

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

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

NOTICE OF ACCEPTANCE (NOA)

Siplast, Inc. 1111 Highway 67 South Arkadelphia, AR 71923

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: Siplast Modified Bitumen Roof Systems over Recover Decks.

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

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

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

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

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

This NOA renews NOA No. 12-1220.04 and consists of pages 1 through 10. The submitted documentation was reviewed by Hamley Pacheco, P.E.



Africa

NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 1 of 10

ROOFING SYSTEM APPROVAL

<u>Category:</u> Roofing

Sub-Category: Modified Bitumen

Deck Type:RecoverMaterial:SBSMaximum Design Pressure:-172.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

		Test	Product
Product	Dimensions	Specification	Description
Parabase	3' x 108'	ASTM D4601	Asphalt coated fiberglass base sheet for mechanically fastened applications.
Parabase FS	3' x 108'	ASTM D4601	Asphalt coated fiberglass base sheet with a polyolefin back surfacing for mechanically fastened applications.
Parabase Plus	3.28' x 102.3'; 28 lbs./sq.	ASTM D4601	Elastomeric asphalt coated base sheet.
Paradiene 20	3.28' x 50'; 90 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with random fiberglass mat reinforcement used as the base ply of a Paradiene 20/30 system.
Paradiene 20 HT	3.28' x 50'; 90 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with fiberglass scrim reinforcement for use as a base ply of a Paradiene 20/30 system.
Paradiene 20 EG	3.28' x 33.5'; 90 lbs./sq.	ASTM D6163	Heavy duty asphalt elastomer sheet with fiberglass scrim reinforcement for use as a base ply in Paradiene systems.
Paradiene 20 HV	3.28' x 33.5'; 90 lbs./sq.	ASTM D6163	Heavy duty asphalt elastomer sheet with random fiberglass mat reinforcement used as a base ply of a Paradiene 20/30 system.
Paradiene 20 PR	3.28' x 50'; 55 lbs./sq.	ASTM D6164	Asphalt elastomer sheet with polyester fiberglass scrim composite reinforcement used as the top ply of a Paradiene 20/20 PR system having a gravel surfacing. Has additional puncture resistance.
Paradiene 20 TG	3.28' x 33.5'; 70 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with random fiberglass reinforcement used as the base ply of a Paradiene 20/30 TG Series system.
Paradiene 20 TG F	3.28' x 33.5'; 70 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with random fiberglass reinforcement used as the base ply of a Paradiene 20/30 TG Series system.



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 2 of 10

<u>Product</u>	Dimensions	Test Specification	Product <u>Description</u>
Paradiene 20 HT TG	3.28' x 33.5'; 70 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with fiberglass scrim reinforcement for use as a base ply of a Paradiene 20/30 system.
Paradiene 20 EG TG	3.28' x 33.5'; 100 lbs./sq.	ASTM D6163	Heavy duty asphalt elastomer sheet with fiberglass scrim reinforced for use as a base ply in Paradiene 20TG/30TG systems.
Paradiene 20 HV TG	3.28' x 33.5'; 100 lbs./sq.	ASTM D6163	Heavy duty asphalt elastomer sheet with random fiberglass mat reinforcement used as a base ply of a Paradiene 20TG/30TG system.
Paradiene 20 PR TG	3.28' x 33.5'; 96 lbs./sq.	ASTM D6164	High performance SBS modified bitumen finish ply designed for use in gravel surfaced. Used as a surface ply of a Paradiene 20/20TG system.
Paradiene 20 TS	3.28' x 33.5'; 76 lbs./sq.	ASTM D6163	High performance, semi adhered SBS modified bitumen with random fiberglass mat reinforcement used as a base ply of Paradiene 20/30 systems.
Paradiene 30 FR Paradiene 30 CR FR	3.28' x 33.5'; 85 lbs./sq.	ASTM D6163	Asphalt elastomer sheet with mineral surfacing and random glass mat reinforcement, for use as the top ply of a Paradiene 20/30 system.
Paradiene 30 HT FR	3.28' x 33.5'; 87 lbs./sq.	ASTM D6163	Fire-rated asphalt elastomer sheet with mineral surfacing and fiberglass scrim reinforcement for use as the top ply of a Paradiene 20/30 FR system.
Paradiene 30 MW FR	3.28' x 33.5'; 87 lbs./sq.	ASTM D6163	Fire rated asphalt elastomer sheet with mineral surfacing and ultra high tensile fiberglass reinforcement for use as the top ply of a Paradiene 20/30 FR system.
Paradiene 30 FR TG Paradiene 30 CR FR TG	3.28' x 25.25'; 80 lbs./sq.	ASTM D6163	Fire rated asphalt elastomer sheet with mineral surfacing and random fiberglass mat reinforcement for use as the top ply sheet of a Paradiene 20/30 TG Series system.
Paradiene 30 HT FR TG	3.28' x 25.25'; 80 lbs./sq.	ASTM D6163	Fire rated asphalt elastomer sheet with mineral surfacing and fiberglass scrim reinforcement for use as the top ply of a Paradiene TG Series system.
Paradiene 40 FR	3.28' x 26'; 115 lbs./sq.	ASTM D6163	Fire rated asphalt elastomer sheet with mineral surfacing, glass mat/glass scrim reinforced.
Paradiene 40 FR TG	3.28' x 26'; 115 lbs./sq.	ASTM D6163	Fire rated asphalt elastomer sheet with mineral surfacing, glass mat/glass scrim reinforced.



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 3 of 10

		Test	Product
Product	<u>Dimensions</u>	Specification	<u>Description</u>
Parafor 50 LT	3.28' x 17.5'; 114 lbs./sq.	ASTM D6164	Heavy duty asphalt elastomer sheet with mineral surfacing, polyester mat scrim reinforced.
Parafor 50 TG	3.28' x 17.5'; 114 lbs./sq.	ASTM D6164	Heavy duty asphalt elastomer sheet with mineral surfacing, polyester mat scrim reinforced.
IREX 40	3.28' x 34'; 89 lbs./sq.	ASTM D6163	High-melt asphalt sheet with random fiberglass mat reinforcement for use as the base ply sheet for a Veral system.
IREX HT	3.28' x 34'; 89 lbs./sq.	ASTM D6163	High-melt asphalt sheet with fiberglass scrim reinforcement for use as a base ply sheet for the Veral system.
Veral Aluminum	3.28' x 33.5'; 90 lbs./sq.	ASTM D6298	Aluminum clad asphalt elastomer sheet with woven fiberglass reinforcement for use as the top ply sheet of a Veral system.
Veral Copper	3.28' x 33.5'; 105 lbs./sq.	ASTM D6298	Copper clad asphalt elastomer sheet with fiberglass scrim reinforcement for use as the top ply of a Veral system.
PA 311/ 311 M/	5 or 55 gal.	ASTM D4479	Blend of adhesive asphalts and quick-drying solvents.
PA 828	5 gal.	ASTM D4586	Flashing Cement
PA 1021	5 gal.	ASTM D4586	Asphalt cutback reinforced general purpose cement with non-asbestos fibers.
PA 1125	5 or 55 gal.	ASTM D41	Asphalt primer.
PC – 227	5 or 55 gal	ASTM D6083	Elastomeric roof coating.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
DensDeck	Water resistant gypsum	Georgia-Pacific Gypsum LLC
H-Shield	Polyisocyanurate foam Insulation.	Hunter Panels LLC
ENRGY 3	Isocyanurate Insulation.	Johns Manville
Paratherm W, Paratherm H	Polyisocyanurate foam insulation.	Siplast Inc.



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 4 of 10

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	OMG XHD	Fastener for use in wood, steel or concrete decks.	#15 x 16''max. length	OMG, Inc.
2.	OMG 2 ³ / ₄ " Super XHD Barbed Plate	Round galvanized steel stress plates for use with OMG fasteners.	2 ³ / ₄ " round	OMG, Inc.
3.	Parafast XHD Fasteners	Fastener for use in wood, steel or concrete decks.	#15 x 16''max. length	Siplast, Inc.
4.	Parafast XHD Barbed Plates	Barbed Steel Plates	2-3/4" Round	Siplast Inc.



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 5 of 10

EVIDENCE SUBMITTED:

Test Agency/Identifier	<u>Name</u>	Report	<u>Date</u>
Factory Mutual Research Corp.	FM 4470	J.I. 2X1A2.AM	11/04/93
-	FM 4470	J.I. 0T0A2.AM	10/24/91
	FM 4470	J.I. 0T2A7.AM	10/28/91
	FM 4470	J.I. 1V2A3.AM	06/29/92
Trinity-ERD			
	TAS 117	C8500SC.11.07	11/30/07
Atlantic & Caribbean Roof	TAS 114-J	07-034	05/29/07
Consulting, LLC	TAS 114-J	07-012	04/02/07
PRI Construction Materials	ASTM D6163	SRI-037-02-01.1	03/06/17
Technologies LLC	ASTM D6163	SRI-039-02-01	11/20/12
	ASTM D6164	SRI-041-02-01	11/15/12
	ASTM D6163	SRI-042-02-01	11/16/12
	ASTM D6163	SRI-042-02-02	11/18/12
	ASTM D5147/D6163	SRI-043-02-01	11/15/12
	ASTM D5147/D6164	SRI-044-02-01	12/07/12
	ASTM D5147/D6163	SRI-045-02-01	12/10/12
	ASTM D5147/D6163	SRI-045-02-03	11/18/12
	ASTM D5147/D6163	SRI-046-02-01	11/16/12
	ASTM D6164	SRI-047-02-01	12/07/12
	ASTM D6298	SRI-048-02-01	01/11/13
	ASTM D4601	SRI-049-02-01	11/13/12
	ASTM D4601	SRI-050-02-01	11/12/12
	ASTM D4601	SRI-051-02-01	11/12/12

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	<u>Identifier</u>	<u>Assemblies</u>	Date
Zachary R. Priest, P.E.	Signed/Sealed Calculations	E	03/23/18



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 6 of 10

APPROVED ASSEMBLIES

Membrane Type: SBS Foil

Deck Type 7I: Recover

Deck Description: 2500 psi structural concrete or plank

System Type A: Anchor sheet mechanically fastened; all layers of insulation adhered with

approved asphalt.

All General and System limitations apply.

One or more layers of any of the following insulations:

Insulation Layer Insulation Fasteners Fastener
Table 3 Density/ft²

ENRGY 3, ACFoam II, H-Shield

Minimum 1" thick N/A N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of the insulation. All layers of insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) One or more plies of Paraglas adhered to the insulation with approved

mopping asphalt at an application rate of 20-25 lbs./sq. See General Limitation

#4.

Ply Sheet: IREX 40 or IREX HT, adhered in approved mopping asphalt at an application

rate of 20-40 lbs/sq. IREX 40 or IREX HT may also be applied by torch. See

General Limitation #4.

Membrane: Veral Aluminum or Veral Copper adhered in approved mopping asphalt at an

application rate of 20-40 lbs/sq. or by torch.

Note: Refer to manufacturer's specifications for specific application requirements.

Surfacing: Optional when granular surfaced membranes are used Required with non-granular

surfaced membranes. Install one of the following:

1.400 lbs./sq. gravel in a flood coat of PA-311 or PA-311 M adhesive at an

application rate of 3 gal./sq.

2.400 lbs./sq. gravel in a flood coat of asphalt applied at a rate of 60 lbs./sq.

Maximum Design

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



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 7 of 10 **Membrane Type: SBS**

Deck Type 7: Recover

¹⁹/₃₂" or greater plywood or wood plank nailed in the field 6" o.c. with #8 ring **Deck Description:**

shank nails and 4" o.c. at the perimeter of the sheet or plank with #10 ring shank

nails. Wood sheathing supports shall be spaced maximum 24" o.c.

System Type D: All insulation is loose laid with preliminary attachment to roof deck. Membrane

is subsequently mechanically fastened through insulation layers to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer Insulation Fasteners Fastener (Table 3) Density/ft²

ACFoam-II, Paratherm, H-Shield

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 an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Top Insulation Layer Insulation Fasteners Fastener (Table 3) Density/ft²

DensDeck

Minimum 1/4" thick N/A N/A

Base Sheet: Paradiene 20 PR mechanically fastened through base and top insulation layers,

> into wood decking with Parafast XHD Fasteners and Parafast XHD Barbed Plates at 12 O.C. at the previously heat welded 4" side lap and three staggered rows 12"

O.C. in the field of the sheet. See System Limitation #6.

Paradiene 20 TG, 20 HV TG, 20 HT TG or 20 EG TG adhered by torch or Ply Sheet:

> Paradiene 20, 20 FR, 20 HT, 20 HV or 20 EG adhered with approved mopping asphalt at an application rate of 20-25 lbs./sq. or with PA 311/PA-311M adhesive

at a rate of 1.5-2 gal/sq. See General Limitation #4.

Membrane: Paradiene 30 FR, Paradiene 30 CR FR or 30 HT FR adhered in approved mopping

asphalt at an application rate of 20-25 lbs./sq. or Paradiene 30 FR TG, Paradiene

30 CR FR TG or 30 HT FR TG adhered by torch.

Note: Refer to manufacturer's specifications for specific application requirements.

Surfacing: Optional when granular surfaced membranes are used Required with non-granular

surfaced membranes. Install one of the following:

1.400 lbs./sq. gravel in a flood coat of PA-311 or PA-311 M adhesive at an

application rate of 3 gal./sq.

2.400 lbs./sq. gravel in a flood coat of asphalt applied at a rate of 60 lbs./sq.

Maximum Design

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



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 8 of 10

Membrane Type: SBS Foil

Deck Type 7: Recover

Deck Description: Minimum 2" Siplast Z.I.C. lightweight insulating concrete design mix, 1:4 ratio,

over a Min. 22 ga, x 1.5" Deep corrugations, Type B, Grade 80 steel, 1.5% vented, G-90 finish steel deck. Steel deck installed over 0.25" (6mm) thick structural supports having 5'-6" o.c. (1.8m) spans. The steel deck fastened with one ITW Buildex Traxx-5 fastener at 6" O.C. along the perimeter and Two ITW Buildex Traxx-5 and 3/4" washer in each flute of the metal deck along the joist in the field and 12" O.C. along the side laps with ITW Buildex Traxx-1 self-drilling screws. **This Tested Assembly has been analyzed for allowable deck stress. See**

evidence submitted table.

System Type E: Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of Paradiene 20 PR.

Fastening: Fasten base sheet with OMG XHD fasteners with OMG 2-3/4" Super XHD

Barbed Plates or Parafast XHD Fasteners with Parafast XHD Barbed Plates at 12" O.C. in the 4" lap and two staggered rows 12" O.C. in the field of the sheet. See

System Limitation #6.

Ply Sheet: Paradiene 20, 20 FR, 20 HT, 20 HV or 20 EG adhered with approved mopping

asphalt at an application rate of 20-40 lbs./sq. with 3" side laps or Paradiene 20

TG, 20 FR TG, 20 HT TG, 20 HV TG.

(For Veral system), IREX 40 or IREX HT adhered in approved mopping asphalt at

an application rate of 20-40 lbs/sq. or by torch with 3" side laps.

Membrane: Paradiene 30 FR, 30 CR FR, 30 HT FR, 30 MW FR, 40 FR or Parafor 50 LT

adhered with approved mopping asphalt at an application rate of 20-40 lbs/sq. with 3" side laps or Paradiene 30 FR TG, 30 CR FR TG, 30 HT FR TG or Parafor 50 TG adhered by torch or Veral Aluminum or Veral Copper adhered in approved

mopping asphalt at an application rate of 20-40 lbs/sq. or by torch.

Note: Refer to manufacturer's specifications for specific application requirements.

Surfacing: Optional when granular surfaced membranes are used Required with non-granular

surfaced membranes. Install one of the following:

1.400 lbs./sq. gravel in a flood coat of PA-311 or PA-311 M adhesive at an

application rate of 3 gal./sq.

2.400 lbs./sq. gravel in a flood coat of asphalt applied at a rate of 60 lbs./sq.

Maximum Design

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



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 9 of 10

RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

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 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. (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 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 17-1221.08 Expiration Date: 04/14/23 Approval Date: 04/05/18 Page 10 of 10