



MIAMI-DADE COUNTY
 PRODUCT CONTROL SECTION
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
 BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

Siplast
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 and revises NOA No. 08-0731.06 consists of pages 1 through 19.
 The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 12-1220.04
 Expiration Date: 04/14/18
 Approval Date: 04/11/13
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ROOFING SYSTEM APPROVAL

| | |
|--|------------------------|
| <u>Category:</u> | Roofing |
| <u>Sub-Category:</u> | Modified Bitumen |
| <u>Deck Type:</u> | Recover |
| <u>Material:</u> | SBS |
| <u>Maximum Design Pressure:</u> | See Specific Deck Type |

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> |
|-----------------------|--------------------------------|----------------------------------|---|
| 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. |



| <u>Product</u> | <u>Dimensions</u> | <u>Test Specification</u> | <u>Product 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. |



| <u>Product</u> | <u>Dimensions</u> | <u>Test Specification</u> | <u>Product 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. |
| IRES 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. |
| IRES 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 100 Mopping Asphalt | | ASTM D312 Type IV | Mopping Asphalt |
| PA 311/ 311 M/ 311 LS Adhesives | 5 or 55 gal. | ASTM D4479 | Blend of adhesive asphalts and quick-drying solvents. |
| PA 828 Flashing Cement | 5 gal. | ASTM D4586 | Flashing Cement |
| PA 1021 Plastic Cement | 5 gal. | ASTM D4586 | Asphalt cutback reinforced general purpose cement with non-asbestos fibers. |
| PA 1125 Asphalt Primer | 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. |
| High Density Wood Fiberboard | High Density Wood Fiber insulation board. | Generic |
| Perlite Insulation Board | Perlite Insulation | Generic |
| 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. |



APPROVED FASTENERS:

TABLE 3

| Fastener Number | Product Name | Product Description | Dimensions | Manufacturer (With Current NOA) |
|------------------------|--|--|-----------------------|--|
| 1. | Dekfast Fasteners #12, #14 & #15 | Insulation fastener for wood, steel and concrete decks | | SFS Intec |
| 2. | Dekfast Hex Plate | Galvalume hex stress plate. | 2 7/8" x 3 1/4" | SFS Intec |
| 3. | Dekfast Lock Plate | Polypropylene locking plate. | 3" x 3 1/4" | SFS Intec |
| 4. | #12, #15 Roofgrip Fasteners | Insulation fastener for wood and steel. | | OMG |
| 5. | Metal Plate | Galvalume stress plate. | 3" round 3" square | OMG |
| 6. | Gearlok Plastic Plate | Polypropylene round plate | 3.2" | OMG |
| 7. | Olympic Fastener #12 & #14 | Insulation fastener | | OMG |
| 8. | Olympic Polypropylene | Polypropylene plastic plate | 3.25" round | OMG |
| 9. | Olympic Standard | 3" round Galvalume AZ50 steel plate | 3" round | OMG |
| 10. | Olympic G-2 | 3.5" round Galvalume AZ55 steel plate | 3.5" round | OMG |
| 11. | System ES-I | Preassembled plate/screw unit for fastening insulation | | SFS Intec |
| 12. | Olympic CD-10 | Concrete Anchor | N/A | OMG |
| 13. | Olympic Fluted Nail | Concrete Anchor | N/A | OMG |
| 14. | Olympic Lite-Deck | Steel Auger | N/A | OMG |
| 15. | Olympic NTB-1H | Plastic Auger | N/A | OMG |
| 16. | Olympic Lite-Deck Plate | Round Steel Plate | 3" Round | OMG |
| 17. | Olympic CR 1.2 Fastener | Base Sheet Fastener | N/A | OMG |
| 18. | Olympic CR 1.75 Fastener | Base Sheet Fastener | N/A | OMG |
| 19. | Olympic Base sheet Plate | Steel Plate | 2.75" Round | OMG |
| 20. | Olympic Olylok | Base Sheet Fastener | N/A | OMG |
| 21. | Olympic #15 screw | XHD Fastener | N/A | OMG |
| 22. | Olympic 2-3/4" Super XHD Barbed Stress Plate | Barbed Steel Plate | 2-3/4" Round | OMG |
| 23. | Parafast CD-10 | Split Shank Nail | N/A | Siplast Inc. |



APPROVED FASTENERS:

TABLE 3

| Fastener Number | Product Name | Product Description | Dimensions | Manufacturer (With Current NOA) |
|------------------------|--------------------------|---|-------------------|--|
| 24. | Parafast FN | Concrete Anchor | N/A | Siplast Inc. |
| 25. | Parafast LD | Steel Auger | N/A | Siplast Inc. |
| 26. | Parafast NTB-1H | Plastic Auger | N/A | Siplast Inc. |
| 27. | Parafast 3" Plate | Steel Plate | 3" Round | Siplast Inc. |
| 28. | Parafast 3" PP | Plastic Plate | 3" Round | Siplast Inc. |
| 29. | Parafast L-DP | Lite-Deck Plate | 3" Round | Siplast Inc. |
| 30. | Parafast CR 1.2 | Base Sheet Fastener | N/A | Siplast Inc. |
| 31. | Parafast CR 1.75 | Base Sheet Fastener | N/A | Siplast Inc. |
| 32. | Parafast BSP | Steel Plate | 2.75" Round | Siplast Inc. |
| 33. | Paralok | Base Sheet Fastener | N/A | Siplast Inc. |
| 34. | Parafast #15 XHD Screws | Extra Heavy Duty Fasteners for Steel and Wood Decks | N/A | Siplast Inc. |
| 41. | Parafast Base Sheet Disc | Barbed Steel Plates | 2-3/4" Round | Siplast Inc. |



EVIDENCE SUBMITTED:

| <u>Test Agency/Identifier</u> | <u>Name</u> | <u>Report</u> | <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. 1M9A7.AM | 09/03/86 |
| | FM 4470 | J.I. 0T2A7.AM | 10/28/91 |
| | FM 4470 | J.I. 1V2A3.AM | 06/29/92 |
| | FM 4470 | J.I. 2Y1A1.AM | 04/15/96 |
| | FM 4470 | J.I. 3Z3A7.AM | 04/12/96 |
| Underwriters Laboratories, Inc. | UL 790 | R10630 | 03/11/13 |
| Trinity-ERD | TAS 114 | #4701.02.96-1 | 02/28/96 |
| | TAS 114 | #4701.09.96-1 | 08/22/96 |
| | TAS 117 | C8500SC.11.07 | 11/30/07 |
| Atlantic & Caribbean Roof Consulting, LLC | TAS 114-J | 07-034 | 05/29/07 |
| | TAS 114-J | 07-012 | 04/02/07 |
| PRI Construction Materials Technologies LLC | ASTM D6163 | SRI-037-02-01 | 11/15/12 |
| | 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 |



APPROVED ASSEMBLIES

- Membrane Type:** SBS Foil
- Deck Type 7I:** Recover
- Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel
- 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 Table 3 | Fastener Density/ft ² |
|---|---------------------------------|-------------------------------------|
| ENRGY 3, ACFoam II, H-Shield Minimum 1” thick | N/A | N/A |
| Approved Perlite Minimum ¾” thick | N/A | N/A |
| Approved High Density Wood Fiberboard Minimum ½” thick | N/A | N/A |

Note: 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)



Membrane Type: SBS
Deck Type 7I: Recover
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
System Type B(1): Base layers of insulation mechanically fastened, Optional top layer adhered with approved asphalt.

All General and System limitations apply.

One or more layers of any of the following insulations:

| Base Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| ENRGY 3, ACFoam II, H-Shield Minimum 1.3" thick | See Table 3 | 1:3 ft ² |
| Approved Perlite Minimum ¾" thick | See Table 3 | 1:2 ft ² |
| Approved High Density Wood Fiberboard Minimum ½" thick | See Table 3 | 1:4 ft ² |

Note: Base 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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements set forth in Applicable Building Code. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

| Top Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| Approved Perlite Minimum ¾" thick | N/A | N/A |
| Approved High Density Wood Fiberboard Minimum ½" thick | N/A | N/A |

Note: Apply top layer 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. 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) 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: Paradiene 20 TG, 20 HV TG, 20 HT TG or 20 EG TG, adhered by torch, or 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 PA 311/ PA 311M adhesive at a rate of 1.5-2 gal/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:

-52.5 psf (See General Limitation #9)



Membrane Type: SBS Foil
Deck Type 7I: Recover
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
System Type B(2): Base layers of insulation mechanically fastened, Optional top layer adhered with approved asphalt.

All General and System limitations apply.

One or more layers of any of the following insulations:

| Base Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| ENRGY 3, ACFoam II, H-Shield Minimum 1.3" thick | See Table 3 | 1:3 ft ² |
| Approved Perlite Minimum ¾" thick | See Table 3 | 1:2 ft ² |
| Approved High Density Wood Fiberboard Minimum ½" thick | See Table 3 | 1:4 ft ² |

Note: Base 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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements set forth in Applicable Building Code. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

| Top Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| Approved Perlite Minimum ¾" thick | N/A | N/A |
| Approved High Density Wood Fiberboard Minimum ½" thick | N/A | N/A |

Note: Apply top layer 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. 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) 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 20-25 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 20-25 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)



Membrane Type: SBS
Deck Type 7I: Recover
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
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:

| Base Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| ENRGY 3, ACFoam II, H-Shield Minimum 1.3" thick | N/A | N/A |
| Approved Perlite Minimum ¾" thick | N/A | N/A |
| Approved High Density Wood Fiberboard Minimum ½" thick | N/A | N/A |
| Top Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
| Approved Perlite Minimum ¾" thick | See Table 3 | 1:2 ft ² |
| Approved High Density Wood Fiberboard Minimum ½" thick | See Table 3 | 1:4 ft ² |

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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One or more plies of Paraglas adhered to the insulation with approved mopping asphalt at a rate of 20-25 lbs./sq. See General Limitation #4.

Ply Sheet: Paradiene 20 TG, 20 HV TG, 20 HT TG or 20 EG TG adhered by torch, or 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 with PA 311/PA 311M adhesive at a rate of 1.5-2 gal/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: -52.5 psf (See General Limitation #9)



Membrane Type: SBS Foil
Deck Type 7I: Recover
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
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:

| Base Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
|---|---|--|
| ENRGY 3, ACFoam II, H-Shield Minimum 1.3” thick | N/A | N/A |
| Approved Perlite Minimum ¾” thick | N/A | N/A |
| Approved High Density Wood Fiberboard Minimum ½” thick | N/A | N/A |
| Top Insulation Layer | Insulation Fasteners Table 3 | Fastener Density/ft² |
| Approved Perlite Minimum ¾” thick | See Table 3 | 1:2 ft ² |
| Approved High Density Wood Fiberboard Minimum ½” thick | See Table 3 | 1:4 ft ² |

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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

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 20-25 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 20-25 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: -52.5 psf (See General Limitation #9)



Membrane Type: SBS

Deck Type 7: Recover

Deck Description: 1⁹/₃₂" or greater plywood or wood plank nailed in the field 6" o.c. with #8 ring 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 (Table 3) | Fastener 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 (Table 3) | Fastener 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 Screws and Parafast Base Sheet Disc 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.

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



Membrane Type: SBS

Deck Type 7: Recover

Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel

System Type E(1): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: Parabase, Parabase Plus, Gafglas #75.

Fastening: Fasten base sheet at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c. See System Limitation #6.

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

Membrane: Paradiene 30 FR, Paradiene 30 CR FR or 30 HT FR, adhered with approved mopping asphalt at an application rate of 20-40 lbs/sq. or PA 311/ PA 311M adhesive at a rate of 1.5-2 gal/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:

-52.5 psf (See General Limitation #9)

Membrane Type: SBS Foil
Deck Type 7: Recover
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
System Type E(2): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: None.
Ply Sheet: IREX 40 or IREX HT adhered in approved mopping asphalt at an application rate of 20-40 lbs/sq. or by torch.
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: -67.5 psf (See General Limitation #9)



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 Steel 1.5% vented, G-90 finish steel deck. Steel deck installed over 0.25" (6mm) thick structural supports having 6'-0" 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.

System Type E(3): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of Paradiene 20 PR.

Fastening: Fasten base sheet with Olympic XHD Screws with Olympic Base Sheet Disc or Parafast XHD Screws with Parafast Base Sheet Disc 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 30, 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)



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

