



BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Performance Roof System
4800 Blue Parkway
Kansas City ,MO 64130

Your application for Notice of Acceptance (NOA) of:

Derbigum, Modified Bitumen roof systems over Poured Gypsum

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0629.04
EXPIRES: 08/23/2006

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 08/23/2001

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: SBS/APP, Modified Bitumen

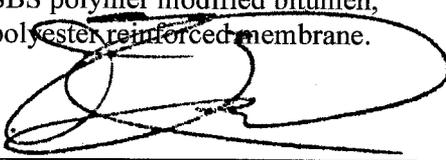
Approval Date: August 23, 2001

Expiration Date: August 23, 2006

Deck Type: Poured Gypsum
Maximum Design Pressure -45 psf
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Derbigum GP	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 5147	Modified bitumen glass fiber and polyester reinforced membrane for torch application.
Derbigum XPS	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 5147	Modified bitumen glass fiber and polyester reinforced membrane for torch application.
Derbicolor GP	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 5147	Modified bitumen glass fiber and polyester reinforced membrane for torch application.
Derbicolor XPS	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 5147	Modified bitumen glass fiber and polyester reinforced membrane for torch application.
Derbibase	66' x 39.4"; roll weight: 90 lbs.	ASTM D 5147	Modified bitumen glass fiber base sheet for mechanical attachment.
PRS Glass Base	108' x 36"; roll weight: 82 lbs.	ASTM D 4601	Asphalt coated fiberglass base sheet for use in hot-mop or mechanically fastened applications.
Permalume		ASTM D 4479	Asbestos free aluminum metal asphalt based roof coating for use with unsurfaced Performance membranes.
Permalume MB		ASTM D 4479	Asbestos free aluminum metal asphalt based roof coating for use with unsurfaced Performance membranes.
Permax B-Base		ASTM D 5147	SBS polymer modified bitumen base sheet.
Permax B-Economy	39 1/2" x 33'11"	ASTM D 5147	SBS polymer modified bitumen, polyester reinforced membrane.



Frank Zuloaga, RRC
 Roofing Product Control Examiner

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
APOC 302		PA 121	Roof coating	APOC, Subsidiary of Gardner
Sunbright 400		PA 121	Roof coating	APOC, Subsidiary of Gardner
ACFoam I	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products
Dekfast fasteners		PA 114	Insulation fastener and metal or plastic plate	Construction Fasteners Inc.
FM-30, FM-45, FM-60, FM-90 Fasteners		PA 114	Base ply fastening systems for lightweight concrete decks	ES Products, Inc.
GAFGLAS # 75	3' x 108'; Roll weight: 75 lbs.	ASTM D 4601	G2 Fiberglass base sheet	GAF Materials Corporation
Asphalt Primer		ASTM D 41	Asphalt Primer	generic
Asphalt		ASTM D 312	Type III or IV Hot asphalt bitumin adhesive	generic
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	generic
Perlite Insulation	various	PA 110	Perlite insulation board	generic
Red Rosin	various		Rosin paper for barrier layer on wood decks	generic
Type X Gypsum	various		Fire resistant rated gypsum	generic
al MB Aluminum Roof Coating		PA 121	Aluminum roof coating	Grundy Industries
Grundy 20 F		PA 121	Asphalt emulsion	Grundy Industries
Henry 220		PA 121	Roof coating	Henry Co.
Glasfast/Striker		PA 114	Insulation fastener assembly	ITW Buildex

Frank Zuloaga, RRC
Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Karnak 97		PA 121	Roof coating	Karnak
Aquabrite		PA 121	Roof coating	Monsey Asphalt Products
Endure		PA 121	Asphalt emulsion	Monsey Asphalt Products
E'NERG'Y PSI-25	various	PA 110	Polyisocyanurate foam insulation	Johns Manville
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation	Johns Manville
Olympic Fastener		PA 114	Insulation fastener with steel or plastic plate	Olympic Mfg. Group, Inc.
Fiberglas	various	PA 110	Fiber glass roof insulation	Owens-Corning Fiberglas Corp.
Asphalt Emulsion		PA 121	Asphalt emulsion	Pure Asphalt
Multi-Max	various	PA 110	Polyisocyanurate foam insulation	RMAX
GlasBase	36' x 108' weight: 72 lb.	ASTM D 4601	Type II fiberglass base sheet	Johns Manville
PermaPly 28	36" x 324 sq. ft.	ASTM D 4601	Glass fiber, asphalt impregnated base sheet	Johns Manville
PermaPly VI	36" x 540 sq. ft.	ASTM D 2178	Type VI asphalt impregnated glass felt	Johns Manville
PermaPly IV	36" x 540 sq. ft.	ASTM D 2178	Type IV asphalt impregnated glass felt	Johns Manville
HD Insul-Fixx Fastener		PA 114	Insulation fastener and steel and plastic stress plate	SFS/Stadler
Insul-Fixx Fastener		PA 114	Insulation fastener and steel and plastic stress plate	SFS/Stadler
Rawl #14, #15 fasteners		PA 114	Insulation fastener assembly	The Rawlplug Company Inc.
Rawl Speed-Lock Toggle Bolt		PA 114	Insulation fastener assembly	The Rawlplug Company Inc.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Rawlite		PA 114	Insulation fastener for cementitious and gypsum decks	The Rawlplug Company Inc.
Tru-Fast CF Fasteners		PA 114	Insulation fastener with steel or plastic plate for concrete	Tru-Fast
Tru-Fast Fastener		PA 114	Insulation fastener with plastic or steel plate	Tru-Fast

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corporation	J.I. 0X2A3.AM	Product Name Change	01/13/93
Underwriters Laboratories	R13327	Fire Classification	11/23/92



Frank Zuloaga, RRC
Roofing Product Control Examiner

APPROVED ASSEMBLIES

- Membrane Type:** APP
- Deck Type 6I:** Poured Gypsum, Insulated, New Construction
- Deck Description:** Poured Gypsum Concrete
- System Type B(1):** Base layers of insulation mechanically fastened, Optional top layer adhered with approved asphalt.

All General and System Limitations apply.

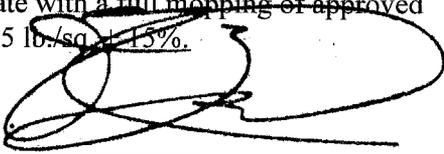
<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): AC-Foam I Minimum: 1.3" x 3' x 4'	Rawlite	[2]	4	1:3 ft ²
Approved Type(s): E'NRG'Y 2 Minimum: 1.25" x 3' x 4'	Rawlite	[2]	4	1:3 ft ²
Approved Type(s): AC-Foam II Minimum: 1.3" x 4' x 4'	Rawlite	[3]	4	1:2.67 ft ²
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	Rawlite	[3]	6	1:2.67 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	N/A	N/A	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: One ply of Perma Ply IV, VI, or #28 or Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ft. ± 15%.



 Frank Zuloaga, RRC
 Roofing Product Control Examiner

Ply Sheet: (Optional) One or more plies of Perma Ply IV, VI, or #28 or Derbibase, Derbigum/Derbicolor GP or XPS, Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15%.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS torch applied to base sheet.

Surfacing: Install one of the following:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq.. Karnak 97, Grundy al MB, Permalume aluminum, Monsey Endure, Weather Check Pro-Grade, or Aqua-Brite applied at an application rate of 1.5 gal./sq.. Grundy 20F or Pure Asphalt emulsion at 2 gal./sq. with optional roofing granules. APOC # 302 or ATCO 1851 FR applied at an application rate of 3 gal./sq.. VIP-400 or ATCO 1846 applied at an application rate of 3.5 gal./sq.

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



Membrane Type: APP
Deck Type 6I: Poured Gypsum, Insulated, New Construction
Deck Description: Poured Gypsum Concrete
System Type B(2): Base layers of insulation mechanically fastened, Optional top layer adhered with approved asphalt.

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): AC-Foam I Minimum: 1.3" x 3' x 4'	Rawlite	[2]	4	1:3 ft ²
Approved Type(s): E'NRG'Y 2 Minimum: 1.25" x 3' x 4'	Rawlite	[2]	4	1:3 ft ²
Approved Type(s): AC-Foam II Minimum: 1.3" x 4' x 4'	Rawlite	[3]	4	1:2.67 ft ²
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	Rawlite	[3]	6	1:2.67 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	N/A	N/A	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: One ply of Perma Ply IV, VI, or #28 or Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ± 15%.



Ply Sheet: (Optional) One or more plies of Perma Ply IV, VI, or #28 or Derbibase, Derbigum/Derbicolor GP or XPS, Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15% or with a full mopping of PERMASTIC® adhesive at a rate of 1.5-2 gal/sq.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS torch applied to base sheet.

Surfacing: Install one of the following:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq.. Karnak 97, Grundy al MB, Permalume aluminum, Monsey Endure, Weather Check Pro-Grade, or Aqua-Brite applied at an application rate of 1.5 gal./sq.. Grundy 20F or Pure Asphalt emulsion at 2 gal./sq. with optional roofing granules. APOC # 302 or ATCO 1851 FR applied at an application rate of 3 gal./sq.. VIP-400 or ATCO 1846 applied at an application rate of 3.5 gal./sq.

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



- Membrane Type:** APP
- Deck Type 6I:** Poured Gypsum, Insulated, New Construction
- Deck Description:** Poured Gypsum Concrete
- System Type C:** All layers of insulation simultaneously fastened.

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): AC-Foam I Minimum: 1.3" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): E'NRG'Y 2 Minimum: 1.4" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Multi-Max Minimum: 1.4" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	N/A	N/A	N/A	N/A

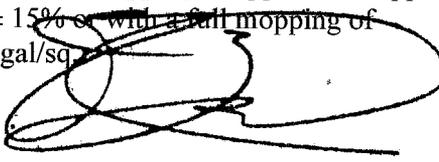
Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	Rawlite	[3]	6	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 Perma Ply IV, VI, or #28 or Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ± 15%.

Ply Sheet: (Optional) One or more plies of Perma Ply IV, VI, or #28 or Derbibase, Derbigum/Derbicolor GP or XPS, Performance Modified Base Sheet or PRS Glass Base adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ± 15% or with a full mopping of PERMASTIC® adhesive at a rate of 1.5-2 gal/sq.



Frank Zuloaga, RRC
Roofing Product Control Examiner

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS torch applied to base sheet.

Surfacing: Install one of the following:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq.. Karnak 97, Grundy al MB, Permalume aluminum, Monsey Endure, Weather Check Pro-Grade, or Aqua-Brite applied at an application rate of 1.5 gal./sq.. Grundy 20F or Pure Asphalt emulsion at 2 gal./sq. with optional roofing granules. APOC # 302 or ATCO 1851 FR applied at an application rate of 3 gal./sq.. VIP-400 or ATCO 1846 applied at an application rate of 3.5 gal./sq.

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



Frank Zuloaga, RRC
Roofing Product Control Examiner

Membrane Type: SBS
Deck Type 6I: Poured Gypsum, Insulated, New Construction
Deck Description: Poured Gypsum Concrete
System Type C: All layers of insulation simultaneously fastened.

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Perlite Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A

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

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Perlite Minimum: ¾" x 2' x 4'	Rawlite	[1]	4	1:2 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: GAFGLAS # 75, or Owens Corning Fiberglas base sheet adhered to the insulated substrate with approved mopping asphalt at an application rate of 25 lb./sq. ± 15%..

Ply Sheet: None.

Membrane: One ply of Permax B-Economy torch applied or adhered with approved mopping asphalt at an application rate of 25 lb./sq. ± 15%..

Surfacing: Install one of the following:

1. 400 lbs. gravel set adhered in hot asphalt.
2. Grundy al MB, Permalume MB applied at a rate of 1-1/2 gal./sq., Karnak 97 applied at a rate of 2 gal./sq..
3. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. and a final coat of Thermo 101.
4. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. with a fine gravel embedded in the wet coating and a final surfacing of Thermo # 101 at the manufacturer's specified installation rate.

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



Frank Zuloaga, RRC
 Roofing Product Control Examiner

Membrane Type: APP
Deck Type 6I: Poured Gypsum, Insulated, New Construction
Deck Description: Poured Gypsum Concrete
System Type D: All layers of insulation and base sheet simultaneously fastened.

All General and System Limitations apply.

<u>Insulation Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): AC-Foam I Minimum: 1.3" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): AC-Foam II Minimum: 1.3" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): E"NRG"Y-2, PSI-25 Minimum: 1.4" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Multi-Max Minimum: 1.5" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): Fiberglas Minimum: 1 ⁵ / ₁₆ " x 4' x 4'	N/A	N/A	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. 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.

Base Sheet: Two plies of Perma Ply IV, VI, R, or #28 mechanically fastened to the deck through the insulation as detailed below.

Fastening: Fasten base sheet with Rawlrite fasteners with Rawl stress plates at a 4" side lap 24" o.c. and one rows in the center of the sheet 24 o.c.. See System Limitation #4.

Ply Sheet: None.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS torch applied to base sheet.

Surfacing: Install one of the following:

- Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
- APOC 400 applied at 1.3 gal./sq.. Karnak 97, Grundy al MB, Permalume aluminum, Monsey Endure, Weather Check Pro-Grade, or Aqua-Brite applied at an application rate of 1.5 gal./sq.. Grundy 20F or Pure Asphalt emulsion at 2 gal./sq. with optional roofing granules. APOC # 302 or ATCO 1851 FR applied at an application rate of 3 gal./sq.. VIP-400 or ATCO 1846 applied at an application rate of 3.5 gal./sq.

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



Frank Zuloaga, RRC
 Roofing Product Control Examiner

Membrane Type: SBS
Deck Type 6I: Poured Gypsum, Insulated, New Construction
Deck Description: Poured Gypsum Concrete
System Type D: All layers of insulation and base sheet simultaneously fastened.

All General and System Limitations apply.

<u>Insulation Base or Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Perlite Minimum: 2' x 4' x 1"	N/A	N/A	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. 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.

Base Sheet: GAFGLAS # 75 or Owens Corning Fiberglas base sheet fastened to the deck through the insulation as detailed below.

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

Ply Sheet: None.

Membrane: One ply of Permax B-Economy torch applied or adhered with approved mopping asphalt at an application rate of 25 lb./sq. ± 15%..

Surfacing: Install one of the following:

1. 400 lbs. gravel set adhered in hot asphalt.
2. Grundy al MB, Permalume MB applied at a rate of 1-1/2 gal./sq., Karnak 97 applied at a rate of 2 gal./sq..
3. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. and a final coat of Thermo 101.
4. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. with a fine gravel embedded in the wet coating and a final surfacing of Thermo # 101 at the manufacturer's specified installation rate.

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



Frank Zuloaga, RRC
 Roofing Product Control Examiner

Membrane Type: APP

Deck Type 6: Poured Gypsum Concrete, Non-insulated, Tear-off Only

Deck Description: Poured gypsum concrete.

System Type E: Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: One ply of Perma Ply #28 mechanically fastened to the deck as detailed below:

Fastening: Fasten base sheet with approved fasteners at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.

Ply Sheet: None.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS torch applied to base sheet.

Surfacing: Install one of the following:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq.. Karnak 97, Grundy al MB, Permalume aluminum, Monsey Endure, Weather Check Pro-Grade, or Aqua-Brite applied at an application rate of 1.5 gal./sq.. Grundy 20F or Pure Asphalt emulsion at 2 gal./sq. with optional roofing granules. APOC # 302 or ATCO 1851 FR applied at an application rate of 3 gal./sq.. VIP-400 or ATCO 1846 applied at an application rate of 3.5 gal./sq.

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



Membrane Type: SBS

Deck Type 6: Poured Gypsum Concrete, Non-insulated, Tear-off Only

Deck Description: Poured gypsum concrete.

System Type E: Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: GAFGLAS #75 or Owens Corning Fiberglas base sheet fastened to the deck as described below:

Fastening: Fasten base sheet with approved fasteners and metal plates at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.

Ply Sheet: None.

Membrane: One ply of Permax B-Economy torch applied or adhered with approved mopping asphalt at an application rate of 25 lb./sq. ± 15%.

Surfacing: Install one of the following:

1. 400 lbs. gravel set adhered in hot asphalt.
2. Grundy al MB, Permalume MB applied at a rate of 1-1/2 gal./sq., Karnak 97 applied at a rate of 2 gal./sq..
3. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. and a final coat of Thermo 101.
4. A two part surfacing consisting of a base coat of Thermo 202 at 2 gal./sq. with a fine gravel embedded in the wet coating and a final surfacing of Thermo # 101 at the manufacturer's specified installation rate.

Maximum Design

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



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. **(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.)**



Frank Zuloaga, RRC
Roofing Product Control Examiner

NOTICE OF ACCEPTANCE STANDARD CONDITIONS

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
 - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
 - b) The product is no longer the same product (identical) as the one originally approved;
 - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
 - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
 - a) Unsatisfactory performance of this product or process;
 - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 18.

END OF THIS ACCEPTANCE



Frank Zuloaga, RRC
Roofing Product Control Examiner