



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

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

Holcim Solutions and Products US, LLC.
26 Century Boulevard, Suite 205
Nashville, TN 37214

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: Firestone Modified Bitumen 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. 16-0628.05 and consists of pages 1 through 17.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 23-0613.21
Expiration Date: 03/08/26
Approval Date: 08/10/23
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ROOFING SYSTEM APPROVAL

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	Modified Bitumen
<u>Material:</u>	APP/SBS
<u>Deck Type:</u>	Wood
<u>Maximum Design Pressure:</u>	-97.5 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>
APP 80 Glass Base	39.4" x 65'4"	ASTM D6509	Fiberglass reinforced modified bitumen, smooth surfaced base sheet.
APP Premium Base	39.4" x 65'4"	ASTM D6509	Fiberglass reinforced APP modified bitumen, smooth surfaced base sheet.
SBS Glass Torch Base	39.4" x 33'10"	ASTM D6163	Modified bitumen base sheet with a burn-off film and reinforced with non-woven fiberglass mat.
SBS Base	39.4" x 50'	ASTM D6163	Fiberglass reinforced SBS base sheet. Applied in hot asphalt or mechanically attached.
SBS Premium Base	39.6" x 50'	ASTM D6163	Fiberglass reinforced SBS base sheet. Applied in hot asphalt or Firestone Multi-Purpose MB Cold Adhesive.
SBS Poly Base	39.6" x 50'	ASTM D6164	A smooth surfaced, non-woven polyester reinforced, modified bitumen base sheet.
SBS Poly Torch Base	45" x 39"	ASTM D6164	Fiberglass reinforced modified bitumen membrane, SBS rubber modified asphalt reinforced with a non-woven polyester mat.
Ply IV	33" x 180"	ASTM D2178	Fiberglass reinforced, asphalt impregnated, roofing ply. Applied in hot asphalt.
Ply VI	33" x 180"	ASTM D2178	Fiberglass reinforced, asphalt impregnated, roofing ply. Applied in hot asphalt.
MB Base	36" x 108'	ASTM D4601	Fiberglass reinforced base sheet, asphalt coated on both sides. Applied in hot asphalt or mechanically attached.
SBS Smooth	39.4" x 33'10"	ASTM D6164	Smooth surfaced, modified bitumen membrane reinforced with non-woven polyester mat. Applied in hot asphalt.
APP 160	39" x 32'10"	ASTM D6222	Polyester reinforced APP modified bitumen, smooth surfaced membrane with burn-off film.
APP 160 P	39.4" x 32'9"	ASTM D6222	Polyester reinforced modified bitumen, smooth surfaced membrane. Torch applied for use as a base or ply sheet only.
APP 160 Cool	39" x 32'10"	ASTM D6222	Polyester reinforced APP modified bitumen, smooth surfaced membrane.
APP 170	39.4" x 32'10"	ASTM D6222	Polyester reinforced APP modified bitumen, smooth surfaced membrane.
APP 170 Cool	39.6" x 33'6"	ASTM D6222	Polyester reinforced modified bitumen, smooth surfaced membrane.



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>
APP 180	39.4" x 32'10"	ASTM D6222	Polyester reinforced modified bitumen, granule surfaced membrane. Torch applied.
APP 180-P	39.4" x 32'9"	ASTM D6222	Polyester reinforced modified bitumen, granule surfaced membrane. Torch applied.
APP 180 UltraWhite	39.4" x 32'10"	ASTM D6222	Polyester reinforced modified bitumen, UltraWhite granule surfaced membrane. Torch applied.
APP 180 FR	39.4" x 32'10"	ASTM D6222	Polyester reinforced, fire retardant modified bitumen, granule surfaced membrane. Torch applied.
APP 180 FR UltraWhite	39.4" x 32'10"	ASTM D6222	Polyester reinforced, fire retardant modified bitumen, UltraWhite granule surfaced membrane. Torch applied.
APP 180 Cool	39.4" x 32'10"	ASTM D6222	Polyester reinforced modified bitumen, granule surfaced membrane.
SBS Glass	39.4" x 33'10"	ASTM D6163	Fiberglass reinforced, granule surfaced, modified bitumen membrane. Applied in hot asphalt.
SBS Glass FR	39.4" x 33'10"	ASTM D6163	Fiberglass reinforced, fire rated, granule surfaced, modified bitumen membrane. Applied in hot asphalt.
SBS Glass FR UltraWhite	39.4" x 33'10"	ASTM D6163	UltraWhite fiberglass reinforced, granule surfaced, modified bitumen membrane. Applied in hot asphalt.
SBS Torch	48" x 39"	ASTM D6164	Granule surfaced, SBS cap reinforced with a non-woven polyester mat, with burn off film and fiberglass enhanced.
SBS Torch UltraWhite	48" x 39"	ASTM D6164	UltraWhite granule surfaced, SBS cap reinforced with a non-woven polyester mat, with burn off film and fiberglass enhanced.
SBS FR Torch	48" x 39"	ASTM D6164	Granule surfaced, fire rated, SBS cap reinforced with a non-woven polyester mat, with burn off film and fiberglass enhanced.
SBS FR Torch UltraWhite	48" x 39"	ASTM D6164	UltraWhite granule surfaced, fire rated, SBS cap reinforced with a non-woven polyester mat, with burn off film and fiberglass enhanced.
SBS Glass FR Torch	39.4" x 33'10"	ASTM D6163	Fiberglass reinforced, fire rated, granule surfaced, modified bitumen membrane. with burn off film and fiberglass enhanced.
SBS Glass FR Torch UltraWhite	39.4" x 33'10"	ASTM D6163	UltraWhite fiberglass reinforced, fire rated, granule surfaced, modified bitumen membrane. with burn off film and fiberglass enhanced.
SBS Cap	39.4" x 33'10"	ASTM D6164	Granule surfaced, modified bitumen membrane reinforced with non-woven polyester mat.
SBS Cap UltraWhite	39.4" x 33'10"	ASTM D6164	UltraWhite granule surfaced, modified bitumen membrane reinforced with non-woven polyester mat.

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>
SBS FR Cap	39.4" x 33'10"	ASTM D6164	Granule surfaced, modified bitumen membrane reinforced with non-woven polyester mat.
SBS FR Cap UltraWhite	39.4" x 33'10"	ASTM D6164	UltraWhite granule surfaced, modified bitumen membrane reinforced with non-woven polyester mat.
SBS Premium FR	39.4" x 33'10"	ASTM D6164	Granule surfaced, fire rated, modified bitumen membrane reinforced with non-woven polyester mat.
SBS Premium FR UltraWhite	39.4" x 33'10"	ASTM D6164	UltraWhite granule surfaced, fire rated, modified bitumen membrane reinforced with non-woven polyester mat.
SBS Premium	39.4" x 33'10"	ASTM D6164	Granule surfaced, modified bitumen membrane reinforced with polyester mat. Applied in hot asphalt.
SBS Premium Torch	39.4" x 33'10"	ASTM D6164	Granule surfaced, modified bitumen membrane with a burn-off film and reinforced with non-woven polyester mat.
SBS Premium Torch UltraWhite	39.4" x 33'10"	ASTM D6164	UltraWhite granule surfaced, modified bitumen membrane with a burn-off film and reinforced with non-woven polyester mat.
SBS Premium FR Torch	39.4" x 33'10"	ASTM D6164	Granule surfaced, fire rated, modified bitumen membrane with a burn-off film and reinforced with non-woven polyester mat.
SBS Premium FR Torch UltraWhite	39.4" x 33'10"	ASTM D6164	UltraWhite granule surfaced, fire rated, modified bitumen membrane with a burn-off film and reinforced with non-woven polyester mat.
Channel Venting Base	39" x 31'8"	ASTM D 4897	Asphalt coated fiberglass base sheet. Sanded top surface and granules on bottom surface
I.S.O. Twin Pack Insulation Adhesive	Dual 750 ml cartridges	Proprietary	A two-component polyurethane insulation adhesive.
I.S.O. Fix II	30 lb.	Proprietary	A single component polyurethane insulation adhesive.
I.S.O. Stick	5 gal.	Proprietary	A two-component polyurethane insulation adhesive.
Multi-Purpose MB Cold Adhesive	55 gal.	Proprietary	An asphalt-based adhesive.



APPROVED INSULATIONS:

TABLE 2		
<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ISO 95+ GL, RESISTA	Isocyanurate Insulation	Holcim Solutions and Products US, LLC
DensDeck, DensDeck Prime,	Silicon treated gypsum	Georgia-Pacific Gypsum 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.	Firestone All-Purpose	Insulation and membrane fastener	Various	Holcim Solutions and Products US, LLC
2.	Firestone Heavy-Duty	Insulation and membrane fastener	Various	Holcim Solutions and Products US, LLC
3.	2" Metal Plate	Membrane attachment plate.	2" dia	Holcim Solutions and Products US, LLC
4.	#14 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
5.	3 in. Round Metal Plates	3" round Galvalume stress plate	3" round	OMG, Inc.
6.	OMG Plastic Plate	Plastic plates for fasteners.	3" round	OMG, Inc.
7.	Insulation Fastening Plate	Insulation plate for use with Firestone Fasteners	3" round	Holcim Solutions and Products US, LLC



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
FM Approvals	3041534	FM 4470	03/09/11
	3038191	FM 4470	08/04/11
	3040109	FM 4470	03/09/11
	3046870	FM 4470	03/22/13
	3055590	FM 4470	01/14/16
	797-05160-267	FM 4470	12/24/09
Trinity ERD	F10370.05.08	ASTM C 1289	05/08/08
	F10500.10.08-1-R2	ASTM D6163	03/22/13
	F31960.05.10-1	ASTM D4977	05/19/10
	F31960.05.10-2-R1	ASTM D4977	05/19/10
	F31960.08.10-1	ASTM D4977	08/25/10
	F35400.05.11	ASTM Physical Properties	05/31/11
	F31960.08.10-2-R1	ASTM D4977	03/25/13
	F41070.08.12	ASTM D6222	08/24/12
	U41790.05.12-2-R2	ASTM D6222	02/11/13
	U41790.05.12-1-R1	ASTM D6222	01/21/13
	F4000.08.12	TAS 114-J	08/08/12
	F45610.01.14	TAS 114-C	01/13/14
Atlantic & Caribbean Roof Consulting, LLC.	ACRC 03-001	TAS 114	03/06/03
	ACRC 03-007	TAS 114	05/01/03
PRI Construction Materials Technologies LLC	FBP-038-02-03	ASTM D 6164	01/12/11
	FBP-038-02-04	ASTM D 6164	01/12/11
	FBP-038-02-02	ASTM D 6164	01/12/11
	FBP-038-02-01	ASTM D 6164	12/27/10
	FBP-043-02-03	ASTM D 6164	07/26/11
	FBP-043-02-02	ASTM D 6164	08/02/11
	FBP-043-02-04	ASTM D 6164	07/26/11
	FBP-043-02-01	ASTM D 6164	08/02/11
	FBP-042-02-01	ASTM D 6164	07/26/11
	FBP-042-02-02	ASTM D 6164	07/27/11
	FBP-058-02-01	ASTM D 4601	12/12/08
	FBP-057-02-01	ASTM D 2178	12/12/08
	FBP-056-02-01	ASTM D 2178	12/12/08
	FBP-059-02-01.6	Various	03/15/18
	FBP-087-02-01	ASTM D 4798	03/22/13
	FBP-088-02-01	ASTM D 4798	03/22/13
	FBP-101-02-01	TAS 114-J	04/25/12
	FBP-050-02-01	ASTM D 5147	11/29/11
	FBP-053-02-01 Rev 1	TAS 110	10/08/12
	FBP-063-02-01	TAS 114 E	07/10/12
	FBP-064-02-01	ASTM D 6509	
	FBP-074-02-01 Rev 1	ASTM D 6222	01/31/13
	FBP-076-02-01	TAS 110	10/23/12
	FBP-091-02-01	ASTM D 6223	03/25/13
	FBP-166-02-01	ASTM D 6163	05/15/14
	FBP-168-02-03	ASTM D 6164	07/14/14

APPROVED ASSEMBLIES

Membrane Type:	APP
Deck Type 1I:	Wood, Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank
System Type C(1):	All layers of insulation simultaneously attached.

All General and System Limitations apply.

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>
ISO 95+ GL or RESISTA Minimum 1.4" thick	N/A	N/A

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

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
RESISTA, Minimum 1.3" thick	1 with 7	1:2.67 ft ²

Note: 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 Firestone MB Base ply sheet adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Ply Sheet (Optional):	One or more plies of Firestone MB Base, Ply IV or Ply VI ply sheet or other listed base sheet applied in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply Firestone APP 160-P torch applied.
Membrane:	One ply of APP 180, APP 180-P, APP 180 UltraWhite, APP 180 FR, APP 180 FR UltraWhite torch applied parallel to the base ply, with overlaps staggered 12".
Surfacing (Optional):	*Required over APP 180-P. Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following: <ol style="list-style-type: none">1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq.2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq.
Maximum Design Pressure:	-45 psf (See General Limitation #9)



Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank
System Type C(2): All layers of insulation simultaneously attached.

All General and System Limitations apply.

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>
ISO 95+ GL or RESISTA Minimum 1.5" thick	N/A	N/A

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

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck, DensDeck Prime Minimum ½" thick	1 or 2 with 7	1:3.5 ft ²

Note: 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 Firestone SBS Base adhered to the insulation in a full mopping of approved asphalt applied at a rate of 20-25 lbs./sq.

Membrane: One ply of Firestone SBS Cap, SBS Cap UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite, adhered in a full mopping of approved asphalt applied at a rate of 20-25 lbs./sq.

Surfacing (Optional): Install one of the following:
 1. Roof gravel at 400 lb/sq in a flood coat of approved asphalt.

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



Membrane Type: APP

Deck Type 1I: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood or wood plank mechanically fastened to wood supports spaced 24-inch o.c. with 1-5/8" #6 wood screws spaced 6-inch o.c.

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:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL or RESISTA Minimum 1.5" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One ply of Firestone MB Base, Channel Venting Base with a 4" side lap mechanically fastened through the insulation to the deck as described below:

Fastening: Fasten base sheet with Firestone All-Purpose or Heavy-Duty fasteners and Insulation Fastening Plates at a spacing of 12" o.c. in the 4" side lap and two rows staggered in the center of the sheet 12" o.c.

Ply Sheet (Optional): One or more plies of Firestone MB Base, Ply IV or Ply VI ply sheet or other listed base sheet applied in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.; or one ply Firestone APP 160-P torch applied.

Membrane: (Not to Channel Venting Base) One ply of APP 180, APP 180-P, APP 180 UltraWhite, APP 180 FR, APP 180 FR UltraWhite torch applied parallel to the base ply, with overlaps staggered 12".

Surfacing (Optional): ***Required over APP 180-P.**
Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following:

1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq.
2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq.

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



Membrane Type: SBS

Deck Type 1I: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood or wood plank; APA Span-Rated over wood supports at 24-inch o.c., 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inch o.c. at the perimeter and 6-inch o.c. in the field.

System Type D(2): 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:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ISO 95+ GL or RESISTA Minimum 1.5" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One ply of Firestone MB Base or, Channel Venting Base, with a 4" side lap mechanically fastened through the insulation to the deck as described below:

Fastening: Fasten base sheet with Firestone All-Purpose or Heavy-Duty fasteners and Insulation Fastening Plates at a spacing of 12" o.c. in the 4" side lap and two rows staggered in the center of the sheet 12" o.c.

Ply Sheet (Optional): One or more plies of Firestone MB Base, SBS Base, Ply IV, Ply VI ply sheet or other listed base or ply sheet hot mopped in approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
One or more plies of Firestone SBS Glass Torch Base or SBS Poly Torch Base torch adhered.

Membrane: (Not to Channel Venting Base) One ply of Firestone SBS Cap, SBS Cap UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Smooth, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite, SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
(Not to Channel Venting Base) One ply of Firestone SBS Torch, SBS Torch UltraWhite, SBS Smooth, SBS FR Torch, SBS FR Torch UltraWhite, SBS Glass FR Torch, SBS Glass FR Torch UltraWhite, SBS Premium Torch, SBS Premium Torch UltraWhite, SBS Premium FR Torch or SBS Premium FR Torch UltraWhite, torch adhered.
Or
(Not to Channel Venting Base) (Not with SBS Base) One ply of Firestone SBS Cap, SBS Cap UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS Premium, SBS Premium FR or SBS Premium FR UltraWhite cap sheet fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1½ - 2 gal/sq.



Surfacing (Optional): *Required over SBS Smooth.

Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following:

1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq.
2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq.

**Maximum Design
Pressure:**

-60 psf (See General Limitation #7)



Membrane Type: APP
Deck Type 1: Wood, Non-Insulated
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank.
System Type E(1): Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: One ply of Firestone MB Basemechanically fastened to the wood deck as described below:
Fastening: Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. at the lap and two rows staggered in the center of the sheet 18" o.c.
Ply Sheet (Optional): One or more plies of APP 80 Glass Base, APP Premium Base, APP 160, APP 160 P, APP 160 Cool, APP 170, or APP 170 Cool fully torch adhered with minimum 3" wide side laps.
Membrane: One ply of APP 180, APP 180-P, APP 180 UltraWhite, APP 180 FR, APP 180 FR UltraWhite torch applied parallel to the base ply, with overlaps staggered 12".
Surfacing (Optional): ***Required over APP 180-P.**
Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following:
1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq.
2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq.
Maximum Design Pressure: -45 psf (See General Limitation #9)

Membrane Type: SBS
Deck Type 1: Wood, Non-Insulated
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank.
System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: One ply of Firestone MB Base, Channel Venting Base, or SBS Base with a 4" side lap mechanically fastened to the deck as described 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 18" o.c.
Ply Sheet (Optional): One or more plies of SBS Smooth, SBS Base Sheet or Firestone Ply IV, Ply VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
One or more plies of Firestone SBS Glass Torch Base or SBS Poly Torch Base torch adhered.

Membrane: (Not to Channel Venting Base) One ply of Firestone SBS Cap, SBS Cap UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Smooth, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite, SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
(Not to Channel Venting Base) One ply of Firestone SBS Torch, SBS Torch UltraWhite, SBS FR Torch, SBS FR Torch UltraWhite, SBS Glass FR Torch, SBS Glass FR Torch UltraWhite, SBS Premium Torch, SBS Premium Torch UltraWhite, SBS Premium FR Torch or SBS Premium FR Torch UltraWhite, torch adhered.
Or
(Not to Channel Venting Base) (Not with SBS Base, SBS Smooth) One ply of Firestone SBS Smooth, SBS Cap, SBS Cap UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS Premium, SBS Premium FR or SBS Premium FR UltraWhite cap sheet fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1½ - 2 gal/sq.

Surfacing (Optional): ***Required over SBS Smooth.**
Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following:
1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq.
2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq.

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



Membrane Type:	APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank mechanically fastened to wood supports spaced 24-inch o.c. with #10 wood screws spaced 6-inch o.c.
System Type E(3):	Base sheet mechanically fastened.
All General and System Limitations apply.	
Base Sheet:	One ply of Firestone MB Base or Channel Venting Base mechanically fastened to the wood deck as described below.
Fastening:	Base sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 6" o.c. at the lap and two rows staggered in the center of the sheet 6" o.c.
Ply Sheet (Optional):	One or more plies of Firestone MB Base, Ply IV or Ply VI ply sheet or other listed base sheet applied in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.; or one ply Firestone APP 160-P torch applied.
Membrane:	(Not to Channel Venting Base) One ply of APP 180, APP 180-P, APP 180 UltraWhite, APP 180 FR, APP 180 FR UltraWhite torch applied parallel to the base ply, with overlaps staggered 12".
Surfacing (Optional):	<p>*Required over APP 180-P.</p> <p>Any coating, listed below, used as a surfacing, must be listed within a current NOA. Install one of the following:</p> <ol style="list-style-type: none"> 1. Gravel or slag at 400 lb. and 300 lb., respectively, set in a flood coat of type III or IV asphalt at 60 lb./sq. 2. Karnak No. 97, No. 97 AF or No. 169 at an application rate of 1½-3 gal./sq..
Maximum Design Pressure:	-90 psf (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank; APA Span-Rated over wood supports at 24-inch o.c., 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inch o.c. at the perimeter and 6-inch o.c. in the field.
System Type E(4):	Base sheet mechanically fastened.
All General and System Limitations apply.	
Base Sheet:	One ply of Firestone SBS Base mechanically fastened to the wood deck as described below.
Fastening:	Base sheet shall be lapped 3" and fastened with approved roofing nails and tin caps 6" o.c. at the lap and three rows staggered in the center of the sheet 6" o.c.
Ply Sheet:	<p>One or more plies of Firestone SBS Base, Ply IV, SBS Poly Base, MB Base, SBS Smooth, SBS Premium Base fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1.5 – 2.0 gal/sq</p> <p>Or</p> <p>One or more plies of Firestone SBS Base, Ply IV, SBS Poly Base, SBS Smooth or SBS Premium Base in a full mopping of approved asphalt applied within the EVT range and at a rate of 25-30 lbs./sq.</p> <p>Or</p> <p>One or more plies of Firestone SBS Glass Torch Base or SBS Poly Torch Base torch adhered.</p>
Membrane:	<p>One or more plies of Firestone SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Cap, SBS Cap UltraWhite, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite or SBS Smooth fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1.5 – 2.0 gal/sq.</p> <p>Or</p> <p>One or more plies of Firestone SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Cap, SBS Cap UltraWhite, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite or SBS Smooth in a full mopping of approved asphalt applied within the EVT range and at a rate of 25-30 lbs./sq.</p> <p>Or</p> <p>One or more plies of Firestone SBS Glass FR Torch, SBS Glass FR Torch UltraWhite, SBS Torch, SBS Premium Torch, SBS FR Torch, SBS Premium FR Torch or SBS Premium FR Torch UltraWhite torch adhered.</p>
Maximum Design Pressure:	-97.5 psf. (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank; APA Span-Rated over wood supports at 24-inch o.c., 0.113-inch x 2-3/8-inch ring shank nails fastened 6-inch o.c. at the perimeter and 6-inch o.c. in the field.
System Type E(5):	Base sheet mechanically fastened.
All General and System Limitations apply.	
Base Sheet:	One ply of Firestone MB Base or Channel Venting Base mechanically fastened to the wood deck as described below.
Fastening :	Base sheet shall be lapped 3.5" and fastened with Firestone All Purpose fastener & Insulation Fastening Plate 12" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.
Ply Sheet (Optional):	<p>(Not to Channel Venting Base) One or more plies of Firestone SBS Base, Ply IV, SBS Poly Base, MB Base, SBS Smooth, SBS Premium Base fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1.5 – 2.0 gal/sq</p> <p>Or</p> <p>One or more plies of Firestone SBS Base, Ply IV, SBS PolyBase, SBS Smooth or SBS Premium Base in a full mopping of approved asphalt applied within the EVT range and at a rate of 25-30 lbs./sq</p> <p>Or</p> <p>One or more plies of Firestone SBS Glass Torch Base or SBS Poly Torch Base torch adhered.</p>
Membrane:	<p>(Not to Channel Venting Base) One or more plies of Firestone SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Cap, SBS Cap UltraWhite, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite or SBS Smooth fully adhered to the base sheet with Firestone Multi-Purpose MB Cold Adhesive applied at 1.5 – 2.0 gal/sq</p> <p>Or</p> <p>(Not to Channel Venting Base) One or more plies of Firestone SBS Glass, SBS Glass FR, SBS Glass FR UltraWhite, SBS FR Cap, SBS FR Cap UltraWhite, SBS Cap, SBS Cap UltraWhite, SBS Premium, SBS Premium FR, SBS Premium FR UltraWhite or SBS Smooth in a full mopping of approved asphalt applied within the EVT range and at a rate of 25-30 lbs./sq.</p> <p>Or</p> <p>(Not to Channel Venting Base) One or more plies of Firestone SBS Glass FR Torch, SBS Glass FR Torch UltraWhite, SBS Torch, SBS Premium Torch, SBS FR Torch, SBS Premium FR Torch or SBS Premium FR Torch UltraWhite torch adhered.</p>
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 sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.
Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant. **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

