



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

CertainTeed Corporation
18 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 Modified Bitumen Roofing Systems over Cementitious Wood Fiber 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. 14-0224.06 and consists of pages 1 through 18.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 14-0529.04
Expiration Date: 06/19/18
Approval Date: 10/08/15
Page 1 of 18

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	APP/SBS
Deck Type:	Wood
Maximum Design Pressure:	-67.5 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>
All Weather/Empire Base Sheet	39 ³ / ₈ " x 65' 10"; Roll weight: 70 lbs. (2 squares)	ASTM D 4601 Type II UL Type G2	Asphalt coated, fiberglass reinforced base sheet.
Flexiglas Base Sheet	39 ³ / ₈ " x 98' 9"; Roll weight: 90 lbs. (3 squares)	ASTM D 4601, Type II UL Type G2	Modified Bitumen coated fiberglass base sheet.
Flintlastic Base 20	39 ³ / ₈ " x 49' 6"; Roll weight: 90 lbs. (1.5 squares)	ASTM D 6163, Grade S, Type I	Modified Bitumen coated fiberglass base sheet.
Flintglas Ply Sheet Type IV	39 ³ / ₈ " x 164' 7"; Roll weight: 38 lbs. (5 squares)	ASTM D 2178 Type IV UL Type G1	Fiberglass, asphalt impregnated ply sheet.
Flintglas Premium Ply Sheet Type VI	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.
Flintlastic STA	39 ³ / ₈ " x 32' 10"; Roll weight: 87 lbs. (1 square)	ASTM D 6222, Grade S, Type I	Smooth surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application.
Flintlastic GTA	39 ³ / ₈ " x 32' 10"; Roll weight: 105 lbs. (1 square)	ASTM D 6222, Grade G, Type I	Granule surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application.
Flintlastic GTA-FR	39 ³ / ₈ " x 32' 10"; Roll weight: 105 lbs. (1 square)	ASTM D 6222, Grade G, Type I	Granule surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application.
Flintlastic GMS	39 ³ / ₈ " x 32' 10"; Roll weight: 94 lbs. (1 square)	ASTM D 6164, Grade G, Type I	Granule surfaced SBS Modified Bitumen membrane with non-woven polyester mat reinforcement for mop application.

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>
Flintlastic Premium GMS	39 3/8" x 32' 10"; Roll weight: 101 lbs. (1 square)	ASTM D 6164, Grade G, Type II	Granule surfaced SBS Modified Bitumen membrane with non-woven polyester mat reinforcement for mop application.
Flintlastic FR-P	39 3/8" x 32' 10"; Roll weight: 101 lbs. (1 square)	ASTM D 6164, Grade G, Type I	Fire resistant, granule surfaced SBS Modified Bitumen Membrane with non-woven polyester mat reinforcement for mop application.
Flintlastic Premium FR-P	39 3/8" x 32' 10"; Roll weight: 101 lbs. (1 square)	ASTM D 6164, Grade G, Type II	Fire resistant, granule surfaced SBS Modified Bitumen Membrane with non-woven polyester mat reinforcement for mop application.
Flintlastic FR Dual Cap	39 3/8" x 32' 10"; Roll weight: 103 lbs. (1 square)	ASTM D 6162, Grade G, Type I	Granule surfaced SBS modified bitumen membrane with a nonwoven polyester/fiberglass composite mat reinforcement for use in cold or mop applications.
Flintlastic FR Cap 30	39 3/8" x 32' 10"; Roll weight: 86 lbs. (1 square)	ASTM D 6163, Grade G, Type I	Fire resistant, granule surfaced SBS Modified Bitumen membrane with fiberglass mat reinforcement for mop applications.
Flintlastic FR Cap 30 T	39 3/8" x 32' 10"; Roll weight: 100 lbs. (1 square)	ASTM D6163, Grade G, Type I	Granule surfaced SBS Modified Bitumen membrane with fiberglass mat reinforcement for torch application.
Flintlastic Base 20 T	39 3/8" x 33'; Roll Weight: 81 lbs. (1 square)	ASTM D6163, Grade S, Type I	Modified Bitumen, coated fiberglass base sheet for torch application.
Flintlastic FR Cap 30 CoolStar	39 3/8" x 32' 10"; Roll weight: 88 lbs. (1 square)	ASTM D 6163, Grade G, Type I	Fire resistant, granule surfaced SBS Modified Bitumen membrane with fiberglass mat reinforcement for mop applications. Covered with reflective CoolStar Coating.
Flintlastic FR Cap 30 T CoolStar	39 3/8" x 32' 10"; Roll weight: 102 lbs. (1 square)	ASTM D 6163, Grade G, Type I	Fire resistant, granule surfaced SBS Modified Bitumen membrane with fiberglass mat reinforcement for mop applications. Covered with reflective CoolStar Coating.



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>
Flintlastic GTA CoolStar	39 3/8" x 32' 10"; Roll weight: 106 lbs. (1 square)	ASTM D 6222, Grade G, Type I	Granule surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application. Covered with reflective CoolStar Coating.
Flintlastic GTA-FR CoolStar	39 3/8" x 32' 10"; Roll weight: 106 lbs. (1 square)	ASTM D 6222 Grade G, Type I	Granule surfaced APP Modified Bitumen membrane with non-woven polyester mat reinforcement for torch application. Covered with reflective CoolStar Coating.
Flintlastic GMS CoolStar	39 3/8" x 32' 10"; Roll weight: 97 lbs. (1 square)	ASTM D 6164, Grade G, Type I	Granule surfaced SBS Modified Bitumen membrane with non-woven polyester mat reinforcement for mop application. Covered with reflective CoolStar Coating.
Flintlastic Premium GMS CoolStar	39 3/8" x 32' 10"; Roll weight: 103 lbs. (1 square)	ASTM D 6164, Grade G, Type II	Granule surfaced SBS Modified Bitumen membrane with non-woven polyester mat reinforcement for mop application. Covered with reflective CoolStar Coating.
Flintlastic FR-P CoolStar	39 3/8" x 32' 10"; Roll weight: 103 lbs. (1 square)	ASTM D 6164, Grade G, Type I	Fire resistant, granule surfaced SBS Modified Bitumen Membrane with non-woven polyester mat reinforcement for mop application. Covered with reflective CoolStar Coating.
Flintlastic Premium FR-P CoolStar	39 3/8" x 32' 10"; Roll weight: 103 lbs. (1 square)	ASTM D 6164 Grade G, Type II	Fire resistant, granule surfaced SBS Modified Bitumen Membrane with non-woven polyester mat reinforcement for mop application. Covered with reflective CoolStar Coating.
Flintlastic Ultra Poly SMS Base Sheet	39 3/8" x 32' 10"; Roll weight: 90 lbs. (1 squares)	ASTM D 6164, Grade S, Type I	Smooth surfaced SBS Modified Bitumen Membrane with non-woven polyester mat reinforcement for mop applications.
Glasbase Base Sheet	39 3/8" x 98' 9"; Roll weight: 75 lbs. (3 squares)	ASTM D 4601, Type II UL Type G2	Asphalt coated, fiberglass base sheet.



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>
Flintlastic Poly SMS Base Sheet	39 3/8" x 64' 3"; Roll weight: 90 lbs. (2 squares)	ASTM D 4601, Grade S, Type II UL Type G2	Modified Bitumen coated polyester base sheet.
Yosemite Venting Base Sheet	39 3/8" x 32' 10"; Roll weight: 85 lbs. (1 square)	ASTM D 3909 ASTM D 4897, Type II UL Type G3	Mineral Surfaced fiberglass reinforced buffer sheet.
Flintlastic APP Base T	39 3/8" x 65' 4"; Roll weight: 100 lbs. (2 squares)	ASTM D6509	Modified Bitumen coated fiberglass base sheet.
Flintlastic Ultra Glass SA	39 3/8" x 33' 11"; Roll weight: 73 lbs. (1 square)	ASTM D1970	Self-adhering, fiberglass reinforced, SBS modified bitumen base/ply sheet.
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

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
FlintBoard ISO	Polyisocyanurate foam insulation	CertainTeed Corp.
FlintBoard _H ISO	Polyisocyanurate foam insulation	CertainTeed Corp.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corp.
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Perlite Insulation	Perlite insulation board	Generic
DensDeck	Water resistant gypsum board	Georgia Pacific Gypsum LLC
DensDeck Prime	Water resistant gypsum board	Georgia-Pacific Gypsum LLC
H-Shield	Polyisocyanurate foam insulation	Hunter Panels LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
ENRGY 3 25 PSI	Polyisocyanurate foam insulation	Johns Manville Corp.
Multi-Max-3	Polyisocyanurate roof insulation	RMax Operating, LLC



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Twin Loc-Nails	Galvanized stress plate and tube with integrated locking staple.	2.7” round x various lengths	Altenloh, Brinck & Co. U.S., Inc.

APPROVED SURFACING/COATING OPTIONS:

TABLE 4

Chosen components must be applied according to manufacturer’s application instructions. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

<u>System Number</u>	<u>Manufacturer</u>	<u>Application</u>
1.	Generic	Gravel applied at 400 lbs/sq., adhered with flood coat of asphalt at 60 lbs/sq.
2.	Generic	Slag applied at 300 lbs/sq., adhered with flood coat of asphalt at 60 lbs/sq.
3.	Karnak Corp.	Karnak (#97 AF) Fibrated Aluminum Roof Coating applied at an application rate of 1.5 gal/sq.
4.	CertainTeed Corp.	FlintCoat A-150 applied at an application rate of 1.5 gal/sq.
5.	Gardner Asphalt Corp.	APOC #212 Fibrated Aluminum Roof Coating applied at an application rate of 1.5 gal/sq.
6.	Gardner Asphalt Corp.	APOC #400 Sunbrite applied at an application rate of 3 gal./sq.



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>	
Factory Mutual Research Corp.	FM 4470	3Y8A1.AM	03/23/96	
	FM 4470	0D3A3.AM	04/04/97	
	FM 4470	2D0A0.AM	12/23/98	
	FM 4470	1D7A4.AM	11/09/98	
	FM 4470	3024177	07/18/06	
	FM 4470	3039046	06/15/10	
	FM 4470	3048520	09/19/13	
Underwriters Laboratories, Inc.	UL 790	R11656	01/11/13	
United States Testing Company	ASTM D 5147	97457-4	06/03/88	
	ASTM D 5147	97-457-2R	12/02/87	
Momentum Technologies, Inc.	ASTM D 4601	AX31G8D	09/05/08	
	ASTM D6164	AX31G8F	06/05/09	
	ASTM D6222	AX31G8G	06/05/09	
	ASTM D 3909/ D 4897	AX31G8C	09/05/08	
Trinity ERD	TAS 114(J)	#3504.06.01-1	06/05/01	
	TAS 117 (B)	3503.10.06	10/10/06	
	TAS 117 (B)	O6490.04.07-R1	06/27/07	
	TAS 114 (H)	Letter	04/05/06	
	TAS 114	3533.01.06	01/06/06	
	TAS 114	3521.07.04-R1	10/26/07	
	TAS 117 (B)/ ASTM D 6862	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 117 & TAS 114	C30560.03.10	03/18/10	
	ASTM D4601	C40050.09.12-1	09/28/12	
	ASTM D1970	C40050.09.12-2	09/28/12	
	ASTM D5147/D4798	C31410.10.10-R1	11/01/12	
	ASTM D5147/D4798	C31410.01.11-1-R1	11/01/12	
	TAS 117 B	C35500.02.11	02/09/11	
	ASTM D1876	C35460.05.11	06/16/11	
	ASTM D1876, TAS 114 (H), TAS 117 (B)	C42110.08.12	08/13/12	
	ASTM D1876, TAS 114 (H), FM 4474	C47320.03.14-R1	04/01/15	
	ASTM D4798	C31410.01.11-2A-R1	02/21/13	
	ASTM D4798	C31410.12.13	12/05/13	
	ASTM D6222	C40050.12.13-R1	12/31/13	
	PRI Construction Materials Technologies LLC	ASTM D6163	CTC-032-02-01	01/22/08
		ASTM D6163	CTC-066-02-01	08/09/11
ASTM D6222		CTC-070-02-01	08/09/11	
ASTM D6164/D4798		CTC-093-02-01	08/09/11	
ASTM D2178		CTC-122-02-01	03/13/12	



EVIDENCE SUBMITTED:

Test Agency/Identifier

Name

Report

Date

ASTM D2178	CTC-123-02-01	03/13/12
ASTM D4601	CTC-127-02-01	03/13/12
ASTM D6509	CTC-116-02-01	04/04/12
ASTM D6163	CTC-128-02-01	06/11/12
ASTM D6163	CTC-129-02-01	06/11/12
ASTM D6164	CTC-132-02-01	06/11/12
ASTM D6164	CTC-162-02-01	05/09/13
ASTM D6164	CTC-161-02-01	05/09/13
ASTM D6162	CTC-183-02-01	10/02/13
ASTM D6164	CTC-190-02-01	12/02/13
ASTM D1970	CTC-199-02-01	01/22/14



APPROVED ASSEMBLIES

- Membrane Type:** APP Modified
- Deck Type 5I:** Cementitious Wood Fiber, Insulated
- Deck Description:** Cementitious Wood Fiber
- System Type A(1):** Anchor sheet mechanically fastened; all insulation layers adhered with approved asphalt

All General and System limitations apply.

- Anchor Sheet:** One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Yosemite Venting Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or All Weather/Empire Base Sheet mechanically attached to the deck with Twin Loc-Nails spaced 7” o.c. in 4” side lap and two staggered rows in center of the sheet, 7” o.c.
- Fastening #1:** Twin Loc-Nails spaced 7” o.c. in 4” side lap and two staggered rows in center of the sheet, 7”o.c.
- Fastening #2:** Twin Loc-Nails spaced 9” o.c. in 4” side lap and two staggered rows in center of the sheet, 9”o.c.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, FlintBoard ISO, ENRGY 3, Multi-Max-3, H-Shield, FlintBoard _H ISO Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
FescoBoard Minimum 0.75” thick	N/A	N/A
Approved High Density Wood Fiberboard Minimum 0.5” 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 ft². 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 All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the insulated substrate with approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Ply Sheet: (Optional)	One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic STA or Flintlastic APP Base T torch adhered.
Membrane:	One ply of Flintlastic GTA, Flintlastic GTA CoolStar, Flintlastic GTA-FR CoolStar or Flintlastic GTA-FR torch adhered to base sheet or ply sheet.
Surfacing: (Optional)	Any of the approved surfacing/coating options listed in Table 4.
Maximum Design Pressure:	-60 psf. (See General Limitation #7.)



Membrane Type: SBS Modified
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(2): Anchor sheet mechanically fastened; all insulation layers adhered with approved asphalt

All General and System limitations apply.

Anchor Sheet: One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or All Weather/Empire Base Sheet mechanically attached to the deck as detailed below.

Fastening #1: Twin Loc-Nails spaced 7” o.c. in 4” side lap and two staggered rows in center of the sheet, 7”o.c.

Fastening #2: Twin Loc-Nails spaced 9” o.c. in 4” side lap and two staggered rows in center of the sheet, 9”o.c.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, FlintBoard ISO, ENRGY 3, Multi-Max-3, H-Shield, FlintBoard _H ISO Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
FescoBoard Minimum 0.75” thick	N/A	N/A
Approved High Density Wood Fiberboard Minimum 0.5” 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 ft². 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 All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the insulated substrate with approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



- Ply Sheet:
(Optional)** One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic Ultra Poly SMS Base Sheet torch applied.
- Membrane:** One ply of Flintlastic GMS, Flintlastic GMS CoolStar, Flintlastic Premium GMS, Flintlastic Premium GMS CoolStar, Flintlastic FR Dual Cap, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar applied to the base sheet or ply sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or Flintlastic FR Cap 30 T or Flintlastic FR Cap 30 T CoolStar torch adhered to base or ply sheet.
- Surfacing:
(Optional)** Any of the approved surfacing/coating options listed in Table 4.
- Maximum Design
Pressure:** -60 psf. (See General Limitation #7.)



Membrane Type: APP Modified
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(3): Anchor sheet mechanically fastened; all insulation layers adhered with approved asphalt

All General and System limitations apply.

Anchor Sheet: One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Yosemite Venting Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintlastic Ultra Poly SMS Base Sheet mechanically attached to the deck as detailed below.

Fastening #1: Twin Loc-Nails spaced 7" o.c. in 4" side lap and two staggered rows in center of the sheet, 7"o.c.

Fastening #2: Twin Loc-Nails spaced 9" o.c. in 4" side lap and two staggered rows in center of the sheet, 9"o.c.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, ENRGY 3, FlintBoard ISO, Multi-Max-3, H-Shield, FlintBoard _H ISO 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 ft². 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:
(Optional)** One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic STA or Flintlastic APP Base T torch adhered.

Membrane: One ply of Flintlastic GTA, Flintlastic GTA CoolStar, Flintlastic GTA-FR or Flintlastic GTA-FR CoolStar torch adhered to base sheet or ply sheet.

**Surfacing:
(Optional)** Any of the approved surfacing/coating options listed in Table 4.

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



Membrane Type: SBS Modified
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(4): Anchor sheet mechanically fastened; all insulation layers adhered with approved asphalt

All General and System limitations apply.

Anchor Sheet: One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Yosemite Venting Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or All Weather/Empire Base Sheet mechanically attached to the deck as detailed below.

Fastening #1: Twin Loc-Nails spaced 7" o.c. in 4" side lap and two staggered rows in center of the sheet, 7"o.c.

Fastening #2: Twin Loc-Nails spaced 9" o.c. in 4" side lap and two staggered rows in center of the sheet, 9"o.c.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, ENRGY 3, FlintBoard ISO, Multi-Max-3, H-Shield, FlintBoard _H ISO 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 ft². 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: (Optional) One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic Ultra Poly SMS Base Sheet torch applied.



Membrane: One ply of Flintlastic GMS, Flintlastic GMS CoolStar, Flintlastic Premium GMS, Flintlastic Premium GMS CoolStar, Flintlastic FR Dual Cap, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic Premium FR-P, Flintlastic Premium FR-P CoolStar, Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar, adhered to ply sheet with approved mopping asphalt applied within the EVT range and at a rate of 20 to 40 lbs./sq. or Flintlastic FR Cap 30 T or Flintlastic FR Cap 30 T CoolStar torch adhered to ply sheet.

**Surfacing:
(Optional)** Any of the approved surfacing/coating options listed in Table 4.

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



Membrane Type: APP Modified
Deck Type 5I: Cementitious Wood Fiber, Non-Insulated
Deck Description: Cementitious Wood Fiber
System Type E(1): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet, Yosemite Venting Base Sheet or All Weather/Empire Base Sheet mechanically fastened to the deck as detailed below:

Fastening #1: Twin Loc-Nails spaced 7" o.c. in 4" side lap and two staggered rows in center of the sheet, 7" o.c.
(Maximum Design Pressure –67.5 psf., See General Limitation #9.)

Fastening #2: Twin Loc-Nails spaced 9" o.c. in 4" side lap and two staggered rows in center of the sheet, 9" o.c.
(Maximum Design Pressure –60 psf., See General Limitation #9.)

**Ply Sheet:
(Optional)** One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic STA or Flintlastic APP Base T torch adhered.

Membrane: One ply of Flintlastic GTA, Flintlastic GTA CoolStar, Flintlastic GTA-FR or Flintlastic GTA-FR CoolStar torch adhered to base sheet or ply sheet.

**Surfacing:
(Optional)** Any of the approved surfacing/coating options listed in Table 4.

Maximum Design Pressure: See Fastening requirements above.



Membrane Type: SBS Modified
Deck Type 5I: Cementitious Wood Fiber, Non-Insulated
Deck Description: Cementitious Wood Fiber
System Type E(2): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, All Weather/Empire Base Sheet, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or Yosemite Venting Base Sheet mechanically fastened to the deck:

Fastening #1: Twin Loc-Nails spaced 7" o.c. in 4" side lap and two staggered rows in center of the sheet, 7" o.c.
(Maximum Design Pressure –67.5 psf., See General Limitation #9.)

Fastening #2: Twin Loc-Nails spaced 9" o.c. in 4" side lap and two staggered rows in center of the sheet, 9" o.c.
(Maximum Design Pressure –60 psf., See General Limitation #9.)

**Ply Sheet:
(Optional)** One ply of All Weather/Empire Base Sheet, Glasbase Base Sheet, Flexiglas Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet, Flintlastic Ultra Poly SMS Base Sheet or one or more plies of Flintglas Ply Sheet Type IV or Flintglas Premium Ply Sheet Type VI adhered to the base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of Black Diamond Base Sheet or Flintlastic Ultra Glass SA self-adhered or Flintlastic Ultra Poly SMS Base Sheet torch applied.

Membrane: One ply of Flintlastic GMS, Flintlastic GMS CoolStar, Flintlastic Premium GMS, Flintlastic Premium GMS CoolStar, Flintlastic FR Dual Cap, Flintlastic FR-P, Flintlastic FR-P CoolStar, Flintlastic FR Cap 30, Flintlastic FR Cap 30 CoolStar applied to the base sheet or ply sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or Flintlastic FR Cap 30 T or Flintlastic FR Cap 30 T CoolStar torch adhered to base or ply sheet.

**Surfacing:
(Optional)** Any of the approved surfacing/coating options listed in Table 4.

**Maximum Design
Pressure:** See Fastening requirements above.



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