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)

CertainTeed LLC.
20 Moores Road
Malvern, PA 19355

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: CertainTeed Conventional Built-Up-Roof Systems Over Steel Decks.

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

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

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

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

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

This NOA renews NOA # 23-0215.06 and consists of pages 1 through 21.
The submitted documentation was reviewed by Alex Tigera.

06/13/24

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Built-Up Roofing
Material:	Fiberglass
Deck Type:	Steel
Maximum Design Pressure	**-172.5 psf**

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Black Diamond Base Sheet	39 3/8" x 68'7"	ASTM D1970	Self-adhering, fiberglass reinforced, SBS modified bitumen base/ply sheet.
Flintlastic Ultra Glass SA	39 3/8" x 33'11"	ASTM D1970	Self-adhering, fiberglass reinforced, SBS modified bitumen base/ply sheet.
Flintglas Ply 4	39 3/8" x 164'7"	ASTM D2178 Type IV UL Type G1	Fiberglass reinforced, asphalt impregnated ply sheet.
Flintglas Premium Ply 6	39 3/8" x 164'7"	ASTM D2178 Type VI UL Type G1	Fiberglass reinforced, asphalt impregnated ply sheet.
Flintglas MS Cap Sheet	39 3/8" x 32'10"	ASTM D3909 UL Type G3	Asphalt impregnated and coated inorganic glass fiber surfaced with mineral granules used as the top ply in conventional built-up roof membranes.
All Weather/ Empire Base Sheet	39 3/8" x 65'10"	ASTM D4601 Type II	SBS modified, fiberglass reinforced, base/ply sheet.
Flintlastic Poly SMS Base Sheet	39 3/8" x 64'3"	ASTM D4601 Type II	SBS modified, polyester reinforced base/ply sheet.
Glasbase Base Sheet	39 3/8" x 98'9"	ASTM D4601 Type II	Fiberglass reinforced, asphalt coated base/ply sheet.
Flintlastic Base 20	39 3/8" x 49'6"	ASTM D6163 Grade S Type I	SBS modified, fiberglass reinforced base/ply sheet.
Flintlastic Ultra Poly SMS Base Sheet	39 3/8" x 32'10"	ASTM D6164 Grade S Type I	SBS modified, polyester reinforced base/ply sheet.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
DensDeck, DensDeck Prime	Water resistant gypsum board	Georgia Pacific Gypsum LLC
ENRGY 3, ENRGY 3 25 PSI	Polyisocyanurate foam insulation	Johns Manville Corp.
Fesco Board	Expanded perlite and fiber insulation	Johns Manville Corp.
Ultra-Max & Multi-Max FA-3	Polyisocyanurate foam insulation	RMax Operating, LLC.
FlintBoard ISO	Polyisocyanurate foam insulation	CertainTeed LLC
$FlintBoard_H$ ISO	Polyisocyanurate foam insulation	CertainTeed LLC
Structodek High Density Fiberboard Insulation	High Density Wood Fiber insulation board.	Blue Ridge Fiberboard, Inc.
SECUROCK Gypsum-Fiber Roof Board	Gypsum insulation	USG Corp.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Dekfast DF-#12 PH3, Dekfast DF-#14-PH3, & Dekfast DF-#15-PH3	Insulation fastener		SFS Group USA
2.	Dekfast PLT-H-2-7/8	Galvalume AZ50 steel plate	2 $^{7}/_{8}$" x 3 ¼"	SFS Group USA
3.	#12 Standard Roofgrip & #14 Roofgrip Fasteners	Insulation fastener for wood and steel.		OMG, Inc.
4.	AccuTrac Hextra	Insulation fastener for wood and steel		OMG, Inc.
5.	3 in. Ribbed Galvalume Plate	Galvalume stress plate.	3" round	OMG, Inc.
6.	AccuTrac Plate	Galvalume stress plate.	3" square	OMG, Inc.
7.	3 in. Round Metal Plate	Galvalume AZ50 steel plate	3" round	OMG, Inc.
8.	OMG Plastic Plate	Polypropylene plastic plate	3" round	OMG, Inc.
9.	Trufast #12 DP & Trufast #14 HD Fastener	Insulation fastener for wood and steel decks		Altenloh, Brinck & Co. U.S., Inc.
10.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 steel plate	3" round	Altenloh, Brinck & Co. U.S., Inc.
11.	FlintFast #12 & #14	Insulation fastener for wood and steel decks		CertainTeed LLC
12.	FlintFast 3" Insulation Plate	Galvalume AZ50 steel plate	3" round	CertainTeed LLC

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Trinity|ERD	TAS 117 (B)	3503.10.06	10/10/06
	TAS 117 (B)	O6490.04.07-R1	06/27/07
	TAS 117 (B)/ ASTM D6862	C8500SC.11.07	11/30/07
	TAS 114	C8370.08.08	08/19/08
	ASTM Physical Properties	C10080.09.08-R4	03/25/10
	TAS 114-H / TAS 117-B	C30560.06.10	06/10/10
	TAS 117	C35500.02.11	02/09/11
	TAS 114 / TAS 117	3513.08.02-R1	03/17/11
	FM 4470 / TAS 114	03515.07.03-1-R1	06/27/12
	ASTM D4601	C40050.09.12-1	09/28/12
	ASTM D1970	C40050.09.12-2	09/28/12
	ASTM D3909	C4420.03.13	03/22/13
	ASTM D2178	C47250.03.14	03/26/14
	ASTM D1876, / TAS 114, / FM 4474	C45620.03.14	03/27/14
	ASTM D1876	C35460.05.11-R1	05/20/15
	ASTM D3909	CTR-SC11145.09.16-2A	09/19/16
	ASTM D3909	CTR-SC11145.09.16-2B	09/19/16
	ASTM D4601	CTR-SC11145.09.16-3A	09/19/16
	ASTM D4897	CTR-SC11145.09.16-4	09/19/16
Factory Mutual Research Corp.	4470	3Y8A1.AM	09/30/96
	4454	0D3A3.AM	04/04/97
	4470	1D7A4.AM	11/09/98
	4470	2D0A0.AM	12/23/98
	4470	3021759	06/03/05
	4470	3039046	06/15/10
	4470	3040761	11/16/10
Underwriters Laboratories, Inc.	UL 790	R11656	01/11/13
PRI Construction Materials Technologies LLC	ASTM D6163	CTC-066-02-01	08/09/11
	ASTM D6164	CTC-068-02-01	08/09/11
	ASTM D2178	CTC-123-02-01	03/13/12
	ASTM D4601	CTC-124-02-01	03/13/12
	ASTM D4601	CTC-127-02-01	03/13/12
	ASTM D6164	CTC-190-02-01	12/02/13
	ASTM D1970	CTC-199-02-01	01/22/14

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Factory Mutual Research Corp.	RoofNav Listings	C(3), C(4), C(5)	12/15/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	B(2), C(2), D(2)	12/15/16

APPROVED ASSEMBLIES:

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. steel

System Type B(1): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Fesco Board Minimum ¾" thick	**1 or 3**	**1:2 ft²**
Structodek High Density Fiberboard Insulation Minimum ½" thick	**1, 3, 9 or 11**	**1:2 ft²**

Note: Base 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).

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any of the insulations listed for Base Layer, above.		
DensDeck, DensDeck Prime Minimum ¼" thick	**N/A**	**N/A**

Note: Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (Optional) Install one ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or Glasbase Base Sheet directly over the top layer of insulation. Adhere with any approved mopping asphalt at an application rate of 20-35 lbs./sq.

Ply Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Any coating, listed below, used as a surfacing must be listed within a current NOA. Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

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

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck is secured to steel supports spaced maximum 5 ft. o.c. with 5/8" puddle welds with weld washers or with Teks 4 fasteners spaced 6" o.c. Side laps are secured with Teks 1 fasteners spaced maximum 20" o.c.

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

System Type B(2): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam-II, ENRGY 3, Multi-Max FA-3, H-Shield, FlintBoard ISO, FlintBoard$_H$ ISO		
Minimum 1.5" thick	**1, 3, 9 or 11**	**1:1.33**

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

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Fesco Board		
Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Insulation		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (Optional) Install one ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or Glasbase Base Sheet directly over the top layer of insulation. Adhere with any approved mopping asphalt at an application rate of 20-35 lbs./sq.

Ply Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Any coating, listed below, used as a surfacing must be listed within a current NOA. Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

Maximum Design Pressure: -52.5 psf (For Fesco Board) (See General Limitation #7)
-67.5 psf (Structodek High Density Fiberboard Insulation) (See General Limitation #7)

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. steel

System Type C(1): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam-II, ENRGY 3, Ultra-Max, H-Shield, FlintBoard ISO, FlintBoard$_H$ ISO Minimum 1" thick	**N/A**	**N/A**
Fesco Board Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Insulation Minimum ½" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam II, FlintBoard ISO Minimum 1.3" thick	**1, 3**	**1:3 ft²**
ENRGY 3, H-Shield, FlintBoard$_H$ ISO Minimum 1.4" thick	**1, 3, 9 or 11**	**1:3 ft²**
Ultra-Max Minimum 1.5" thick	**1, 3, 4, 9 or 11**	**1:2.9 ft²**
Fesco Board Minimum ¾" thick	**1, 3, 9 or 11**	**1:2 ft²**
Structodek High Density Fiberboard Insulation Minimum ½" thick	**1, 3, 9 or 11**	**1:2 ft²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) Install one ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or Glasbase Base Sheet directly over the top layer of insulation. Adhere with any approved mopping asphalt at an application rate of 20-35 lbs./sq.

Ply Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Any coating, listed below, used as a surfacing must be listed within a current NOA. Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

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

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga., Type B, Grade 33 steel, fastened 6" o.c. with 5/8" puddle welds and washers to steel supports spaced maximum 6 ft. o.c. Side laps are secured with Teks 1 fasteners spaced maximum 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table

System Type C(2): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, ENRGY 3, Multi-Max FA-3, H-Shield, FlintBoard ISO, FlintBoard$_H$ ISO Minimum 1.5" thick	**1, 3, 9 (#14) or 11 (#14)**	**1:1.33 ft²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered.

Ply Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Any coating, listed below, used as a surfacing must be listed within a current NOA. Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

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

Deck Type 2I: Steel, Insulated

Deck Description:

1. 22 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 62" o.c.
2. 20 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maxim span of 69" o.c.
3. 18 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 72" o.c.
4. 18-22 ga., Type WR, Grade 80 steel deck fastened to structural supports having a maximum span of 72" o.c.

All of the above steel deck options are attached to structural supports with Traxx/5 screws and ¾" diameter washers spaced maximum 6 in. o.c. Side laps are secured with Teks 1 fasteners spaced maximum 12" o.c.

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

System Type C(3): All layers of insulation simultaneously attached

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
H-Shield, Flintboard ISO, ACFoam-II, or PSI-25 Minimum 1.5" thick	**11 (#14) & 12**	**1:1.33**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime Minimum ½" thick	**9 (#14) or 11 (#14)**	**1:1.33 ft²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Ply Sheet: (Optional) One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

Maximum Design Pressure: -112.5 psf (See General Limitation #7)

Deck Type 2I: Steel, Insulated

Deck Description:

1. 22 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 52" o.c.
2. 20 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 58" o.c.
3. 18 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 68" o.c.
4. 18-20 ga., Type WR, Grade 80 steel deck fastened to structural supports having a maximum span of 72" o.c.

All of the above steel deck options are attached to structural supports with Traxx/5 screws and ¾" diameter washers spaced maximum 6 in. o.c. Side laps are secured with Teks 1 fasteners spaced maximum 12" o.c.

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

System Type C(4): All layers of insulation simultaneously attached

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
H-Shield, Flintboard ISO, ACFoam-II, or PSI-25 Minimum 1.5" thick	**11 (#14) & 12**	**1:1.33**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime Minimum ½" thick	**9 (#14) or 11 (#14)**	**1:1 ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**9 (#14) or 11 (#14)**	**1:1.33 ft²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Ply Sheet: (Optional) One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

Maximum Design Pressure: -157.5 psf (See General Limitation #7)

Deck Type 2I: Steel, Insulated

Deck Description:

1. 22 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 50" o.c.
2. 20 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 56" o.c.
3. 18 ga., Type WR, Grade 33 steel deck fastened to structural supports having a maximum span of 65" o.c.
4. 18-20 ga., Type WR, Grade 80 steel deck fastened to structural supports having a maximum span of 72" o.c.

All of the above steel deck options are attached to structural supports with Traxx/5 screws and ¾" diameter washers spaced maximum 6 in. o.c. Side laps are secured with Teks 1 fasteners spaced maximum 12" o.c.

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

System Type C(5): All layers of insulation simultaneously attached

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
H-Shield, Flintboard ISO, ACFoam-II, or PSI-25 Minimum 1.5" thick	**11 (#14) & 12**	**1:1.33**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime Minimum ½" thick	**9 (#14) or 11 (#14)**	**1:1 ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**9 (#14) or 11 (#14)**	**1:1.33 ft²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq

Ply Sheet: (Optional) One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq

Cap Sheet: (Optional) One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-25 lbs./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq.
2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.

Maximum Design Pressure: -172.5 psf (See General Limitation #7)

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, (*See Fastening Options Below*) steel deck fastened to structural supports spaced a maximum 5 ft. o.c. with Traxx/5 screws spaced maximum 6 in. o.c. Side laps are fastened with Traxx/1 screws spaced maximum 20 in. o.c.

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

System Type D(1): All layers of insulation and base sheet simultaneously attached

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam-II, ENRGY 3, Multi-Max FA-3, H-Shield, FlintBoard ISO, FlintBoard$_H$ ISO Minimum 1.5" thick	**N/A**	**N/A**

(Optional) Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Insulation Minimum ½" thick	**N/A**	**N/A**
Fesco Board Minimum ¾" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime Minimum ¼" thick	**N/A**	**N/A**

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet 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.

Base Sheet: One ply of Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, or Flintlastic Ultra Poly SMS Base Sheet mechanically attached as detailed below.

Fastening #1: OMG #14 Roofgrip fasteners with OMG 3 in. Round Metal Plates, Dekfast 14 with Dekfast PLT-H-2-7/8 plates, Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates, or FlintFast #14 fasteners with FlintFast 3" Insulation Plates at a 4" side lap 6" o.c. and two rows staggered in the center of the sheet, 6" o.c.
Minimum Grade 33 steel deck. ***(Maximum Design Pressure -67.5 psf; See General Limitation #7).***

Fastening #2:	(*Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet only*) OMG #14 Roofgrip Fasteners and OMG 3" Round Metal Plates, Dekfast DF-#14 PH3 with Dekfast PLT-H-2-7/8 plates, OMG #14 Roofgrip with 3 in. Ribbed Galvalume Plates, or Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates, or FlintFast #14 fasteners with FlintFast 3" Insulation Plates at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet, 12" o.c. **Minimum Grade 80 steel deck.** ***(Maximum Design Pressure -120 psf; See General Limitation #7.)***
Ply Sheet:	(Optional if Cap Sheet used) One ply of All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or two or more plies of Flintglas Ply Sheet 4 or Flintglas Premium Ply 6 adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.
Cap Sheet: (Optional)	One ply of Flintglas MS Cap Sheet adhered in a full mopping of approved asphalt at an application rate of 20-35 lbs./sq.
Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Gravel or slag applied at 400 lb./sq. and 300 lb./sq. respectively in a flood coat of approved asphalt at 60 lb./sq. 2. A two part coating consisting of a base coat of APOC #300 Non-Fibered Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibered Aluminum Roof Coating.
Maximum Design Pressure:	See Fastening Options Above

STEEL DECK SYSTEM LIMITATIONS:

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

GENERAL LIMITATIONS:

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

END OF THIS ACCEPTANCE