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 a division of Holcim Solutions and Products US, LLC
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. 23-0509.10 and consists of pages 1 through 85.
The submitted documentation was reviewed by Jorge L. Acebo.

11/28/24

MIAMI-DADE COUNTY APPROVED

NOA No.: 24-0305.21
Expiration Date: 08/22/28
Approval Date: 11/28/24

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, Various widths x 150 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Membrane	.045" thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Last Membrane	.057" thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Fleece Membrane	.047" thick,. Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Membrane	.056" thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Membrane	.080" thick Various widths x 65 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Tuff Membrane	.045" thick Vaious widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Tuff Membrane	.057" thick Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane
Duro-Tuff Membrane	.080" thick Various widths x 65 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Tab Sealer 4725	5 gal.	Proprietary	Solvent-based contact-bonding agent.
Duro-Blue Separation Slip Sheet	4 mil x 20' x 360'; 4 mil x 20'x 100'	Proprietary	Separation slip sheet produced from coextruded polyethylene film.
Duro-Last Duro-Weave Separation Slip Sheet	2.5 mil thick 12' x 328'	Proprietary	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)
ACFoam II, ACFoam III	Polyisocyanurate foam insulation	Atlas Roofing Corp.
ISO 95+ GL	Polyisocyanurate foam insulation	Holcim Solutions and Products US, LLC
Cellofoam Type IX EPS Insulation	Type IX Expanded Polystyrene (EPS)	Cellofoam North America, Inc.
Insulfoam EPS, R-TECH Fan Fold	Type IX Expanded Polystyrene (EPS)	Insulfoam a Division of Carlisle Construction Materials, Inc.
Kingspan GreenGuard Insulation Board CM	Extruded polystyrene (XPS)	Kingspan Insulation, LLC
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
ENRGY-3, ENRGY-3 25 PSI	Polyisocyanurate foam insulation	Johns Manville
Duro-Guard EPS	Expanded polystyrene Type IX	DURO-LAST a division of Holcim Solutions and Products US, LLC
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax, A Business Unit of Sika Corporation
H-Shield, H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, a division of Carlisle Construction Materials, 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	United States Gypsum Corporation
Duro-Fold Underlayment Board	Extruded polystyrene with polypropylene facer.	DURO-LAST a division of Holcim Solutions and Products US, LLC
Duro-Guard Iso II-H & Tapered, Duro-Guard Iso III-H & Tapered, Duro-Guard Iso HD-H	Polyisocyanurate foam insulation	DURO-LAST a division of Holcim Solutions and Products US, LLC
Duro-Guard Iso II-A & Tapered, Duro-Guard Iso III-A & Tapered, Duro-Guard Iso HD-A	Polyisocyanurate foam insulation	DURO-LAST a division of Holcim Solutions and Products US, LLC
DEXcell Cement Roof Board	Cementitious Insulation Board	National Gypsum Company
DEXcell FA Glass Mat Roof Board	Coated Gypsum Insulation Board	National Gypsum Company

APPROVED FASTENERS/ADHESIVES: TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Duro-Last 3"Metal Plates	Galvalume steel stress plates.	3" square	DURO-LAST a division of Holcim Solutions and Products US, LLC
2.	Duro-Last Poly-plates	Round plastic stress plates.	2" round	DURO-LAST a division of Holcim Solutions and Products US, LLC
3.	Polymer GypTec	Glass-filled nylon auger type fastener	Various Lengths	OMG, Inc.
4.	Polymer GypTec Insulation Plates	Galvalume steel stress plates.	3" round	OMG, Inc.
5.	OMG Plastic Plate	Round plastic stress plates.	3" round	OMG, Inc.
6.	Duro-Last #15 Extra Heavy Duty Drill Point Fastener	Corrosion resistant, drill point with a #3 Phillips truss head	Various Lengths	DURO-LAST a division of Holcim Solutions and Products US, LLC
7.	Duro-Last #14 Concrete Screws	Corrosion resistant, drill point fastener with #3 Phillips head.	Various Lengths	DURO-LAST a division of Holcim Solutions and Products US, LLC
8.	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.
9.	Duro-Last #14 HD Fasteners	Roofing and insulation fasteners, Duro-Coated with #3 Phillips head.	Various	DURO-LAST a division of Holcim Solutions and Products US, LLC
10.	Duro-Last Cleat Plates	0.035" thick galvalume stress plate	2-3/8"	DURO-LAST a division of Holcim Solutions and Products US, LLC
11.	OMG XHD	Carbon steel fastener with #3 phillips head	Various lengths	OMG, Inc.
12.	Trufast DP #12 Fasteners	Carbon steel screw with #3 Phillips drive	#12 x 8" max. length	Altenloh, Brinck & Co. U.S., Inc.
13.	Duro-Bond Plate 1302	Round, coated galvalume plate (Gold and Black)	3" round	DURO-LAST a division of Holcim Solutions and Products US, LLC
14.	OMG Eyehook Accuseam Plate	Stress plates	2-3/8"	OMG, Inc.

APPROVED FASTENERS/ADHESIVES: TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
15.	Trufast Twin Loc-Nail Assembled Fastener	Three-piece preassembled fastener/plate unit	2.7" plate x 4.8" max. length	Altenloh, Brinck & Co. U.S., Inc.
16.	Duro-Last Auger Plates	2" metal plate for use Duro-Last Auger Fastener	2" round	DURO-LAST a division of Holcim Solutions and Products US, LLC
17.	Duro-Last Auger Fastener	Glass-filled nylon fastener for use with Duro-Last Auger Plates	Various lengths	DURO-LAST a division of Holcim Solutions and Products US, LLC
18.	Duro-Last Duro-Auger	Composite nylon and fiberglass fastener/plate system with epoxy injection	Various Lengths	DURO-LAST a division of Holcim Solutions and Products US, LLC
19.	OMG XHD	Carbon steel fastener with #3 phillips head	Various lengths	OMG, Inc.
20.	Dekfast #12 Purlin Fasteners	#3 Sq. Drive, drill point fastener for steel purlins	Various	SFS Group USA, Inc.
21.	Isoweld F1-P-6.8-PVC Plate	G-90 steel plate with PVC coating for insulation	3" dia.	SFS Group USA, Inc.
22.	Duro-Grip OlyBond 500	Dual component, low-rise polyurethane foam adhesive.	10 gallon Bag-in-Box sets or 1.5 liter 1 cartridges	DURO-LAST a division of Holcim Solutions and Products US, LLC
23.	Duro-Last WB II Adhesive	Polymeric waterborne membrane adhesive.	5 gal. pail	DURO-LAST a division of Holcim Solutions and Products US, LLC
24.	Duro-Last SB IV	Low VOC solvent-based membrane adhesive.	5 gal. pail	DURO-LAST a division of Holcim Solutions and Products US, LLC
25.	Duro-Fleece CR-20 Adhesive	Dual component, low-rise polyurethane foam adhesive	Kit covers 2,000 ft^2	DURO-LAST a division of Holcim Solutions and Products US, LLC
26.	Duro-Fleece Adhesive	Two-component membrane adhesive.	10 gal.	DURO-LAST a division of Holcim Solutions and Products US, LLC

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
FM Approvals	J.I. 3Y5A6.AM	FM 4470	03/10/95
	J.I. 2M4A8.AM	FM 4470	03/05/87
	J.I. 1X2A7.AM	FM 4470	09/17/93
	J.I 1X8A8.AM	FM 4470	11/01/93
	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
	3055227	FM 4470	05/21/15
Exterior Research & Design, LLC	#02733.01.05-1	TAS 114	01/21/05
Trinity|ERD	D6760.08.07	TAS 114	08/01/07
	C8500SC.11.07	TAS 117(B)	11/30/07
	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
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-021-02-01.12 2	ASTM D1876/D1761 TAS 117(A)/(B) TAS 114(D)	06/27/17
	DLRI-029-02-01	TAS 114(J)	10/25/12
	DLRI-045-02-02	TAS 114(D)	09/13/13
	DLRI-047-02-01	TAS 114(J)	08/24/13
	DLRI-068-02-01.1	TAS 114(D)	07/28/14
	DLRI-073-02-01.1	TAS 114(J)	04/23/15
	DLRI-073-02-02	TAS 114(J)	11/18/14
	DLRI-077-02-01	TAS 114 (D)	04/07/15

EVIDENCE SUBMITTED: (Continued)

Test Agency/Identifier	Name	Report	Date
PRI Construction Materials Technologies, LLC	DLRI-079-02-01.1	TAS 114(J)	08/08/17
	DLRI-086-02-01	TAS 114(J)	10/07/15
	DLRI-086-02-02	TAS 114(J)	09/18/15
	DLRI-096-02-01.1	TAS 114(J)	08/28/17
	DLRI-090-02-01	TAS 114(J)	02/01/16
	DLRI-099-02-01	TAS 114 (J)	07/20/16
	DLRI-100-02-01	TAS 114(J)	06/07/17
UL LLC	R10128	UL790	09/19/24
	R11183	UL723	11/19/09
RADCO	RAD-5135	ASTM C578	05/02/12
NEMO ETC, LLC	4r-DL-19-SSTHP-01.A.R2	ASTM D4434	04-29-20
	4r-DL-19-SSTHP-01.B	ASTM D4434	04-29-20
	4p-DL-23-SSLAP-01.A	Various properties	06-09-23

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
FM Approval Deck Limitations	N/A	C(1), C(3), C(4), C(31), D(2), D(3), D(4), D(11), D(12), D(13), D(14), D(15), D(16), D(19), D(30), D(42)	01/01/13
Zachary R. Priest, P.E.	Signed/Sealed Calculations	E(12), E(13), E(14)	10/07/15
		C(5), C(7), C(9), C(11), C(13), C(15),	02/18/16
		C(17), C(28), C(29), C(30), D(5), D(17),	02/18/16
		D(18), D(24), D(25), D(26), D(27), D(28),	02/19/16
		D(29), E(1), E(2), E(4), E(8)	02/19/16
		E(9), E(10)	02/19/16
		D(31), D(32), D(33),	06/07/16
		D(34), D(35), D(36)	07/24/17
		E(7)	08/08/17

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 22 ga., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 180 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

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

System Type C(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, DensDeck Prime Maximum 1" thick	**9 with 1**	**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-Fleece membrane fully adhered with Duro-Last WB II Adhesive applied at 100 ft^2/gal. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Fleece fully adhered with Duro-Fleece CR-20 applied at 8 lbs./100-ft^2 in "splatter" pattern. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last SB IV Adhesive applied at 60ft^2/gal total coverage. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last WB II Adhesive applied at 140 ft^2/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., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 216 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fastener installed through to the deck in accordance with TAS 105.

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

System Type C(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 not to exceed 1" max.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck Prime Maximum 1" thick	**6 with 1**	**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-Fleece membrane fully adhered with Duro-Last WB II Adhesive applied at 100 ft^2/gal. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Fleece membrane fully adhered with Duro-Fleece CR-20 applied at 8 lbs./100-ft^2 in "splatter" pattern. Laps are sealed with a minimum 1.5" wide heat
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last SB IV Adhesive applied at 60ft^2/gal total coverage. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last WB II Adhesive applied at 140 ft^2/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., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 180 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

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

System Type C(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	**9 with 1**	**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-Fleece membrane fully adhered with Duro-Last WB II Adhesive applied at 100 ft^2/gal. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Fleece fully adhered with Duro-Fleece CR-20 applied at 8 lbs./100-ft^2 in "splatter" pattern. Laps are sealed with a minimum 1.5" wide heat
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last SB IV Adhesive applied at 60ft^2/gal total coverage. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last WB II Adhesive applied at 140 ft^2/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. 18 ga., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(4): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(5): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, , Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) 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 maximum 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(6): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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

Fastening: Insulation shall be mechanically attached at maximum 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(7): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Membrane: Insulation Layer shall be through fastened to the steel purlin with the fastener and plate listed above. The Duro-Last or Duro-Tuff 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 maximum 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(8): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(9): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) 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 maximum 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(10): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(11): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) 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 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(12): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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

Fastening: Insulation shall be mechanically attached at maximum 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(13): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Membrane: Insulation Layer shall be through fastened to the steel purlins with the fastener and plate listed above. The Duro-Last or Duro-Tuff 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 maximum 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(14): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(15): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) 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 maximum 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., Grade 33 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(16): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**5 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**5 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**5 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(17): All layers of insulation simultaneously attached. Membrane adhered to plates.

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**
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1.5" thick	**8 with 13**	**See below**
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**8 with 13**	**See below**
DensDeck Prime		
Minimum 0.25" thick	**8 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

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) or Duro-Tuff (.080" min) 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 maximum 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 338 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type C(18): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**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 or Duro-Tuff membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(19): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**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 or Duro-Tuff membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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(20): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**1:2.67 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: Insulation Layer shall be through fastened to the concrete deck with the fastener and plate and density listed above. The Duro-Last or Duro-Tuff 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 Ptressure: -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(21): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**1:2.0 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: 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) or Duro-Tuff (.080" min) 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: 19/32" plywood or wood plank with support at a maximum 24" o.c. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 12-inches o.c. in the field. 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(22): All layers of insulation simultaneously attached. Membrane adhered to plates.

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®Fire Retardant Slip Sheet, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
H-Shield, Duro-Guard Iso II-H		
Minimum 1.5" thick	**9 with 13**	**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 or Duro-Tuff 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. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 12-inches o.c. in the field. 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(23): All layers of insulation simultaneously attached. Membrane adhered to plates.

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®Fire Retardant Slip Sheet, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 12-inches o.c. in the field. 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(24): All layers of insulation simultaneously attached. Membrane adhered to plates.

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®Fire Retardant Slip Sheet , ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**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) or Duro-Tuff (.080" min) membrane shall be induction welded to Duro-Bond Plates in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached at maximum 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. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 12-inches o.c. in the field. 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(25): All layers of insulation simultaneously attached. Membrane adhered to plates.

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®Fire Retardant Slip Sheet, ¼" DensDeck, or ¼" SECUROCK

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
H-Shield, Duro-Guard Iso II-H Minimum 1.5" thick	**9 with 13**	**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 or Duro-Tuff 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: Minimum 22 ga., Grade 33 steel deck 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 OMG XHD installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(26): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1" thick	**11 with 13**	**See below**
Duro-Guard Iso HD-A, Duro-Guard Iso HD-H		
Minimum 0.5" thick	**11 with 13**	**See below**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	**11 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Membrane: Duro-Last or Duro-Tuff Membrane with shall be induction welded to Duro-Bond Plates 1302 in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached maximum 24-inch o.c. in rows spaced maximum 24-inch o.c. Two rows are installed in a non-staggered pattern and two rows are staggered 12- inches. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond welder. Minimum 1-inch wide weld at lap seams.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga., Grade 33 steel deck 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 OMG XHD installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(27): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1" thick	**11 with 13**	**See below**
Duro-Guard Iso HD-A, Duro-Guard Iso HD-H		
Minimum 0.5" thick	**11 with 13**	**See below**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	**11 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Membrane: Duro-Last or Duro-Tuff shall be induction welded to Duro-Bond Plates 1302 ithe manner and spacing specified below.

Fastening: Insulation shall be mechanically attached maximum 24-inch o.c. in rows spaced maximum 18-inch o.c. Two rows are installed in a non-staggered pattern and two rows are staggered 12- inches. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond welder. Minimum 1-inch wide weld at lap seams.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga., Grade 33 steel deck attached to supports having a maximum span of 6 ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 540 lbf when tested with OMG XHD fastener installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(28): All layers of insulation simultaneously attached. Membrane adhered to plates.

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
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H Minimum 1" thick	**11 with 13**	**See below**
Duro-Guard Iso HD-A, Duro-Guard Iso HD-H Minimum 0.5" thick	**11 with 13**	**See below**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	**11 with 13**	**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).

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Membrane: Duro-Last or Duro-Tuff Membrane with shall be induction welded to Duro-Bond Plates 1302 in the manner and spacing specified below.

Fastening: Insulation shall be mechanically attached maximum 24-inch o.c. in rows spaced maximum 36-inch o.c. Two rows are installed in a non-staggered pattern and two rows are staggered 12- inches. Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond welder. Minimum 1-inch wide heat weld at lap seams.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Min. 22 ga., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 165 lbf when tested with Trufast DP #12 Fasteners installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See evidence submitted

System Type C(29): 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.

Fire Barrier Minimum. ½" SECUROCK Gypsum-Fiber Roof Board or SECUROCK Glass-Mat Roof Board loose laid.

One or more layers of any of the following insulations not to exceed 1" max.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime Maximum 1-2" thick	**12 with 1**	**1:1 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-Fleece membrane fully adhered with Duro-Last WB II Adhesive applied at 100 ft^2/gal. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last SB IV Adhesive applied at 60 ft^2/gal total coverage. Laps are sealed with a minimum 1.5" wide heat weld.
Or
Duro-Tuff or Duro-Last membrane fully adhered with Duro-Last WB II Adhesive applied at 140 ft^2/gal. 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: Minimum 22 gauge, type B, Grade 80 steel deck attached to supports having a maximum span of 6 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. at the supports with washers. Deck side laps secured maximum 24" o.c. with Traxx/1 fasteners. See required deck MCRF performance below.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(1): 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 any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1½" thick	**N/A**	**N/A**
	N/A	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
	N/A	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
	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).

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

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®Fire Retardant Slip Sheet , ¼" DensDeck, or a second sheet of barrier board may be used over the insulation (see General Limitation #1).

Membrane, 60" 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.

Duro-Last membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 60" o.c. with Duro-Last #14 HD 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, 28"	The deck should record a Minimum Characteristic Resistance Force (MCRF) of 246 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 maximum 28" o.c. with Duro-Last #14 HD 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 -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: Minimum 22 gage, Type B, Grade 80 steel deck 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.
See required deck MCRF performance below.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(2): 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 of more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ACFoam III, Duro-Guard Iso III-A, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1½" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board, SECUROCK Gypsum Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: 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.

Membrane shall be fastened at its minimum 3" tabs, spaced maximum 28" o.c. with Duro-Last #14 HD Fasteners and Duro-Last Poly-plates or Duro-Last Cleat Plates or Duro-Last 3" Metal Insulation 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 -52.5 psf. See General Limitation #7)

Membrane: (continued)	Duro-Last membrane shall be mechanically attached as described below:
Fastener #2:	The deck should record a Minimum Characteristic Resistance Force (MCRF) of 246 lbf. when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105. Membrane shall be fastened at its minimum 3" tabs, spaced maximum 28" o.c. with Duro-Last #14 HD Fasteners and Duro-Last Poly-plates or Duro-Last Cleat Plates or Duro-Last 3" Metal Insulation Plates, 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: Minimum 22 gauge, Type B, Grade 80 steel attached to steel supports spaced 5-ft. o.c. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 338 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fastener installed through to the deck in accordance with TAS 105. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type D(3): Insulation is preliminarily attached to roof deck as specified below. Membrane is mechanically attached to deck through the insulation layer.

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

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ACFoam III, Duro-Guard Iso III-A, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1½" thick	**6, 2**	**1:6.4 ft²**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**6, 2**	**1:6.4 ft²**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**6, 2**	**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 minimum 3" wide tabs,spaced maximum 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 andinto 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: Cementitious wood fiber attached with ¼-14 x 5-inch screws with 2-inch diameter metal plates fastened 3 ½ inches from each edge and 8 inches o.c. between edge fasteners at each support spaced a maximum 32" o.c. 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(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.

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: All layers of insulation and membrane shall be simultaneously attached. 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 or Duro-Tuff membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 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.
Or
Duro-Tuff membrane mechanically attached at its minimum 6" tabs, spaced maximum 57" with Polymer GypTec Fasteners and Polymer GypTech insulation plate spaced 6" o.c. maximum, through the insulation and into the deck. The 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 attached with ¼-14 x 5-inch screws with 2-inch diameter metal plates fastened 3 ½ inches from each edge and 8 inches o.c. between edge fasteners at each support spaced a maximum 32" o.c. 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(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.

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: All layers of insulation and membrane shall be simultaneously attached. 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 or Duro-Tuff membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 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.
Or
Duro-Tuff membrane mechanically attached at its minimum 6" tabs, spaced maximum 57" with Polymer GypTec Fasteners and Polymer GypTech insulation plate 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). The 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. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 6-inches o.c. in the field. 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(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.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®Fire Retardant Slip Sheet, 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**
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1/2" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Fold Underlayment Board		
Minimum 0.375" thick	**N/A**	**N/A**
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1" thick	**N/A**	**N/A**
R-Tech Fan Fold, Duro-Guard EPS		
Minimum 0.5" thick	**N/A**	**N/A**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell FA Glass Mat Roof Board		
Minimum 0.25" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" thick	**N/A**	**N/A**

Note: All layers of insulation and membrane shall be simultaneously attached. 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 minimum 3" tabs, spaced maximum 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. attached with 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inches o.c. at the perimeter and 6-inches o.c. in the field. 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(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.

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®Fire Retardant Slip Sheet, 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**
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1/2" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density**
Duro-Fold Underlayment Board		
Minimum 0.375" thick	**N/A**	**N/A**
Duro-Guard Iso II-A, Duro-Guard Iso III-A, Duro-Guard Iso II-H, Duro-Guard Iso III-H		
Minimum 1" thick	**N/A**	**N/A**
R-Tech Fan Fold		
Minimum 0.5" thick	**N/A**	**N/A**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell FA Glass Mat Roof Board		
Minimum 0.25" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" thick	**N/A**	**N/A**

Note: All layers of insulation and membrane shall be simultaneously attached. 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 minimum 6" tabs, spaced maximum 120" o.c. 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:

1. Min. 22 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 66 in. o.c.
2. Min. 20-18 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 72 in. o.c.

Steel deck options listed above shall be fastened to supports with ITW Buildex Traxx/5 fastener at a maximum spacing of 6" o.c., Sidelaps are attached with Traxx/1 fasteners at 24" 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 Fastener installed through to the deck in accordance with TAS 105.

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

System Type 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 or Duro-Guard Iso II-H, Duro-Guard III-A, H-Shield CG		
Maximum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board, SECUROCK Gypsum Fiber Roof Board, DensDeck Prime		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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 maximum 12" o.c. in rows spaced maximum 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: Min. 22 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 6 ft. o.c. Deck attached to supports with ITW Buildex Traxx/5 fastener at a maximum spacing of 6" o.c., Sidelaps are attached with Traxx/1 fasteners at 24" 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 Fastener installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type 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.

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, H-Shield CG		
Minimum 1" thick	**N/A**	**N/A**
DensDeck, SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board		
Minimum ½" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼"	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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 maximum 12" o.c. in rows spaced maximum 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: Min. 22 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 6 ft. o.c. Deck attached to supports with ITW Buildex Traxx/5 fastener at a maximum spacing of 6" o.c., Side laps are attached with Traxx/1 fasteners at 24" 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. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type D(10): 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:

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		
Minimum 1.5" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
SECUROCK Gypsum Fiber Roof Board, DEXcell FA Glass Mat Roof Board, DensDeck Prime		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" thick	**N/A**	**N/A**

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®Fire Retardant Slip Sheet, FR-50® Fire Retardant Slip Sheet, 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 minimum 3" tabs, spaced maximum 60" o.c. with Duro-Last #14 HD 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: Min. 22 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 6 ft. o.c. Deck attached to supports with ITW Buildex Traxx/5 fastener at a maximum spacing of 6" o.c., Side laps are attached with Traxx/1 fasteners at 24" o.c. 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(11): 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:

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, or ACFoam III		
Minimum 1.5" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
SECUROCK Gypsum Fiber Roof Board, DEXcell FA Glass Mat Roof Board, DensDeck Prime		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" thick	**N/A**	**N/A**

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®Fire Retardant Slip Sheet, FR-50® Fire Retardant Slip Sheet, 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: Duro-Last® membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 28" o.c. with Duro-Last #14 HD 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.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, Grade 80 steel deck 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 #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density
Duro-Guard Iso II-H, Duro-Guard Iso III-H, Duro-Guard Iso II-A, Duro-Guard Iso III-A, Kingspan GreenGuard Insulation Board CM Minimum 1" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS Minimum 0.5" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime Minimum 0.25" thick	**N/A**	**N/A**
SECUROCK Gypsum Fiber Roof Board, DEXcell FA Glass Mat Roof Board, DensDeck Prime Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board Minimum 7/16" 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: Duro-Last Membrane with minimum 6-inch wide tabs spaced maximum 120-inches o.c. shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Poly-Plates or Cleat Plates fastened along the tab 6-inches o.c. Minimum 1-inch wide heat weld at lap seams.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga., Grade 33 steel deck attached to supports having a maximum span of 6 ft. 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.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

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-H, Duro-Guard Iso III-H, Duro-Guard Iso II-A, Duro-Guard Iso III-A, Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum 0.5" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime, DEXcell FA Glass Mat Roof Board		
Minimum 0.25" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last Membrane with minimum 6-inch wide tabs spaced maximum 60-inches o.c. shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Poly-Plates or Cleat Plates fastened along the tab 6-inches o.c. Minimum 1-inch wide heat weld at lap seams.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 gage, Type B, Grade 80 steel deck 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 24" 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. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type D(14): 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:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1½" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick		
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board, SECUROCK Gypsum Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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.

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

Fire Barrier: (Optional) Atlas Roofing Corporation FR-10®Fire Retardant Slip Sheet, ¼" DensDeck, or a second sheet of barrier board may be used over the insulation (see General Limitation #1).

Membrane: Duro-Last membrane, maximum 60" tabs, shall be mechanically attached at its minimum 3" tabs, spaced every 60" with Duro-Last #14 HD fasteners and Duro-Last Poly-plates or Duro-Last Cleat Plates spaced 12" o.c. minimum, 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: 19/32" plywood or wood plank with supports at a maximum 24" o.c. attached 6" o.c. with 8d common nails to support members. The wood deck shall record a Minimum Characteristic Resistance Force (MCRF) of 225 lbf when tested with Duro-Last #14 HD Fasteners in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.

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:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-½" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 60"o.c. with Duro-Last #14 HD fasteners and Duro-Last Poly-Plates or Duro-Last Cleat Plates spaced a maximum of 6" o.c. 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 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. attached 6" o.c. with 8d common nails to support members. The wood deck shall record a Minimum Characteristic Resistance Force (MCRF) of 250 lbf when tested with Duro-Last #14 HD Fasteners in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.

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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-½" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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, 57" tabs: Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57"o.c. with Duro-Last #14 HD fasteners with Duro-Last Cleat Plates spaced a maximum of 6" o.c. 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.

or

Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57"o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners with Duro-Last Duro-Last Cleat Plates spaced a maximum of 6" o.c. through the insulation and into the deck. Fasteners are located 2.7-inches 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 Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Cementitious wood fiber deck attached to supports spaced a maximum 24" o.c. with three (3) #15 fasteners and 2-inch diameter steel plates per panel, per support. The CWF deck should record a Minimum Characteristic Resistance Force (MCRF) of 214 lbf when tested with Duro-Last Liquid Auger Fastener through to the deck in accordance with TAS 105. The existing roof shall contain minimum 1.5" thick insulation.

System Type D(17): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" 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: Duro-Last membrane, or Duro-Tuff membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57"o.c. with Polymer GypTec fasteners with Polymer GypTec Insulation Plates or Duro-Last Auger Fastener and Auger Plates spaced a maximum of 6" o.c. 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:	Cementitious wood fiber deck attached to supports spaced a maximum 24" o.c. with three (3) #15 fasteners and 2-inch diameter steel plates per panel, per support. The CWF deck should record a Minimum Characteristic Resistance Force (MCRF) of 285 lbf when tested with Duro-Last Liquid Auger Fastener through to the deck in accordance with TAS 105. The existing roof shall contain minimum 1.5" thick insulation.[3]
System Type D(18):	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:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" 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:	Duro-Last membrane, or Duro-Tuff membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57"o.c. with Polymer GypTec fasteners with Polymer GypTec Insulation Plate or Duro-Last Auger Fastener and Auger Plates spaced a maximum of 6" o.c. 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)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete or Minimum 22 gage, type B, 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 498 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(19): 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:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57" o.c., with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners(steel), Duro-Last #14 Concrete Screws or Duro-Last Concrete Nails (concrete), and Duro-Last Cleat Plates spaced a maximum of 6" o.c. 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 psf. (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete or Minimum 22 gage, type B, 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 315 lbf when tested with Duro-Last #14 HD Fasteners (steel) or Duro-Last #14 Concrete Screws in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(20): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 84" o.c. with Duro-Last #14 HD Fasteners (steel) or Duro-Last #14 Concrete Screws with Duro-Last Poly-plates or Duro-Last Cleat Plates spaced 6" o.c. maximum, through the insulation and/or LWC 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:	Structural Concrete or Minimum 22 gage, type B, 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 (steel) or Duro-Last #14 Concrete Screws in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type D(21):	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 followings:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" 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:	Duro-Last membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 84" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws with Duro-Last Cleat Plates or OMG Eyehook Accuseam Plate spaced 6" o.c. maximum, through the insulation and/or LWC 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, type B, 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 367 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(22): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws with Duro-Last Cleat Plates spaced 12" o.c. maximum, through the insulation and/or LWC 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)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete or Minimum 22 gage, type B, 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 498 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws in accordance with TAS 105. The existing roof shall contain minimum 1" thick insulation.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(23): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" 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: Duro-Last membrane shall be mechanically attached at its minimum 6" wide tabs, spaced maximum 84" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners (steel) or Duro-Last #14 Concrete Screws with Duro-Last Cleat Plates spaced 6" o.c. maximum, through the insulation and/or LWC 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)

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description:

1. Min. 22 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 54 in. o.c.
2. Min. 20 gage, Type B, Grade 80 steel deck with minimum ¼" thick steel supports having a maximum span of 72 in. o.c.

Steel deck options listed above attached to supports with ITW Buildex Traxx/5 fastener at a maximum spacing of 6" o.c., Sidelaps are attached with Traxx/1 fasteners at 24" o.c.

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

System Type D(24): 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:

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, or ACFoam III		
Minimum 1.5" thick	**N/A**	**N/A**
Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" thick	**N/A**	**N/A**
DEXcell FA Glass Mat Roof Board, SECUROCK Gypsum Fiber Roof Board, DensDeck Prime		
Minimum ¼" thick	**N/A**	**N/A**
DEXcell Cement Roof Board		
Minimum 7/16" thick	**N/A**	**N/A**

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®Fire Retardant Slip Sheet, FR-50® Fire Retardant Slip Sheet, 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 120" tabs Duro-Last® membrane shall be mechanically attached at its minimum 3" tabs, spaced maximum 120" o.c. 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 7I: Recover, Insulated

Deck Description: 19/32" plywood or wood plank with supports at a maximum 24" o.c. attached 6" o.c. with 8d common nails to support members. The wood deck shall record a Minimum Characteristic Resistance Force (MCRF) of 600 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners in accordance with TAS 105.

System Type D(25): 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.

Fire Barrier: Atlas FR 10 loose laid

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Duro-Guard 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.

Membrane: Duro-Last membrane shall be mechanically attached 6" o.c. within a 6" wide tab in rows spaced 120" o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Cleat Plates or Poly Plates. Minimum 7-1/4" wide laps are sealed with a minimum 1-1/4" 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 supports at a maximum 24” o.c. attached 6” o.c. with 8d common nails to support members. The wood deck shall record a Minimum Characteristic Resistance Force (MCRF) of 263 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners in accordance with TAS 105.

System Type D(26): 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.

Fire Barrier: Atlas FR 10 loose laid

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Duro-Guard 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.

Membrane: Duro-Last membrane shall be mechanically attached 6” o.c. within a 3” wide tab in rows spaced 60” o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Cleat Plates or Poly Plates. Minimum 4-1/4” wide laps are sealed with a minimum 1-1/4” heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Structural Concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 825 lbf when tested with Duro-Last #14 Concrete Screw installed through to the deck in accordance with TAS 105.

System Type D(27): All layers of insulation are preliminarily attached to roof deck as specified below. Membrane is mechanically attached to deck through the insulation layer.

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

One or more layers of the following:

Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, Duro-Guard ISO II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G Minimum 1-1/2" 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.

Membrane: Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 120" o.c. with Duro-Last #14 Concrete Screw with Duro-Last 3" Metal Plates fastened 6" o.c. in center of the 6" tab. 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)

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. attached 6” o.c. with 8d common nails to support members. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 250 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(28):	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:

Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-½” thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½” thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1” 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 with no dimension greater than 8 ft.

Membrane:	Duro-Last membrane shall be mechanically attached at its minimum 6” tabs, spaced maximum 57”o.c. with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Cleat Plates spaced a maximum of 6” o.c. through the insulation and into the deck. Fasteners are located 2.7” from the tab edge. 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. attached 6" o.c. with 8d common nails to support members. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 250 lbf when tested with Duro-Last #14 HD Fasteners installed through to the deck in accordance with TAS 105.

System Type D(29): 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:

Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam II, Duro-Guard Iso II-A, ENRGY-3, ENRGY-3 25 PSI, Duro-Guard II-H, Duro-Guard HD-G		
Minimum 1-½" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam EPS		
Minimum ½" thick	**N/A**	**N/A**
Kingspan GreenGuard Insulation Board CM		
Minimum 1" 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 with no dimension greater than 8 ft.

Membrane: Duro-Last membrane shall be mechanically attached at its minimum 6" tabs, spaced maximum 57"o.c. with Duro-Last #14 HD Fasteners and Duro-Last 3" Metal Plates spaced a maximum of 6" o.c. 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).
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. 22 ga., Grade 33, Type B, Steel Deck attached 6" o.c. with Traxx/5 fasteners to supports having a maximum spacing of 6' o.c. Side laps secured with Traxx1fasteners spaced 24" 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 Fastener installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See evidence submitted.

System Type D(30): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, H-Shield, ISO 95+ GL, Duro-Guard ISO II-A, ENRGY-3, Duro-Guard II-H, Duro-Guard HD-G, Minimum 1-1/2" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, Cellofoam Type IX EPS Insulation, Duro-Guard EPS, Insulfoam 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: Duro-Tuff membrane shall be mechanically attached at its minimum 4" wide laps, spaced maximum 116" o.c. , with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners and Duro-Last Cleat Plates spaced a maximum of 12" o.c. 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 7: Recover, Non-insulated

Deck Description: Elastizell cellular lightweight concrete cast with Zell-Fibers in the mix, wet cast density of 46-50 pcf, 354 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 cast over minimum 22 ga, Grade 40, 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 Trufast Twin Loc-Nail Assembled Fasteners installed through to the deck in accordance with TAS 105.

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

System Type E(1): 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 Trufast Twin Loc-Nail Assembled Fasteners 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 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:	Minimum 22 ga., Grade 80 steel deck 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 #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type E(2):	Membrane mechanically fastened 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.

Slip Sheet	(Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.
Membrane:	Duro-Last Membrane with minimum 6 inch wide tabs spaced maximum 120 inches o.c. shall be fastened through existing roof into the deck with the fastener and plate specified below.
Fastening:	Membrane shall be fastened with Duro-Last #15 Extra Heavy Duty Drill Point Fastener and Poly-Plates or Cleat Plates fastened along the tab maximum 6 inches o.c. Minimum 1-inch wide factory weld at the lap seams
Maximum Design Pressure:	-45 psf. (See General Limitation #7

Membrane Type:	Single Ply, PVC
Deck Type 7:	Recover, Non-insulated
Deck Description:	Poured gypsum concrete. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 180 lbf when tested with Trufast Twin Loc Nail batten fasteners installed through to the deck in accordance with TAS 105.
System type E(3):	Membrane mechanically attached to roof deck

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

Slip Sheet	(Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.
Membrane:	Duro-Last or Duro-Tuff membrane shall be mechanically attached 6” o.c. in rows spaced 48” o.c. with 2-1/2” Duro-Last Auger Fasteners and Auger Plates. A 10” wide cover strip welded over the fastener rows with a 1-1/2” 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:	Minimum 22 ga., Grade 33 steel deck attached to supports having a maximum span of 6 ft. 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. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type E(4):	Membrane mechanically fastened 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.

Slip Sheet	(Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.
Membrane:	Duro-Last Membrane with minimum 3 inch wide tabs spaced maximum 60 inches o.c. shall be fastened through existing roof into the deck with the fastener and plate specified below.
Fastening:	Membrane shall be fastened with Duro-Last #15 Extra Heavy Duty Drill Point Fastener and Poly-Plates or Cleat Plates fastened along the tab maximum 6 inches o.c. Minimum 1-inch wide factory weld at the lap seams.
Maximum Design Pressure:	-52.5 psf. (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: The cementitious wood fiber panels attached to supports spaced maximum 4-ft. o.c. with OMG Purlin fasteners with 2-inch metal plates, each panel is secured with three (3) fasteners at each support. The CWF deck should record a Minimum Characteristic Resistance Force (MCRF) of 338 lbf when tested with Duro-Last Auger Fasteners installed with Dow EnerFoam (See Fastening below for details) through to the deck in accordance with TAS 105.

System Type E(5): Membrane mechanically fastened 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.

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Last Membrane or Duro-Tuff membrane with minimum 1 inch wide Weld at lap seams shall be fastened through existing roof into the deck with the fastener and plate specified below.

Fastening: Duro-Last Auger Fastener with 2-inch diameter Auger Plates shall be installed 6" o.c. in rows spaced a maximum 60" o.c. The fastener shall be embedded a minimum 2-inches into the deck as follows:

1) 7/16" pilot hole drilled to a depth of 2.5"
2) Dow EnerFoam dispensed into the hole for two (2) full seconds using application gun.
3) Fastener installed into the hole within 20-40 seconds after dispensing foam

Fastener rows shall be covered with a 10" wide strip for Duro-Last Membrane and heat welded a minimum 1.5" along each edge to the roof membrane.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: The cementitious wood fiber panels attached to supports spaced maximum 4-ft. o.c. with OMG Purlin fasteners with 2-inch metal plates, each panel is secured with three (3) fasteners at each support. The CWF deck should record a Minimum Characteristic Resistance Force (MCRF) of 540 lbf when tested with Duro-Last Auger Fasteners installed with Dow EnerFoam (See Fastening below for details) through to the deck in accordance with TAS 105.

System Type E(6): Membrane mechanically fastened 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.

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Last Membrane or Duro-Tuff membrane with minimum 1 inch wide weld at lap seams shall be fastened through existing roof into the deck with the fastener and plate specified below.

Fastening: Duro-Last Auger Fastener with 2-inch diameter Auger Plates shall be installed 6" o.c. in rows spaced a maximum 96" o.c. The fastener shall be embedded a minimum 2-inches into the deck as follows:
1) 7/16" pilot hole drilled to a depth of 2.5"
2) Dow EnerFoam dispensed into the hole for two (2) full seconds using application gun
3) Fastener installed into the hole within 20-40 seconds after dispensing foam

Fastener rows shall be covered with a 10" wide strip for Duro-Last Membrane and heat welded a minimum 1.5" along each edge to the roof membrane.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Min. 22 ga., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 428 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point fasteners installed through to the deck in accordance
with TAS 105

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

System Type E(7): Membrane mechanically attached to existing single ply membrane roof deck

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point fasteners with Cleat Plates fastened 12" o.c. within 6" wide laps spaced 114" o.c.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Minimum 22 ga., Type B, Grade 40 steel deck 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.
Or
Minimum 22 gage, Type B, Grade 40 steel deck attached to steel supports spaced 6 ft. o.c. with 5/8-inch puddle welds at each flute. No fasteners were installed in the side laps.

The deck should record a Minimum Characteristic Resistance Force (MCRF) of 428 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105

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

System Type E(8): Membrane mechanically attached to roof deck

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point fasteners with Poly Plates or Cleat Plates fastened 6" o.c. Within 6" wide laps spaced 114" o.c. Fasteners are centered 1.25" from the edge of tab.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Min. 22 ga., Grade 33, Type B, Steel Deck 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. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 304 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

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

System Type E(9): Membrane mechanically attached to roof deck

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point fasteners with Poly Plates or Cleat Plates fastened 6" o.c. within 6" wide laps spaced 54" o.c. Fasteners are centered 1.25" from the edge of tab.

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

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Minimum 22 gage, type B, Grade 33 steel deck attached to steel supports spaced 6 ft. o.c. with 5/8-inch puddle welds at each flute. No fasteners were installed in the side laps. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 236 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the deck in accordance with TAS 105.

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

System Type E(10): Membrane mechanically attached to roof deck

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point fasteners with Poly Plates or Cleat Plates fastened 6" o.c. within 6" wide laps spaced 54" o.c. Fasteners are centered 1.25" from the edge of tab.

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 supports at a maximum 24” o.c. attached with 0.113 inch x 2-3/8 inch ring shank nails fastened 6-inches o.c. at the perimeter and 12-inches o.c. in the field. The wood supports should record a Minimum Characteristic Resistance Force (MCRF) of 428 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fasteners installed through to the wood support in accordance with TAS 105.

System Type E(11): Membrane mechanically attached to roof deck

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached with Duro-Last #15 Extra Heavy Duty Drill Point fasteners with Poly Plates or Cleat Plates fastened 6” o.c. within 6” wide laps spaced 114” o.c. Fasteners are centered 1.25” from the edge of tab.

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

Membrane Type:	Single Ply, PVC
Deck Type 7:	Recover, Non-insulated
Deck Description:	Min. 22 ga., Grade 80, Type B, Steel Deck attached 6" o.c. with #12-24 HWH self drilling screws to supports having a maximum spacing of 6' o.c. No fasteners were installed at the side laps. 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. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type E(12):	Membrane mechanically fastened to existing single ply 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.

Slip Sheet:	(Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturer's installation instructions.
Membrane:	Duro-Last Membrane with minimum 1 inch wide weld at lap seams shall be fastened through existing roof into the deck with the fastener and plate specified below.
Fastening:	Duro-Last #15 Extra Heavy Duty Drill Point Fastener and Poly Plates shall be installed 6" o.c. within 6" wide tabs in rows spaced a maximum 120" o.c. with 1" wide factory weld at lap seams.
Maximum Design Pressure:	-45 psf. (See General Limitation #7)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Minimum 329 psi cellular lightweight concrete, with a wet cast density of 36-38 pcf, 1/8" Slurry coat, followed by 1" thick EPS Board placed into the wet concrete, followed by a minimum 2" thick top coat cast after curing.
A minimum 26 ga, HD-Dek, vented , min. Grade 80, over structual supports spaced 5' o.c. with 5/8" diameter puddle welds with washers. Deck side laps stitched 15" o.c. with ¼" – 14 x 7/8" HWH screws. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 225 lbf when tested with Duro-Last #15 Extra Heavy Duty Drill Point Fastener installed through to the deck in accordance with TAS 105.

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

System Type E(13): Membrane mechanically fastened to steel deck through existing single ply membrane and LWC.

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

Slip Sheet: (Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Last Membrane with minimum 1-1/2 inch wide weld at lap seams shall be fastened through existing roof and LWC into the steel deck with the fastener and plate specified below.

Fastening: Duro-Last #15 Extra Heavy Duty Drill Point Fastener and Poly Plates shall be installed 6" o.c. within 3" wide tabs in rows spaced a maximum 60" o.c. with 1-1/2" wide factory weld at lap seams.

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

Membrane Type:	Single Ply, PVC
Deck Type 7I:	Recover, Insulated
Deck Description:	Minimum 22 ga., type B, Grade 33 steel deck with supports spaced maximum 6 ft. o.c. fastened with #12-24 HWH self drilling screws at each flute. Laps stitched 24" o.c. with ¼" – 14 x 7/8" HWH screws. or Minimum 22 gage, type B, Grade 33 steel deck attached to steel supports spaced 6 ft. o.c. with 5/8-inch puddle welds at each flute. Laps stitched 24" o.c. with ¼" – 14 x 7/8" HWH screws. The deck should record a Minimum Characteristic Resistance Force (MCRF) of 420 lbf when tested with OMG XHD fasteners secured to the deck in accordance with TAS 105. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
System Type E(14):	Membrane induction welded to existing single ply membrane roof

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.

Duro-Bond Plate Note: When using Duro-Bond Plate 1302 over steel decks, ensure that the combined thickness of the existing roof assembly and new insulation is minimum 1". This thickness shall be measured from the top rib of the steel deck.

Slip Sheet:	(Optional) One ply of Duro-Blue Separation Slip Sheet or Duro-Weave Separation Slip Sheet applied as per manufacturers installation instructions.
Membrane:	Duro-Last membrane or Duro-Tuff membrane shall be induction welded to Duro-Bond 1302 Plates in the manner and spacing specified below.
Fastening:	Membrane is welded to the Duro-Bond Plate 1302 with RhinoBond Welder. TheDuro-Bond 1302 Plates are secured at a rate of 1 per 4.0 ft^2. 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: Existing Smooth BUR, Granule SBS, Granule APP or Granule BUR over structural concrete deck.

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-Fleece membrane 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)

Membrane Type: Single Ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Existing Granule SBS, Granule APP or Granule BUR over structural concrete deck.

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-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: -150 psf. (See General Limitation #9)

RECOVER SYSTEM LIMITATIONS:

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

GENERAL LIMITATIONS:

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

END OF THIS ACCEPTANCE