



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

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786)315-2590 F (786) 31525-99

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

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 Wood 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. 17-1003.15 and consists of pages 1 through 22.  
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 20-0723.19  
Expiration Date: 06/19/23  
Approval Date: 09/17/20  
Page 1 of 22

## ROOFING SYSTEM APPROVAL

**Category:** Roofing  
**Sub-Category:** Built-Up Roofing  
**Material:** Fiberglass  
**Deck Type:** Wood  
**Maximum Design Pressure:** -60 psf

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Black Diamond™ Base Sheet	36" x 68'7"; Roll weight: 78 lbs. (2 squares)	ASTM D 1970	Self-adhering fiberglass reinforced modified bitumen base sheet
Flintlastic Ultra Glass SA	39 3/8" x 33'11"	ASTM D 1970	Self-adhering, fiberglass reinforced, SBS modified bitumen base/ply sheet.
Flintglas Ply 4	36" x 164'7"; Roll weight: 40/55 lbs. (5 squares)	ASTM D 2178 Type IV UL Type G1	Fiberglass, asphalt impregnated ply sheet.
Flintglas Premium Ply 6	39 3/8" x 164'7"; Roll weight: 40 lbs. (5 squares)	ASTM D 2178 Type VI UL Type G1	Fiberglass, asphalt impregnated ply sheet.
Flintglas® MS Cap CoolStar	36" X 32'10"; Roll Weight: 78 lbs. (1 square)	ASTM D 3909 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. Covered with reflective CoolStar Coating.
Flintglas® MS Cap Sheet	36" X 32'10"; Roll Weight: 78 lbs. (1 square)	ASTM D 3909 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.
Yosemite® Venting Base Sheet	39 3/8" x 32'10"	ASTM D 3909 ASTM D 4897 UL Type G3	Mineral surfaced fiberglass reinforced buffer sheet.
Flintlastic Poly SMS Base Sheet	39 3/8" x 64'3"	ASTM D 4601 Grade S Type II	SBS modified, polyester reinforced base/ply sheet.
Glasbase™ Base Sheet	36" x 98'9"; Roll weight: 69 lbs. (3 squares)	ASTM D 4601	Asphalt coated, fiberglass base sheet.
All Weather/Empire Base Sheet	36" x 65'10"; Roll weight: 86 lbs. (2 squares)	ASTM D 4601 Type II	SBS modified, fiberglass reinforced base/ply sheet.



Flexiglas Base Sheet	36" x 98'9"; Roll weight: 90 lbs. (3 squares)	ASTM D 4601 Type II	SBS modified, fiberglass reinforced base/ply sheet.
Flintlastic Base 20	36" x 98'9"; Roll weight: 90 lbs. (3 squares)	ASTM D 6163 Grade S Type I	SBS modified, fiberglass reinforced base/ply sheet.
Flintlastic Ultra Poly SMS Base Sheet	39 3/8" x 32'10"	ASTM D 6164 Grade S Type I	SBS modified, polyester reinforced base/ply sheet.

## APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
FlintBoard ISO	Polyisocyanurate foam insulation	CertainTeed LLC.
FlintBoard <sub>H</sub> ISO	Polyisocyanurate foam insulation	CertainTeed LLC.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
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.
Ultra-Max, Multi-Max FA-3	Polyisocyanurate foam insulation	RMax Operating, LLC.
Structodek High Density Fiberboard Roof Insulation	High Density Wood Fiber insulation board.	Blue Ridge Fiberboard, Inc.
EnergyGuard™ Perlite Roof Insulation	Perlite insulation board	GAF
Fesco Board	Expanded perlite and fiber insulation	Johns Manville Corp.



**APPROVED FASTENERS:****TABLE 3**

<b><u>Fastener Number</u></b>	<b><u>Product Name</u></b>	<b><u>Product Description</u></b>	<b><u>Dimensions</u></b>	<b><u>Manufacturer (With Current NOA)</u></b>
1.	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 1/4"	SFS Group USA
3.	Dekfast PLT-P-R-3	Polypropylene plate	3" x 3 1/4"	SFS Group USA
4.	#12 Standard Roofgrip & #14 Roofgrip	Insulation fastener for wood and steel.		OMG, Inc.
5.	AccuTrac Hextra	Insulation fastener for wood and steel		OMG, Inc.
6.	3 in. Ribbed Galvalume Plate	Galvalume stress plate.	3" round	OMG, Inc.
7.	AccuTrac Plate	Galvalume stress plate.	3" square	OMG, Inc.
8.	3 in. Round Metal Plate	Galvalume AZ50 steel 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.

**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
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
	FM 4470 / TAS 114	C8370.08.08-R1	10/05/09
	ASTM Physical Properties	C10080.09.08-R4	03/25/10
	TAS 117 (B)	C35500.02.11	02/09/11
	FM 4470 / TAS 114	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	C44200.03.13	03/22/13
	ASTM D2178	C47250.03.14	03/26/14
	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.	FMRC 4470	J.I. #3Y8A1.AM	03/23/96
	FMRC 4454	J.I. 0D3A3.AM	04/04/97
	FMRC 4470	J.I. 1D7A4.AM	11/09/98
	FMRC 4470	J.I. 2D0A0.AM	12/23/98
Underwriters Laboratories, Inc.	UL 790	R11656	01/11/13
PRI Construction Materials Technologies LLC	ASTM D6163	CTC-066-02-01	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

## APPROVED ASSEMBLIES:

<b>Deck Type II:</b>	Wood, Insulated
<b>Deck Description:</b>	$\frac{19}{32}$ " or greater plywood or wood plank
<b>System Type A(1):</b>	Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

### All General and System Limitations apply.

**Anchor sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet or Yosemite Venting Base Sheet mechanically attached as detailed below.

**Fastening:** Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. in the lap and two rows staggered in the center of the sheet 12" o.c.

One or more layers of any of the following insulations.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
FlintBoard <sub>H</sub> ISO, ENRGY 3, Ultra-Max, H-Shield Minimum 1" thick	N/A	N/A
Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum $\frac{3}{4}$ " thick	N/A	N/A
Structodek High Density Fiberboard Roof Insulation Minimum $\frac{1}{2}$ " thick	N/A	N/A
DensDeck, Dens-Deck Prime Minimum $\frac{1}{4}$ " thick	N/A	N/A

**Note:** All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:  
(Optional)** Install one ply of All Weather/Empire Base Sheet, Flexiglas 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, Flexiglas 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 or Flintglas MS Cap CoolStar 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-Fibred Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibred Aluminum Roof Coating.

**Maximum Design  
Pressure:**

-45 psf (See General Limitation #9)



**Deck Type 1I:** Wood, Insulated

**Deck Description:** <sup>19</sup>/<sub>32</sub>" or greater plywood or wood plank attached using approved nails spaced 6" o.c. at wood joists spaced maximum 24" o. c

**System Type A(2):** Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

**All General and System Limitations apply.**

**Anchor sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below.

**Fastening:** Anchor sheet shall be lapped 4" and fastened with 11 ga. annular ring shank nails and approved tin caps 8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c.

One or more layers of any of the following insulations.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft<sup>2</sup></u>
<b>ENRGY 3, Multi-Max FA-3, ACFoam-II, FlintBoard ISO, FlintBoard<sub>H</sub> ISO, H-Shield</b> Minimum 1.5" thick	N/A	N/A
<b>Fesco Board or EnergyGuard™ Perlite Roof Insulation</b> Minimum ¾" thick	N/A	N/A
<b>Structodek High Density Fiberboard Roof Insulation</b> Minimum ½" thick	N/A	N/A
<b>DensDeck, DensDeck Prime</b> Minimum ¼" thick	N/A	N/A

**Note:** All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:**  
**(Optional)** Install one ply of All Weather/Empire Base Sheet, Flexiglas 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 20-40 lbs./sq.

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 20-40 lbs./sq.





**Cap Sheet:  
(Optional)**

One ply of Flintglas MS Cap Sheet or Flintglas MS Cap CoolStar 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-Fibred Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibred Aluminum Roof Coating.

**Maximum Design  
Pressure:**

-52.5 psf (See General Limitation #7)



**Deck Type 1I:** Wood, Insulated

**Deck Description:**  $\frac{19}{32}$ " or greater plywood or wood plank attached using approved nails spaced 6" o.c. at wood joists spaced maximum 24" o. c

**System Type A(3):** Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

**All General and System Limitations apply.**

**Anchor sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below.

**Fastening:** Anchor sheet shall be lapped 4" and fastened with 11 ga. annular ring shank nails and approved tin caps 8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c.

One or more layers of any of the following insulations.

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft<sup>2</sup></u>
ENRGY 3, Multi-Max FA-3, ACFoam-II, FlintBoard ISO, FlintBoard <sub>H</sub> ISO, H-Shield Minimum 1.5" thick	N/A	N/A

**Note:** All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**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, Flexiglas 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 20-40 lbs./sq.

**Cap Sheet: (Optional)** One ply of Flintglas MS Cap Sheet or Flintglas MS Cap CoolStar adhered in a full mopping of approved asphalt at an application rate of 20-40 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)



<b>Deck Type 1I:</b>	Wood, Insulated
<b>Deck Description:</b>	<sup>19</sup> / <sub>32</sub> " or greater plywood or wood plank attached using approved nails spaced 4" o.c. at wood joists spaced maximum 24" o. c.
<b>System Type A(4):</b>	Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

**All General and System Limitations apply.**

**Anchor Sheet** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below.

**Fastening:** Anchor sheet shall be lapped 4" and fastened with 11 ga. annular ring shank nails and approved tin caps 8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c.

One or more layers of any of the following insulations.

<b><u>Insulation Layer</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
<b>ENRGY 3, Multi-Max FA-3, ACFoam-II, FlintBoard ISO, FlintBoard<sub>H</sub> ISO, H-Shield Minimum 1.5" thick</b>	N/A	N/A
<b>Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	N/A	N/A
<b>Structodek High Density Fiberboard Roof Insulation Minimum ½" thick</b>	N/A	N/A
<b>DensDeck, DensDeck Prime Minimum ¼" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:  
(Optional)** Install one ply of All Weather/Empire, Flexiglas 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 20-40 lbs./sq.

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 20-40 lbs./sq.



**Cap Sheet:  
(Optional)**

One ply of Flintglas MS Cap Sheet or Flintglas MS Cap CoolStar adhered in a full mopping of approved asphalt at an application rate of 20-40 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:**

-60 psf (See General Limitation #7)



<b>Deck Type II:</b>	Wood, Insulated
<b>Deck Description:</b>	<sup>19</sup> / <sub>32</sub> " or greater plywood or wood plank.
<b>System Type B:</b>	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.

<b><u>Base Insulation Layer</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
<b>ACFoam-II, FlintBoard ISO Minimum 1.3" thick</b>	<b>1, 4, 5</b>	<b>1:3 ft<sup>2</sup></b>
<b>ENRGY 3, H-Shield, FlintBoard<sub>H</sub> ISO Minimum 1.4" thick</b>	<b>1, 4, 5, 9 or 11</b>	<b>1:3 ft<sup>2</sup></b>
<b>Ultra-Max Minimum 1.5" thick</b>	<b>1, 4, 5, 9 or 11</b>	<b>1:2.9 ft<sup>2</sup></b>
<b>Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	<b>1, 4, 5, 9 or 11</b>	<b>1:2 ft<sup>2</sup></b>
<b>Structodek High Density Fiberboard Roof Insulation Minimum ½" thick</b>	<b>1, 4, 5, 9 or 11</b>	<b>1:2 ft<sup>2</sup></b>

**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).

<b><u>Top Insulation Layer (Optional)</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
---	--	---

**Any of the insulations listed for Base Layer, above.**

**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 ft<sup>2</sup>. 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.

<b>Base Sheet: (Optional)</b>	Install one ply of All Weather/Empire Base Sheet, Flexiglas 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, Flexiglas 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 or Flintglas MS Cap CoolStar 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 1I:** Wood, Insulated  
**Deck Description:** <sup>19</sup>/<sub>32</sub>" or greater plywood or wood plank.  
**System Type C:** All layers of insulation simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b><u>Base Insulation Layer (Optional)</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
ACFoam II, ENRGY 3, Ultra-Max, FlintBoard ISO, FlintBoard <sub>H</sub> ISO, H-Shield Minimum 1" thick	N/A	N/A
Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick	N/A	N/A
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	N/A	N/A

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

<b><u>Top Insulation Layer</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
ACFoam-II, FlintBoard ISO Minimum 1.3" thick	1, 4, 5	1:3 ft <sup>2</sup>
FlintBoard <sub>H</sub> ISO, ENRGY 3, H-Shield Minimum 1.4" thick	1, 4, 5, 9 or 11	1:3 ft <sup>2</sup>
Ultra-Max Minimum 1.5" thick	1, 4, 5, 9 or 11	1:2.9 ft <sup>2</sup>
Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick	1, 4, 9 or 11	1:2 ft <sup>2</sup>
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	1, 4, 5, 9 or 11	1:2 ft <sup>2</sup>

**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:** Install one ply of All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20,  
**(Optional)** 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 20-40 lbs./sq.

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 20-40 lbs./sq.

**Cap Sheet:  
(Optional)**

One ply of Flintglas MS Cap Sheet or Flintglas MS Cap CoolStar adhered in a full mopping of approved asphalt at an application rate of 20-40 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 1I:** Wood, Insulated  
**Deck Description:**  $1\frac{9}{32}$ " or greater plywood or wood plank.  
**System Type D:** 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.

<b><u>Base Insulation Layer (Optional)</u></b>	<b><u>Insulation Fasteners (Table 3)</u></b>	<b><u>Fastener Density/ft<sup>2</sup></u></b>
ACFoam-II, ENRGY 3, ENRGY 3 25 PSI, FlintBoard ISO, FlintBoard <sub>H</sub> ISO, H-Shield Minimum 1.5" thick	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
Fesco Board or EnergyGuard™ Perlite Roof Insulation Minimum $\frac{3}{4}$ " thick	N/A	N/A
Structodek High Density Fiberboard Roof Insulation Minimum $\frac{1}{2}$ " thick	N/A	N/A
DensDeck, DensDeck Prime Minimum $\frac{1}{4}$ " thick	N/A	N/A

**Note:** All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

**Base Sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet or Yosemite Venting Base Sheet mechanically attached as detailed below.

**Fastening:** OMG #12 Standard Roofgrip or #14 Roofgrip fasteners with OMG 3 in. Round Metal Plates, Dekfast DF-#14 PH3 or Dekfast DF-#15 PH3 with Dekfast PLT-H-2-7/8 Plates, Trufast #12 DP or Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates or FlintFast #12 & #14 Fasteners with FlintFast 3" Insulation Plates spaced 4" o.c. at a 4" side lap and two staggered rows in the center of the sheet, 24" o.c.

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 or Flintglas MS Cap CoolStar 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-Fibred Emulsion at rate of 3 gal./sq.; surfaced with 1 gal./sq. APOC#212 Fibred Aluminum Roof Coating.

**Maximum Design  
Pressure:**

-45 psf (See General Limitation #9)



**Deck Type 1I:** Wood, Non-Insulated  
**Deck Description:** <sup>19</sup>/<sub>32</sub>" or greater plywood or wood plank.  
**System Type E(1):** Base sheet mechanically attached.

**All General and System Limitations apply.**

**Base Sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below.

**Fastening:** Base sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. in the lap and two rows staggered in the center of the sheet 12" o.c.

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 or Flintglas MS Cap CoolStar 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 1I:** Wood, Non-Insulated  
**Deck Description:** <sup>19</sup>/<sub>32</sub>" or greater plywood or wood plank attached using approved nails spaced 6" o.c. at wood joists spaced maximum 24" o. c.  
**System Type E(2):** Base sheet mechanically attached.

**All General and System Limitations apply.**

**Base Sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below

**Fastening:** Base sheet shall be lapped 4" and fastened with 11 ga. annular ring shank nails and approved tin caps 8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 or Flintglas MS Cap CoolStar 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 1I:** Wood, Non-Insulated  
**Deck Description:** <sup>19</sup>/<sub>32</sub>" or greater plywood or wood plank attached using approved nails spaced 4" o.c. at wood joists spaced maximum 24" o. c.  
**System Type E(3):** Base sheet mechanically attached.

**All General and System Limitations apply.**

**Base Sheet:** All Weather/Empire Base Sheet, Flexiglas Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet or Flintglas Premium Ply 6 mechanically attached as detailed below

**Fastening:** Base sheet shall be lapped 4" and fastened with 11 ga. annular ring shank nails and approved tin caps 8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c

**Ply Sheet:** One ply of All Weather/Empire Base Sheet, Flexiglas 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 20-40 lbs./sq.

**Cap Sheet: (Optional)** One ply of Flintglas MS Cap Sheet or Flintglas MS Cap CoolStar adhered in a full mopping of approved asphalt at an application rate of 20-40 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:** -60 psf (See General Limitation #7)

## WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

## 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**

