock	USG Corp.
GenFlex ISO Insulation GenFlex ISO Insulation Tapered	Polyisocyanurate foam insulation	Holcim Solutions and Products US, LLC
Coated Glass Facer Coated Glass Facer Tapered	Polyisocyanurate foam insulation	Holcim Solutions and Products US, LLC
GenFlex HD ISO	Polyisocyanurate with a coated fiberglass facer	Holcim Solutions and Products US, LLC
GenFlex HD Composite ISO	Polyisocyanurate with a coated fiberglass facer composite insulation.	Holcim Solutions and Products US, LLC

APPROVED FASTENERS/ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Elevate Heavy-Duty	#15 Fastener for steel, Wood, concrete decks	N/A	Holcim Solutions and Products US, LLC
2.	Elevate All-Purpose Fastener	#14 Fastener for steel, Wood, concrete decks	N/A	Holcim Solutions and Products US, LLC
3.	Insulation Fastening Plate	Galvalume insulation plate	3" diameter	Holcim Solutions and Products US, LLC

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
UL LLC	R9516	UL 790	06/03/24
FM Approvals	3029384	4470	06/07/10
	3033218	4470	08/12/08
	3033921	4470	01/12/09
	3039133	4470	04/07/11
	3035017	4470	08/22/12
	3038191	4470	08/04/11
	3035560	4470	01/11/10
	3047398	4470	08/15/13
	3042666	4470	08/14/12
	3041939	4470	08/14/12
	3030227	4470	06/18/07
	797-05604-267	4470	06/07/10
	797-07680-267	4470	09/12/12
	797-08513-267	4470	07/15/13
	797-05830-267	4470	08/30/10
	797-10191-267	4470	01/09/15
PRI Construction Materials Technologies, LLC	FBP-044-02-01, R10	TAS 114 H, J	06/01/17
	FBP-063-02-01	TAS 114 E	07/10/12
	FBP-085-02-01, Rev 1	TAS 114 J	10/04/12
	FBP-149-02-01	TAS 114 J	12/18/13
	FBP-154-02-02	FM 4474 D	12/18/13
	FBP-162-02-01	ASTM D 1970	05/15/14
	FBP-165-02-01	TAS 114 J	04/28/14
	FBP-166-02-01	ASTM D 6163	05/15/14
	FBP-175-02-01	TAS 114 J	04/28/14
	FBP-206-02-01	TAS 114 J	02/02/15
	FBP-208-02-01	TAS 131 ASTM D 6878	04/06/15
	FBP-222-02-03	TAS 114 C	04/01/15
	FBP-225-02-01	TAS 114 J	03/19/15
	FBP-233-02-03	TAS 114 J	06/01/15

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Zachary R. Priest, P.E.	Signed/Sealed Calculations	B(2), B(4), C(3), C(4), C(9), C(13), C(14), C(19), C(22), C(25)	10/03/16
		B(3), B(5)	06/01/15
		C(10)	09/20/17
		C(11)	03/19/15
		C(16), C(20)	10/16/14
FM Approval Deck Limitations	N/A	B(6), B(7), B(8), B(9), C(1), C(12), C(15), C(17), C(21), C(23), C(24), C(26), C(27), C(28), C(29), C(30), C(31), C(32), C(33)	01/01/13

APPROVED ASSEMBLIES

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type B(1): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1.5" thick	**1 or 2 with 3**	**1:2 ft^2**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, GenFlex ISO Insulation Minimum 1.5" thick	**N/A**	**N/A**
Tapered ISO 95+ GL, Tapered GenFlex ISO Insulation Minimum ½" thick with a ¼" per ft. taper	**N/A**	**N/A**

Note: Base layer shall be mechanically attached with fasteners and density described. All other layers of insulation shall be adhered to base insulations with I.S.O. Twin Pack Insulation Adhesive applied in ½" to ¾" wide ribbons spaced 12" o.c. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type:	Single Ply, TPO, Reinforced
Deck Type 2I:	Steel, Insulated
Deck Description:	Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced maximum 6 ft. o.c. with #12-24 HWH self-drilling fasteners spaced maximum 6" o.c. and with side laps attached using ¼"-14 HWH self-drilling fasteners spaced maximum 24" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type B(2):	Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: Base layer shall be fastened with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**N/A**	**N/A**

Note: Top layer shall be adhered to base insulation with I.S.O. Spray R, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane:	Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.
Maximum Design Pressure:	-60 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 HWH self-drilling fasteners spaced 24" o.c.

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

System Type B(3): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:78 ft^2**

Middle Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO		
Minimum ½" thick	**N/A**	**N/A**

Note: Base layer shall be mechanically attached with fasteners and density described. All other layers of insulation shall be adhered to base insulations with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide beads spaced 6"o.c. or I.S.O. Spray R, I.S.O. Fix II, or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 6"o.c. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type B(4): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: Base layer shall be fastened with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
SECUROCK Gypsum Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**

Note: Top layer shall be adhered to top insulation with I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 6" o.c. or I.S.O. Spray R applied in ¾" to 1" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type B(5): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISOGARD HD, GenFlex HD ISO		
Minimum ½" thick	**N/A**	**N/A**

Note: Base layer shall be mechanically attached with fasteners and density described. All other layers of insulation shall be adhered to base insulations with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide ribbons spaced 6" o.c. or I.S.O. Spray R, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 6" o.c. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 12" o.c. at the side laps.

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

System Type B(6): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO Minimum ½" thick	**N/A**	**N/A**

Note: Base layer shall be mechanically attached with fasteners and density described. Top layer of insulation shall be adhered to base insulations with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide beads spaced 12" o.c. or I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 12" o.c. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 12" o.c. at the side laps.

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

System Type B(7): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISO 95+ GL, GenFlex ISO Insulation Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**

Note: Base layer shall be fastened with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISO 95+ GL, GenFlex ISO Insulation Minimum 1" thick	**N/A**	**N/A**

Note: Top layer shall be adhered to base insulation with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide beads spaced 4" o.c., I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 4" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type B(8): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RESISTA, Coated Glass Facer Minimum 1.5" thick	**1 or 2 with 3**	**1:1 ft^2**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RESISTA, Coated Glass Facer Minimum 1.5" thick	**N/A**	**N/A**

Note: Base layer shall be mechanically attached with fasteners and density described. Top layer of insulation shall be adhered to base insulations with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide beads spaced 12" o.c. or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 12" o.c. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 80 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type B(9): Base layer of insulation mechanically fastened, top layer adhered: membrane self-adhered.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1" thick	**N/A**	**N/A**

Middle Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**

Note: Base layer shall be loose laid. Middle layer shall be simultaneously fastened with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer shall be adhered to top insulation with I.S.O. Twin Pack Insulation Adhesive in continuous ½" to ¾" wide ribbons spaced 4" o.c. or, I.S.O. Fix II or I.S.O. Stick applied in continuous ¾" to 1" wide ribbons spaced 4" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(1): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO, ISO 95 + GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1: 1.8 ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Boards		
Minimum ¼" thick	**1 or 2 with 3**	**1: 1.8 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.8 ft^2**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(2): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1.25" thick	**1 or 2 with 3**	**1:2.7ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:2.7 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**1 or 2 with 3**	**1:2.7 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(3): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**1 or 2 with 3**	**1:1.78 ft^2**
RESISTA, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1:1.78 ft^2**
ISO 95+ GL, ISOGARD HD Composite, GenFlex ISO Insulation, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**
DensDeck Prime		
Minimum ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps**.**

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(4): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 2" thick	**1 or 2 with 3**	**1:2.67 ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:2.67 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**1 or 2 with 3**	**1:2.67 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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 Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps**.**

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(5): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1.5" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**1 or 2 with 3**	**1:2.7 ft^2**
RESISTA, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1:2.7 ft^2**
ISO 95+ GL, ISOGARD HD Composite, GenFlex ISO Insulation, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:2.7 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(6): Membrane self-adhered over mechanically fastened insulation.

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

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**1 or 2 with 3**	**1:2.7 ft^2**
RESISTA, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1:2.7 ft^2**
ISO 95+ GL, ISOGARD HD Composite, GenFlex ISO Insulation, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:2.7 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(7): Membrane self-adhered over mechanically fastened 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.

(Optional) Vapor Retarder	**Polyethylene Sheet 4-6 mil thick**	**Min. 2" wide laps sealed with duct tape**

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, ISO 95 + GL Tapered, RESISTA, RESISTA Tapered, GenFlex ISO Insulation, Tapered GenFlex ISO Insulation, Coated Glass Facer, Coated Glass Facer Tapered		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:4 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1: 4 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(8): Membrane fully adhered over mechanically fastened 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.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISO 95+ GL, GenFlex ISO Insulation Minimum 1.5" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO Minimum ½" thick	**1 or 2 with 3**	**1:2.7ft^2**
ISO 95 +GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1" thick	**1 or 2 with 3**	**1:2.7ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Board Minimum ¼"	**1 or 2 with 3**	**1:2.7ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**1 or 2 with 3**	**1:2.7ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft. o.c. with #12-24 x 1-1/4" HWH self-drilling fasteners spaced 6" o.c. and with side laps attached using ¼"-14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(9): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
RESISTA, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1:1.6 ft²**
ISO 95 + GL, ISOGARD HD Composite, GenFlex ISO Insulation, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.6 ft²**
SECUROCK Gypsum Fiber Roof Board, DensDeck Prime		
Minimum ½" thick	**1 or 2 with 3**	**1:1.6 ft²**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B Steel decking attached to Steel supports spaced 6 ft. o.c. with #12-24 x 1-1/4" HWH self-drilling fasteners spaced 6" o.c. and with side laps attached using ¼"-14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(10): All layers of insulation simultaneously attached; membrane full adhered.

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.

Fire Barrier: SECUROCK Gypsum-Fiber Roof Board ¼" minimum thick Loose Laid

Vapor Barrier: V-Force Self-Adhered to top of each deck rib with 3" wide side laps

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 3" thick	**1 or 2 with 3**	**1:4.0 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil. UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

This Tested Assembly has been analyzed for allowable deck stress.

System Type C(11): Membrane fully adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½"thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**
RESISTA, Coated Glass Facer,		
Minimum 2" thick	**1 or 2 with 3**	**1:1.78 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener Installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps

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

System Type C(12): Membrane fully adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1.5" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO		
Minimum ½" thick	**1 or 2 with 3**	**1: 1.33 ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1: 1.33 ft^2**
DensDeck Prime, SECUROCK Gypsum -Fiber Roof Board		
Minimum 1/4¼" thick	**1 or 2 with 3**	**1: 1.33 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1: 1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft. o.c. with #12-24 x 1-1/4" HWH self-drilling fasteners spaced 6" o.c. and with side laps attached using ¼"-14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(13): Membrane fully adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners with ½" washers spaced 12" o.c.

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

System Type C(14): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(15): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+GL, GenFlex ISO Insulation Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD, GenFlex HD ISO Minimum ½" thick	**1 or 2 with 3**	**1:1.33 ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum ¼" thick	**1 or 2 with 3**	**1:1.33 ft^2**
ISO 95 +GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1" thick	**1 or 2 with 3**	**1:1.33 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Membrane: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(16): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum ½" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:2.13 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	**1 or 2 with 3**	**1:2.13 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(17): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: 18 - 22 ga. 33 ksi

System Type C(18): Membrane fully adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1" thick	**N/A**	**N/A**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/2" thick	**1 or 2 with 3**	**1:4.0 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:4.0 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -62.5 psf. (See General Limitation #9)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft. o.c. with #12-24 x 1-1/4" HWH self-drilling fasteners spaced 6" o.c. and with side laps attached using ¼"-14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(19): Membrane fully adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, DensDeck Prime, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1:2.13 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(20): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1/2" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**1 or 2 with 3**	**1:1.6 ft²**
RESISTA, Coated Glass Facer		
Minimum 1" thick	**1 or 2 with 3**	**1:1.6 ft²**
ISO 95 + GL, ISOGARD HD Composite, GenFlex ISO Insulation, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.6 ft²**
DensDeck Prime		
Minimum ½" thick	**1 or 2 with 3**	**1:1.6 ft²**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 12" o.c. at the side laps.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(21): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:1.33 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1-½" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -75 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft. o.c. with #12-24 x 1-1/4" HWH self-drilling fasteners spaced 6" o.c. and with side laps attached using ¼"-14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(22): Membrane fully adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, DensDeck Prime, GenFlex ISO Insulation, Coated Glass Facer Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1 ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -75 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(23): Membrane fully adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ISOGARD HD, RESISTA, DensDeck Prime, Coated Glass Facer, GenFlex HD ISO		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1.6 ft²**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.6 ft²**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.6 ft²**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -75 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(24): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
RESISTA, ISOGARD HD Composite, Coated Glass Facer, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.6 ft^2**
ISO 95 + GL, GenFlex ISO Insulation		
Minimum 2" thick	**1 or 2 with 3**	**1:1.6 ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.6 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -75 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel decking attached to steel supports spaced 6 ft o.c. with 5/8" diameter puddle welds 6" o.c. and with side laps attached using ¼" – 14 x 7/8" HWH self-drilling fasteners spaced 24" o.c.

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

System Type C(25): Membrane self-adhered over mechanically fastened 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	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1/2" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum Fiber Roof Board		
Minimum ½" thick	**1 or 2 with 3**	**1:1.78 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.78 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

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

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(26): Membrane fully adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RESISTA, ISO 95 + GL, GenFlex ISO Insulation, Coated Glass Facer Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1 ½" thick	**1 or 2 with 3**	**1:1.33 ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:1.33 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(27): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
RESISTA, Coated Glass Facer Minimum 2" thick	**1 or 2 with 3**	**1:1.33 ft^2**
SECUROCK Gypsum Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:1.33 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(28): Membrane fully adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	**1 or 2 with 3**	**1: 1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(29): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1/2" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum ½" thick	**1 or 2 with 3**	**1:1ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (one fastener installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(30): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 2" thick	**1 or 2 with 3**	**1:1.33 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 33, Type B steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(31): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1/2" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RESISTA, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**
SECUROCK Gypsum Fiber Roof Board, DensDeck Prime		
Minimum ½" thick	**1 or 2 with 3**	**1:1 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type: Single Ply, TPO, Reinforced

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga. Grade 80 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps.

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

System Type C(32): Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 1/2" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95 + GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer		
Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**
SECUROCK Gypsum Fiber Roof Board, DensDeck Prime		
Minimum ½" thick	**1 or 2 with 3**	**1:1 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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: Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #7)

Membrane Type:	Single Ply, TPO, Reinforced
Deck Type 2I:	Steel, Insulated
Deck Description:	Minimum 22 ga. Grade 80 steel deck is secured to supports spaced 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports (two fasteners installed at each bearing attachment point) and Traxx/1 fasteners 24" o.c. at the side laps. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type C(33):	Membrane self-adhered over mechanically fastened insulation.

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISO 95+ GL, RESISTA, GenFlex ISO Insulation, Coated Glass Facer Minimum 1/2" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RESISTA, Coated Glass Facer Minimum 2" thick	**1 or 2 with 3**	**1:1 ft^2**
SECUROCK Gypsum Fiber Roof Board, DensDeck Prime Minimum ½" thick	**1 or 2 with 3**	**1:1 ft^2**
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1-1/2" thick	**1 or 2 with 3**	**1:1 ft^2**

Note: All layers shall be mechanically attached with fasteners and density described above. 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:	Min. 45 mil UltraPly TPO SA self-adhered with 1.5" wide heat weld at the 2" wide side laps.
Maximum Design Pressure:	-90 psf. (See General Limitation #7)

STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

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 side lap 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 Professional Engineer, Registered 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 to 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 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE