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)

DURO-LAST Roofing, Inc.
525 Morley Drive
Saginaw, MI 48601

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: DURO-LAST Single Ply PVC Roof 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 revises NOA No. 12-0529.03 and consists of pages 1 through 66.
The submitted documentation was reviewed by Jorge L. Acebo.

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Materials:	PVC
Deck Type:	Recover
Maximum Design Pressure:	See Specific System Herein

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Duro-Last Membrane	.037" thick, fabricated in sheets up to 3000 sq. ft.	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Membrane	.045" thick, fabricated in sheets up to 2000 sq. ft.	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Last Membrane	.057" thick, fabricated in sheets up to 1800 sq. ft.	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Last Designer Series Membrane	.045" thick Various widths & lengths	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane: Rock-Ply & Shingle-Ply.
Duro-Fleece Membrane	.047" thick,.	ASTM D-4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Membrane	.056" thick,	ASTM D-4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Plus Membrane	.047" thick, . fabricated in sheets up to 2000 sq. ft.	ASTM D 4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Plus Membrane	.056" thick, fabricated in sheets up to 2000 sq. ft.	ASTM D 4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Tuff Membrane	.045" thick Vaious widths x 100 ft. rolls	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Tuff Membrane	.056" thick Various widths v 100 ft. rolls	ASTM D 4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Last Fascia Bar	1 ¾" x 10'; 4" x 10'		Extruded vinyl drip edge with holes punched 8" o.c.
Duro-Last Fascia Bar Cover	1 ¾" x 10'; 4" x 10'		Extruded decorative cover for Duro-Last Fascia Bar: white, tan or gray.
Duro-Last Fascia	2" & 4"	TAS 111	Kynar finish Galvalume, 24 ga., cover
Duro-Last Snap Coping	12"	TAS 111	Kynar finish Galvalume, 24 ga., coping

Product	Dimensions	Test Specification	Product Description
Duro-Last 2-Piece Metal "T-Edge"		TAS 111	Kynar finish Galvalume, 24 ga., with vinyl skirt
Duro-Last 2-Piece Compression Edge		TAS 111	Kynar finish Galvalume, 24 ga.
Duro-Last Vinyl Coated Metal	4' x 10' .043" thick	G-90	G-90 galvanized steel, laminated with Duro-Last Vinyl Film.
Duro-Last Drip Edge	2" face x 10'; 4" face x 10';		Extruded vinyl drip edge with holes punched 8" o.c.
Duro-Last Two-Way Roof Vents			Injection molded two-way roof vents with a Duro-Last membrane skirt.
Duro-Last Gravel Stop	2" face x 10'; 4" face x 10';		Extruded vinyl gravel stop with holes punched 8" o.c.
Roof-Trak III Walk Pads	30" x 60" .125" thick		Extruded vinyl walk way pads manufactured from Duro-Last membrane.
Duro-Last WB II Adhesive	5 gal. pail		Polymeric waterborne membrane adhesive.
Duro-Last SB IV	5 gal. pail		Low VOC solvent-based membrane adhesive.
Duro-Fleece Membrane Adhesive	10 gal.		Two-component membrane adhesive.
Duro-Fleece CR-20 Adhesive		Proprietary	Dual component, low-rise polyurethane foam adhesive
Duro-Last Tab Sealer 4725			Solvent-based contact-bonding agent.
Duro-Last Accessories	Various	ASTM D 4434	Custom fabricated accessories for parapets and penetrations: Curb flashing, Inside & Outside Corner, Scuppers, Drain Boot, Parapet Flashing, Stack Flashing; all for use in the Duro-Last roofing systems.
Duro-Blue	4 mil x 20' x 360'; 4 mil x 20'x 100'		Separation slip sheet produced from coextruded polyethylene film
Duro-Weave	2.5 mil x 12' x 328'		Separation slip sheet produced from high density polyethylene tapes and coated on one side with low density polyethylene

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
AC Foam II, AC Foam III	Polyisocyanurate foam insulation	Atlas Roofing Corp.
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
EPS	Type IX Expanded polystyrene with a minimum density of 1.8 pcf	Generic
XPS	Type IV Extruded polystyrene with a minimum density of 1.6 pcf	Generic
Type X Gypsum	Gypsum with a moisture resistant facer and core.	Generic
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
ENRGY-3, ENRGY-3 25 PSI, JM ISO 3	Polyisocyanurate foam insulation	Johns Manville
Multi-Max-3, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
H-Shield, H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, LLC
SECUROCK Gypsum-Fiber Roof Board	Rigid, gypsum-based board stock	United States Gypsum Corporation
SECUROCK Glass-Mat Roof Board	Gypsum roof board with fiberglass facer	USG Corporation
Insulfoam EPS	Polystyrene roof board insulation	Insulfoam, LLC
Duro-Fold Underlayment Board	Extruded polystyrene with polypropylene facer	Duro-Last Roofing, Inc.
Duro-Guard Iso II-H & Tapered, Duro-Guard Iso III-H & Tapered, Duro-Guard HD-H, Duro-Guard Iso Composite-H	Polyisocyanurate foam insulation	Duro-Last Roofing, Inc.
Duro-Guard Iso II-A & Tapered, Duro-Guard Iso III-A & Tapered, Duro-Guard Iso IV-A & Tapered, Duro-Guard Iso HD-A	Polyisocyanurate foam insulation	Duro-Last Roofing, Inc.
R-Tech Fan Fold	Type IX Expanded polystyrene with polymeric facers	Insulfoam LLC

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Duro-Last Duro-Coated Hex Head Screws	Roofing and insulation fasteners, Duro-Coated with #3 Phillips head.	Various Lengths	Duro-Last Roofing, Inc.
2.	Duro-Last 3"Metal Plates	Galvalume steel stress plates.	3" square	Duro-Last Roofing, Inc.
3.	Duro-Last Poly-plates	Round plastic stress plates.	2" round	Duro-Last Roofing, Inc.
4.	Polymer GypTec	Glass-filled nylon auger type fastener	Various Lengths	OMG, Inc.
5.	Polymer GypTec Insulation Plates	Galvalume steel stress plates.	3" round	OMG, Inc.
6.	OMG Fluted Nail	Coated Steel fluted shank nail insulation fasteners.	Various Lengths	OMG, Inc.
7.	OMG Plastic Plate	Round plastic stress plates.	3" round	OMG, Inc.
8.	Duro-Last #15 Extra Heavy Duty Drill Point Fastener	Corrosion resistant, drill point with a #3 Phillips truss head	Various Lengths	Duro-Last Roofing, Inc.
9.	Duro-Last #14 Concrete Screws	Corrosion resistant, drill point fastener with #3 Phillips head.	Various Lengths	Duro-Last Roofing, Inc.
10.	Duro-Last Fluted Concrete Nails	Corrosion resistant, 0.22" shank with a flat top pan head.	Various Lengths	Duro-Last Roofing, Inc.
11.	Trufast #12 Purlin Fastener	Carbon steel screw with #3 square drive, modified truss head and long pilot-point for use in min. 18 ga. steel purlin. TruKote epoxy coating.	#12 x 8-¾" max. length	Altenloh, Brinck & Co. U.S., Inc.
12.	Duro-Last #14 HD Fasteners	Roofing and insulation fasteners, Duro-Coated with #3 Phillips head.	Various	Duro-Last Roofing, Inc.
13.	Duro-Last Cleat Plates	0.035" thick galvalume stress plate	2-3/8"	Duro-Last Roofing, Inc.
14.	Trufast 3" Metal Insulation Plate	Round stress plate with reinforcing ribs	3" round	Altenloh, Brinck & Co. U.S., Inc.
15.	Trufast DP #12 Fasteners	Carbon steel screw with #3 Phillips drive	#12 x 8" max. length	Altenloh, Brinck & Co. U.S., Inc.
16.	Duro-Bond Plate 1302	Round, coated galvalume plate (Gold and Black)	3" round	Duro-Last Roofing, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
17.	Twin Loc-Nail	Three piece preassembled fastener/plate unit	2.7" plate x 4.8" max. length	ES Products, Inc.
18.	Duro-Last Auger Plates	2" metal plate for use Duro-Last Auger Fastener	2" round	Duro-Last Roofing, Inc
19.	Duro-Last Auger Fastener	Glass-filled nylon fastener for use with Duro-Last Auger Plates	Various lengths	Duro-Last Roofing, Inc.
20.	Duro-Last Liquid Auger Fastener	Composite nylon and fiberglass fastener/plate system with epoxy injection	Various Lengths	Duro-Last Roofing, Inc.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Architectural Testing, Inc.	C0713.01-109-18	TAS 114(J)	03/05/13
Factory Mutual Research Corp.	J.I. 3Y5A6.AM	FM 4470	06/30/10
	J.I. 2M4A8 .AM	FM 4470	03/05/87
	J.I. 3Y5A6.AM	FM 4470	03/10/95
	J.I. 1X2A7 .AM	FM 4470	08/90/99
	J.I 1X8A8.AM	FM 4470	08/31/07
	AD6A4.AM	FM 4470	08/09/99
	3005604	FM 4470	03/13/00
	3008342	FM 4470	10/19/00
	3026508	FM 4470	05/03/07
	3015816	FM 4470	01/09/03
	3010289	FM 4470	04/13/01
	3040346	FM 4470	09/28/11
	3040741	FM 4470	12/02/11
	3028306	FM 4470	08/03/09
	3037919	FM 4470	05/12/10
	3023458	FM 4470	07/18/06
	3012321	FM 4470	07/29/02
	3032172	FM 4470	06/12/09
	3010987	FM 4470	04/23/02
	3047477	FM 4470	10/03/12
	3006989	FM 4470	02/09/01
	3014929	FM 4470	05/23/03
	3014692	FM 4470	08/05/03
	3044466	FM 4470	11/07/12

EVIDENCE SUBMITTED: (CONTINUED)

Test Agency/Identifier	Name	Report	Date
IRT-ARCON, Inc.	02-025	TAS 114	07/24/02
Exterior Research & Design, LLC	#02733.01.05-1	FM 4470/TAS 114	01/21/05
	#02744.05.06	FM 4470/TAS 114	05/17/06
	02732.09.04	ASTM D4434	09/28/04
	02742.10.05	TAS 117(A) & (B)	10/12/05
	0237.03.05.01	FM 4470/TAS 114	03/21/05
	02745.08.06	TAS 117(A)	08/04/06
Trinity|ERD	02750.02.08-R2	ASTM D4434 / AC75	08/03/12
	D42370.07.12	ASTM D1084 / TAS 117	07/11/12
	D35210.08.11-R1	ASTM D4434	09/17/12
	D6760.08.07	FM 4470/TAS 114	08/01/07
	C8500SC.11.07	TAS 117(B)	11/30/07
	D35210.08.11-R3	ASTM D4434	03/29/13
	D40260.03.13-1	ASTM D4434	03/29/13
	D40280.03.13	ASTM D4434	03/13/13
	D41660.11.12-R2	TAS 114(D & J)	03/25/13
	D42320.08.12	TAS 114(J)/TAS 117(A)	08/21/12
	D42390.10.12-R1	TAS 114(J)	10/03/12
	D43030.1.13-R1	TAS 114(J)/TAS 117(A)	10/02/13
	D44450.05.13-2	ASTM D4434	05/10/13
Intertek Testing Services, NA Inc.	3119586-001	TAS 111	07/10/07
PRI Construction Materials Technologies, LLC	DLRI-013-02-01	TAS 114(J)	08/28/12
	DLRI-014-02-01	TAS 114(J)	08/28/12
	DLRI-021-02-01 Rev 4	ASTM D1761 ASTM D1876 TAS 117(B) FM 4474	10/28/13
	DLRI-029-02-01	TAS 114(J)	10/25/2012
	DLRI-030-02-01	TAS 114(D)	04/01/13
	DLRI-045-02-01	TAS 114(D)	08/24/13
	DLRI-045-02-02	TAS 114(D)	09/13/13
	DLRI-047-02-01	TAS 114(J)	08/24/13
Underwriters Laboratories	R11183	UL723	11/19/09
RADCO	RAD-5135	ASTM C578	05/02/12

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: 18-22 ga. steel

System Type A(1): All layers of insulation fully adhered with approved adhesive; membrane fully 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.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
SECUROCK Gypsum-Fiber Roof Board or DensDeck Maximum 1" thick	**N/A**	**N/A**

Note: Layers of insulation shall be adhered to substrate with Duro-Fleece Membrane Adhesive applied in continuous ¾ in. wide ribbons spaced 6 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Duro-Fleece Plus membrane fully adhered to the insulation layer with Duro-Last WB II Adhesive applied at a rate of 100 ft^2/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(2): One or more layers of insulation adhered with approved adhesive over existing asphaltic BUR; membrane fully adhered with approved adhesive.

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**
AC Foam II, H-Shield, Duro-Guard Iso II-H, Duro-Guard Iso II-A or ISO 95+ GL 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 ¼" thick	**N/A**	**N/A**

Note: Layers of insulation shall be adhered with OlyBond 500 applied in ¾" – 1"ribbons spaced 12-inch. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Duro-Last membrane fully adhered to the insulation layer with Duro-Last WB II Adhesive applied at a rate of 0.7 gal/sq. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Maximum Design Pressure: –112.5 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(3): One or more layers of insulation adhered with approved adhesive over existing asphaltic BUR; membrane fully adhered with approved adhesive.

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**
Multi-Max FA-3, AC Foam III, Duro-Guard Iso III-A, ISO 95+ GL, JM ISO 3, 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 ¼" thick	**N/A**	**N/A**

Note: Layers of insulation shall be adhered with TITESET Roofing Adhesive applied in continuous 1.5 inch wide ribbon in rows spaced 12-inch. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Duro-Last membrane fully adhered to the insulation layer with Duro-Last WB II Adhesive applied at a rate of 0.7 gal/sq. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Maximum Design Pressure: –240 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(4): One or more layers of insulation adhered with approved adhesive over existing asphaltic BUR; membrane fully adhered with approved adhesive.

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**
AC Foam II, Duro-Guard Iso II-A Minimum 2" thick	**N/A**	**N/A**

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

Note: Layers of insulation shall be adhered with TITESET Roofing Adhesive applied in continuous 3 to 3½ inch wide ribbon in rows spaced 12-inch. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Duro-Last membrane fully adhered to the insulation layer with Duro-Last WB II Adhesive applied at a rate of 0.7 gal/sq. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Maximum Design Pressure: –247.5 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 22 ga., steel attached 6" o.c. with Traxx/5 fasteners to supports having a maximum spacing of 6' o.c. Side laps secured with Traxx 1 fasteners spaced 24" o.c.

System Type C(1): All layers of insulation simultaneously attached, membrane fully 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 not to exceed 1" max.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board Maximum 1" thick	**12 with 2**	**1:1.33 ft^2**

Note: Insulation layer 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: Duro-Last membrane adhered with Duro-Last SB IV Adhesive applied at 60 ft²/gal. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete deck.

System Type C(2): All layers of insulation simultaneously attached, membrane fully 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:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**12 with 2**	**1:1.33 ft²**

Note: Insulation layer 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: Duro-Last membrane adhered with Duro-Last SB IV Adhesive applied at 60 ft²/gal. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 22 ga., steel attached 6" o.c. with Traxx/5 fasteners to supports having a maximum spacing of 6' o.c. Side laps secured with Traxx 1 fasteners spaced 24" o.c.

System Type C(3): All layers of insulation simultaneously attached, membrane fully 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 not to exceed 1" max.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime Maximum 1" thick	**8 with 2**	**1:1.6 ft²**

Note: Insulation layer 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: Duro-Last membrane adhered with Duro-Last SB IV Adhesive applied at 60 ft²/gal. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 22 ga., 33ksi steel attached 6" o.c. with Traxx/5 fasteners to supports having a maximum spacing of 6' o.c. Side laps secured with Traxx 1 fasteners spaced 24" o.c.

System Type C(4): All layers of insulation simultaneously attached, membrane fully 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 not to exceed 1" max..

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime Maximum 1" thick	**12 with 2**	**1:1.33 ft²**

Note: Insulation layer 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: Duro-Last Duro-Fleece Plus PVC membrane fully adhered to the insulation layer with Duro-Last WB II Adhesive applied at a rate of 100 ft^2/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(5): Layer of insulation simultaneously attached, membrane 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**
Approved EPS or Approved XPS Minimum $^1/_2$" thick	**N/A**	**N/A**

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(6): Layer of insulation simultaneously attached, membrane 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**
Approved EPS or Approved XPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 315 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(7): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 72" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 315 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(8): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlin with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 72" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(9): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 96" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(10): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlin with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 96" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., Type B steel with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 413 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(11): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 60" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 413 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(12): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 60" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 330 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(13): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 330 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(14): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(15): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 12" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly). The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(16): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 12" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18 ga., steel deck with supports spaced maximum 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 450 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type C(17): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**8 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel deck with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 120" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel (Existing Structural Non-Insulated Metal Roof Panel Assembly) The steel purlin should record a Minimum Characteristic Resistance Force (MCRF) of 450 lbf when tested with Trufast #12 Purlin Fastener installed through to the purlin in accordance with TAS 105.

System Type C(18): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum ½" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**11 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached through to minimum 16 ga. steel purlins at 6" o.c. in rows spaced a maximum of 120" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 225 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type C(19): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the concrete deck with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 60" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 210 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type C(20): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the concrete deck with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 280 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type C(21): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**1:2.67**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the concrete deck with the fastener and plate and density listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 210 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type C(22): Layer of insulation simultaneously attached, membrane 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**
Approved XPS or Approved EPS Minimum $^1/_2$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**1:2**

Note: Insulation layer 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: Insulation Layer shall be through fastened to the concrete deck with the fastener and plate and density listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with supports at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type C(23): Layer of insulation simultaneously attached, membrane 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: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Approved XPS or Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Duro-Guard Iso II–H Minimim 1.5" thick	**12 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through **fastened into the wood supports** with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 12" o.c. in rows spaced a maximum of 48" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 320 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type C(24): Layer of insulation simultaneously attached, membrane 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: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Approved XPS or Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**1:2.67**

Note: Insulation layer 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: Insulation Layer shall be through **fastened into the wood supports** with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 480 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type C(25): Layer of insulation simultaneously attached, membrane 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: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density**
Approved XPS or Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through **fastened into the wood supports** with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 96" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type C(26): Layer of insulation simultaneously attached, membrane 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: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density**
Approved XPS or Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**See below**

Note: Insulation layer 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: Insulation Layer shall be through **fastened into the wood supports** with the fastener and plate listed above. The Duro-Last membrane (0.057" min) shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at 6" o.c. in rows spaced a maximum of 72" o.c. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 360 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type C(27): Layer of insulation simultaneously attached, membrane 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: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density**
Approved XPS or Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Guard Iso II–H Minimum 1.5" thick	**12 with 16**	**1:2**

Note: Insulation layer 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: Insulation Layer shall be through **fastened into the wood supports** with the fastener and plate listed above. The Duro-Last membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. Laps are sealed with a minimum 1" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily fastened insulation through the metal panels into the purlin supports

System Type D(1): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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: (To be placed between the ribs or over panels of existing structural metal roof system.)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft2**
AC Foam II, AC Foam III, Duro-Guard Iso II-A, Duro-Guard Iso III-A, ENRGY 3, ISO 95+ GL, Multi-Max 3, Approved EPS, Approved, XPS		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
AC Foam II, AC Foam III, Duro-Guard Iso II-A, Duro-Guard Iso III-A, ENRGY 3, ISO 95+ GL, Multi-Max 3		
Minimum 1" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimim 0.25" thick	**N/A**	**N/A**

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an 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.

Membrane with 60" tabs: Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Tru-Fast Purlin Fasteners with Duro-Last Poly-plates spaced 12" o.c. maximum, through the insulation and through the deck into the purlins spaced 5' o.c. Laps are sealed with a minimum 1.5 in. heat weld. ***(Maximum Design Pressure -45 psf; See General Limitation #7)***

Membrane with 72" tabs: Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 72" with Tru-Fast Purlin Fasteners with Duro-Last Poly-plates spaced 6" o.c. maximum, through the insulation and through the deck into the purlins spaced 6' o.c. Laps are sealed with a minimum 1.5 in. heat weld. ***(Maximum Design Pressure -52.5 psf; See General Limitation #7)***

Membrane with 120" tabs: Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 120" with Tru-Fast Purlin Fasteners Duro-Last Poly-plates spaced 6" o.c. maximum, through the insulation and through the deck into the purlins spaced 5' o.c. Laps are sealed with a minimum 1.5 in. heat weld. ***(Maximum Design Pressure -52.5 psf; See General Limitation #7)***

Maximum Design Pressure: See Fastening Requirements above.

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete, lightweight concrete, cementitious wood fiber, wood, steel

System Type D(2): All layers of insulation are preliminarily attached to roof deck as specified below. Membrane is mechanically attached to deck through the insulation layers.

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/ft²
AC Foam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Minimum ½" thick	**Any Approved XPS and/or EPS**	
	1, 4 or 7	**1:4 ft²**
	1, 4 or 7	**1:6.4 ft²**

Note: Insulation layer 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).

Vapor Barrier: (Optional) Any UL or FM approved vapor barrier.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, or a second sheet of barrier board may be used over the insulation (see General Limitation #1).

Membrane, 60" tabs: ***(Concrete, wood, steel, lightweight concrete, cementitious wood fiber, gypsum)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last fasteners and Duro-Last Poly-plates spaced 12" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure –45 psf; See General Limitation #7)

Membrane, 28" tabs: ***(Concrete, wood, steel, lightweight concrete, cementitious wood fiber, gypsum)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 28" with Duro-Last fasteners and Duro-Last Poly-plates spaced 18" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure –45 psf; See General Limitation #7)

Membrane, 28" tabs: ***(Concrete)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 28" with Duro-Last Fluted Concrete Nails, Duro-Last #14 HD Fastener, Duro-Last #14 Concrete Screws and Duro-Last Poly-plates spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -105 psf; See General Limitation #7)

Membrane, 28" tabs: ***(Concrete, wood)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 28" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point fasteners and 2" Duro-Last Poly-plates fastened at a maximum spacing of 6" o.c. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -60 psf, See General Limitation #7)

Membrane, 28" tabs: ***(18 to 22 gage approved steel deck meeting ASTM A611 Grade E or ASTM A446 Grade E. Attached with ITW Buildex Traxx/4 or Traxx/5 fastener at a maximum spacing of 6" o.c., to minimum 0.25" thick steel supports having a maximum span of 6 ft. o.c. With deck side laps fastened at a maximum spacing of 24" o.c. with ITW Buildex Traxx/1.)*** Duro-Last® membrane shall be mechanically attached at its 3" tabs, spaced every 28" with Duro-Last fasteners with Duro-Last Poly-plates spaced at 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -105 psf; See General Limitation #7)

Maximum Design Pressure: See Fastening Requirements above.

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete, lightweight concrete, cementitious wood fiber, wood, steel, or gypsum

System Type D(3): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily fastened insulation. Existing roof shall contain min. 1" thick 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**
AC Foam II, Duro-Guard Iso II-A, AC Foam III, Duro-Guard Iso III-A, ENRGY-3, ENRGY 25 PSI, Any Approved XPS and/or EPS		
Minimum ½" thick	**N/A**	**N/A**

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an 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.

Membrane with 25" tabs: ***(Concrete, Wood, Steel)*** Duro-Last membrane shall be mechanically attached at its 6" wide tabs, spaced every 25" o.c. with Duro-Last #15Extra Heavy Duty Drill Point Fasteners (wood, steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last Cleat Plates or OMG 2-3/8" Eyehook Seam Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.

(Maximum Design Pressure -97.5 psf; See General Limitation #7)

(Concrete, steel) Duro-Last membrane shall be mechanically attached at its 6" wide tabs, spaced every 25" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last Cleat Plates or OMG 2-3/8" Eyehook Seam Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane with 57" tabs: ***(Cementitious wood fiber, lightweight concrete, gypsum)*** Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last Liquid Auger Fasteners spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane with 57" tabs: ***(Cementitious wood fiber, lightweight concrete, gypsum)*** Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last Liquid Auger Fasteners spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -60 psf; See General Limitation #7)

(Concrete, lightweight concrete, wood or steel) Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last #14 HD Fasteners (wood or steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last 3-inch Metal Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

(Concrete, lightweight concrete, wood or steel) Duro-Last membrane shall be mechanically attached at its 6" wide tabs, spaced every 57" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (wood or steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last Cleat Plates or OMG 2-3/8" Eyehook Seam Plates spaced 6" o.c. maximum, through the insulation and into the deck. Fastener-line located 2.7-inch from tab edge. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

Membrane with 57" tabs: ***(Concrete, lightweight concrete or steel)*** Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last 3-inch Metal Plates spaced 12" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

(Concrete, lightweight concrete or steel) Duro-Last membrane shall be mechanically attached at its 6" wide tabs, spaced every 57" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last 3-inch Metal Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -105.0 psf; See General Limitation #7)

Membrane with 60" tabs: ***(Concrete, lightweight concrete, wood or steel)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last #14 HD Screws (wood or steel) or DL Concrete Screws or DL Concrete Nails (concrete) with Duro-Last Poly Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -45.0 psf; See General Limitation #7)

Membrane with 84" tabs: ***(Concrete, lightweight concrete or steel)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 84" with Duro-Last #14 HD Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last Poly-plates spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -45.0 psf; See General Limitation #7)

Membrane with 84" tabs: ***(Concrete, lightweight concrete or steel)*** Duro-Last membrane shall be mechanically attached at its 6" wide tabs, spaced every 84" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last 3-inch Metal Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

(Concrete, lightweight concrete or steel) Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 84" with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last Cleat Plates or OMG 2-3/8" Eyehook Seam Plates spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -60.0 psf; See General Limitation #7)

Membrane with 120" tabs: ***(Concrete or Grade 80 steel)*** Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 120" with Duro-Last Poly-plates and Duro-Last #14 HD Fasteners or OMG Fluted Nail (concrete) spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

Membrane with 120" tabs: ***(Concrete, lightweight concrete or steel)*** Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 120" with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws or Duro-Last Fluted Concrete Nails (concrete) with Duro-Last 3-inch Metal Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld. ***(Maximum Design Pressure -82.5 psf; See General Limitation #7)***

Maximum Design Pressure: See Fastening Requirements above.

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Steel/Concrete
22 gage approved steel deck meeting ASTM A611 Grade E or ASTM A446 Grade 80. Attached with ITW Buildex Traxx/4 or Traxx/5 fastener at a maximum spacing of 6" o.c., to minimum ¼" thick steel supports having a maximum span of 6 ft. o.c. Sidelaps are attached with Traxx/1 fasteners at 30" o.c.
or Stuctural Concrete

System Type D(4): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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**
Any approved polyisocyanurate listed in Table 2 Minimum 1½" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Membrane: Duro-Last membrane shall be mechanically attached as described below:

Fastener #1: Membrane shall be fastened at its 3" tabs, spaced every 60" with Duro-Last #14 HD Fasteners and Duro-Last Poly-plates or Duro-Last 3" Metal Insulation Plates, Or OMG Fluted Concrete Nails, (concrete only), spaced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

Fastener #2: Membrane shall be fastened at its 3" tabs, spaced every 28" o.c. with Duro-Last #14 HD Fasteners and Duro-Last Poly-plates or Duro-Last 3" Metal Insulation Plates, Or OMG Fluted Concrete Nails (concrete only), spaced 18" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -52.5 psf; See General Limitation #7)

Fastener #3: Membrane shall be fastened at its 3" tabs, spaced 28" o.c. with Duro-Last #14 HD Fasteners and Duro-Last Poly-plateS or Duro-Last 3" Metal Insulation Plates, Or OMG Fluted Concrete Nails (concrete only) spaced 6" o.c. through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure -105 psf; See General Limitation #7)

Maximum Design Pressure: See Fastening Requirements above.

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: 18 to 22 gage steel deck, type B, Grade 80 steel attached to steel supports spaced 6 ft. o.c.

System Type D(5): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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 (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any approved type II polyisocyanurate listed in Table 2 Minimum 1½" thick	**8, 3**	**1:6.4 ft²**

Note: Insulation layer 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: Duro-Last membrane shall be mechanically attached at its 3" wide tabs, spaced every 60" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners with Duro-Last Batten Bar 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 60 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type D(6): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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**
AC Foam II, Duro-Guard Iso II-A, AC Foam III, Duro-Guard Iso III-A, ENRGY-3, ISO 95+ GL, Multi-Max FA-3		
Minimum 1" thick	**N/A**	**N/A**

Note: Insulation layer 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 with 120" tabs: Duro-Last membrane shall be mechanically attached at its 3" wide tabs, spaced every 120" with Duro-Last Poly-plates and Duro-Last #14 HD Fasteners or Duro-Last Fluted Concrete Nails or Duro-Last #14 Concrete Screws spaced at 6" o.c. maximum, through the insulation and into the deck.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious wood fiber; The deck should record a Minimum Characteristic Resistance Force (MCRF) of 214 lbf when tested with Duro-Last Auger Fasteners installed through to the deck in accordance with TAS 105.

System Type D(7): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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
Duro-Guard Iso II-A, Duro-Guard Iso II –H Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation layer 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, 57" tabs: Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last Auger Fasteners & Plates spaced 6" o.c. maximum, through the insulation and into the deck. 6" wide laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious wood fiber; The deck should record a Minimum Characteristic Resistance Force (MCRF) of 250 lbf when tested with Duro-Last Auger Fasteners installed through to the deck in accordance with TAS 105.

System Type D(8): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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**
Duro-Guard Iso II-A, Duro-Guard Iso II –H Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation layer 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, 57" tabs: Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 57" with Duro-Last Auger Fasteners & Plates spaced 6" o.c. maximum, through the insulation and into the deck. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 30 ft^2/gal (two-sided application). 6" wide laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 263 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(9): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density
Approved XPS, Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density
Duro-Fold Underlayment Board, Insulfoam R-Tech Fan Fold	**N/A**	**N/A**

Note: Insulation layer 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, 60" tabs: Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Poly-Plates or Cleat Plates paced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 600 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(10): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Base Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density
Approved XPS, Approved EPS Minimum $^{1}/_{2}$" thick	**N/A**	**N/A**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density
Duro-Fold Underlayment Board, Insulfoam R-Tech Fan Fold	**N/A**	**N/A**

Note: Insulation layer 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, 120" tabs: Duro-Last membrane shall be mechanically attached at its 6" tabs, spaced every 120" with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Poly-Plates or Cleat Plates paced 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade 80 Steel Attached to supports having a maximum span of 5.5 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 870 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(11): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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**
Duro-Guard Iso II-A or Duro-Guard Iso II-H, Duro-Guard III-A, Duro-Guard Iso IV-A, H-Shield CG Maximum 1" thick	**N/A**	**N/A**

Note: Insulation layer 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. 50-mil Duro-Tuff membrane shall be mechanically attached 12" o.c. in rows spaced 116" o.c. with Duro-Last Cleat Plates and Duro-Last #15 Extra Heavy Duty Drill Point Fastener. Laps are sealed with min. 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade 80 Steel Attached to supports having a maximum span of 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(12): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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 Layer Insulation	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Guard Iso II-A, Duro-Guard Iso II–H, Duro-Guard III-A, Duro-Guard Iso IV-A, H-Shield CG		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
DensDeck, SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Insulation layer 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. 50-mil Duro-Tuff membrane shall be mechanically attached 12" o.c. in rows spaced 56" o.c. with Duro-Last Cleat Plates and Duro-Last #15 Extra Heavy Duty Drill Point Fastener. Laps are sealed with min. 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade 80 Steel Attached to supports having a maximum span of 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(13): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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**
Duro-Guard Iso II-A, Duro-Guard Iso II-H, Duro-Guard III-A, Duro-Guard Iso IV-A, H-Shield CG Minimum 1" thick	**N/A**	**N/A**

Note: Insulation layer 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. 50-mil Duro-Tuff membrane shall be mechanically attached 12" o.c. in rows spaced 56" o.c. with Duro-Last Cleat Plates and Duro-Last #15 Extra Heavy Duty Drill Point Fastener. Laps are sealed with min. 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade 80 Steel Attached to supports having a maximum span of 5.5 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 870 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

System Type D(14): All layers of insulation and base sheet simultaneously attached. Membrane attached over preliminarily 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 Layer Insulation	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Guard Iso II-A, Duro-Guard Iso II-H, Duro-Guard III-A, Duro-Guard Iso IV-A, H-Shield CG		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
DensDeck, SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Insulation layer 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. 50-mil Duro-Tuff membrane shall be mechanically attached 12" o.c. in rows spaced 116" o.c. with Duro-Last Cleat Plates and Duro-Last #15 Extra Heavy Duty Drill Point Fastener. Laps are sealed with min. 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade E Steel Attached to supports having a maximum span of 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 450 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type D(15): All layers of insulation are preliminarily attached to roof deck as specified below. Membrane is mechanically attached to deck through the insulation layers.

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 insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Approved XPS or Approved EPS Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Duro-Guard Iso II-A, Duro-Guard Iso II-H, Duro-Guard III-A, Duro-Guard Iso III-H, ENRGY 3, H-Shield, ISO 95+ GL, ACFoam II, ACFoam III, Duro-Guard Iso IV-A, ACFoam IV Minimum 1.5" thick	**1, 2. 3. 10**	**1:6.4 ft²**

Note: Insulation layers above shall be mechanically attached with preliminary fastening as specified above. All Insulation panels shall also be mechanically fastened along with the roof membrane as specified below. See Roofing Application Standard RAS 117 for fastening details.

Vapor Barrier: (Optional) Any UL or FM approved vapor barrier.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®, FR-50®, ¼" Dens Deck, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core or a second sheet of barrier board may be used over the insulation (see General Limitation #1).

Membrane with 60" tabs: Duro-Last® membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last fasteners and Duro-Last Poly-plates® or Duro-Last Cleat Plates spaced 12" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, grade E Steel Attached to supports having a maximum span of 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) as specified below in the membrane row spacing options when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type D(16): All layers of insulation are preliminarily attached to roof deck as specified below. Membrane is mechanically attached to deck through the insulation layers.

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 insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Approved XPS or Approved EPS Minimum ½" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Duro-Guard Iso II-A, Duro-Guard Iso II-H, Duro-Guard III-A, Duro-Guard Iso III-H, ENRGY 3, H-Shield, ISO 95+ GL, ACFoam II, or ACFoam III, Duro-Guard Iso IV-A, ACFoam IV Minimum 1.5" thick	**1, 2. 3. 10**	**1:6.4 ft²**

Note: Insulation layers above shall be mechanically attached with preliminary fastening as specified above. All Insulation panels shall also be mechanically fastened along with the roof membrane as specified below. See Roofing Application Standard RAS 117 for fastening details.

Vapor Barrier: (Optional) Any UL or FM approved vapor barrier.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®, FR-50®, ¼" DensDeck, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, Duro-Fold or a second sheet of barrier board may be used over the insulation (see General Limitation #1).

Membrane with 28" tabs: **The deck should record a Minimum Characteristic Resistance Force (MCRF) of 368 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.** Duro-Last® membrane shall be mechanically attached at its 3" tabs, spaced every 28" with Duro-Last fasteners with Duro-Last Poly-plates® or Duro-Last Cleat Plates spaced at 18" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5" wide heat weld.

Membrane with 60" tabs: **The deck should record a Minimum Characteristic Resistance Force (MCRF) of 263 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.** Duro-Last® membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last fasteners with Duro-Last Poly-plates® or Duro-Last Cleat Plates spaced at 6" o.c. maximum, through the insulation and into the deck . Laps are sealed with a minimum 1.5" wide heat weld.

Membrane with 120" tabs:	**The deck should record a Minimum Characteristic Resistance Force (MCRF) of 525 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.** Duro-Last® membrane shall be mechanically attached at its minimum 3" tabs, spaced every 120" with Duro-Last fasteners with Duro-Last Poly-plates® or Duro-Last Cleat Plates spaced at 6" o.c. maximum, through the insulation and into the deck. Laps are sealed with a minimum 1.5” wide heat weld.
Maximum Design Pressure:	-52.5 psf (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Concrete, lightweight concrete, cementitious wood fiber, wood, steel

System Type E(1): Membrane mechanically attached through optional barriers to structural 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.

Vapor Barrier:	(Optional) Any UL or FM approved vapor barrier.
Fire Barrier:	(Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, or a second sheet of barrier board may be used over the deck (see General Limitation #1).
Membrane, 60" tabs:	Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 60" with Duro-Last fasteners and Duro-Last Poly-plates spaced 12" o.c. maximum, into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
Membrane, 28" tabs:	Duro-Last membrane shall be mechanically attached at its 3" tabs, spaced every 28" with Duro-Last fasteners and Duro-Last Poly-plates spaced 18" o.c. maximum, into the deck. Laps are sealed with a minimum 1.5" wide heat weld.
Maximum Design Pressure:	-45 psf (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Elastizell cellular lightweight concrete cast with Zell-Fibers in the mix, wet cast density of 46-50 pcf, 350 psi compressive strength. Slurry coat, followed by 1" thick EPS Holey Board placed into the wet concrete, followed by a minimum 2" thick top coat of Elastizell cellular lightweight concrete. 22 ga, Type B, vented steel deck attached to supports at 7 ft. spans using ITW Buildex Traxx/5 fastners spaced 6" o.c. (each flue). Side laps attached with Buildex Traxx/1 fasteners spaced 20" o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 85 lbf when tested with Twin Loc-Nails installed through to the deck in accordance with TAS 105.

System Type E(2): Anchor sheet mechanically fastened to LWC deck subsequent membrane 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.

Anchor Sheet: JM PermaPly 28 or GAFGLAS #75 base sheet mechanically fastened with Twin Loc-Nails spacing of 7.5" o.c. at the 3" side laps and 7.5" o.c. in two equally spaced staggered center rows.

Membrane: Duro-Last Duro-Fleece Plus membrane fully adhered with Duro-Fleece CR-20 Adhesive applied using a splatter pattern at a rate of 7 lbs./square. Laps are sealed with a minimum 1.5" wide heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 525 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type E(3): Membrane mechanically attached through optional barriers to structural 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.

Vapor Barrier:	(Optional) Any UL or FM approved vapor barrier.
Fire Barrier:	(Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, ¼" SECUROCK, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, or a second sheet of barrier board may be used over the deck (see General Limitation #1).
Membrane, 120" tabs:	Duro-Last membrane shall be **mechanically attached into the wood supports** at the 6" tabs, spaced every 120" with Duro-Last #14 HD Fasteners and Duro-Last Poly-Plates or Cleat-Plates spaced 6" o.c. maximum. Laps are sealed with a minimum 1.5" wide heat weld.
Maximum Design Pressure:	-52.5 psf (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 263 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type E(4): Membrane mechanically attached through optional barriers to structural 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.

Vapor Barrier:	(Optional) Any UL or FM approved vapor barrier.
Fire Barrier:	(Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, ¼" SECUROCK, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, or a second sheet of barrier board may be used over the deck (see General Limitation #1).
Membrane, 60" tabs:	Duro-Last membrane shall be **mechanically attached into the wood supports** at the 3" tabs, spaced every 60" with Duro-Last #14 HD Fasteners and Duro-Last Poly-Plates or Cleat-Plates spaced 6" o.c. maximum. Laps are sealed with a minimum 1.5" wide heat weld.
Maximum Design Pressure:	-52.5 psf (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: $^{19}/_{32}$" plywood or wood plank with support at a maximum 24" o.c. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 825 lbf when tested with Duro-Last #14 HD Fasteners installed through to the wood support in accordance with TAS 105.

System Type E(5): Membrane mechanically attached through optional barriers to structural 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.

Vapor Barrier:	(Optional) Any UL or FM approved vapor barrier.
Fire Barrier:	(Optional) Atlas Roofing Corporation FR-10®, ¼" DensDeck, ¼" SECUROCK, ½" thick UL Classification Type X Gypsum with a moisture resistant facer and core, or a second sheet of barrier board may be used over the deck (see General Limitation #1).
Membrane, 120" tabs:	Duro-Last membrane shall be **mechanically attached into the wood supports** at the 6" tabs, spaced every 120" with Duro-Last #14 HD Fasteners and Duro-Last Cleat-Plates spaced 6" o.c. maximum. Duro-Last Tab Sealer 4725 shall be applied over the tab membrane and to the overlying membrane underside at a rate of 30 ft^2/gal (two-sided application). Laps are sealed with a minimum 1.5" wide heat weld.
Maximum Design Pressure:	-82.5 psf (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Smooth BUR, Granule SBS, Granule APP, or Granule BUR

System Type F(1): Membrane directly adhered to existing 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: Duro-Last Duro-Fleece Plus membrane fully adhered with Duro-Fleece CR-20 Adhesive applied using a splatter pattern at a rate of 8 lbs/square. Laps are sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -370 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Smooth BUR, Granule SBS, Granule APP, or Granule BUR

System Type F(2): Membrane directly adhered to existing 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: Duro-Last Duro-Fleece membrane fully adhered with Duro-Fleece CR-20 Adhesive applied using a splatter pattern at a rate of 8 lbs/square. Laps are sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -120 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.

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 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE