MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
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NOTICE OF ACCEPTANCE (NOA)

Genflex Roof Systems
1722 Indian Wood Circle
Maumee, OH 43537-4060

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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.

DESCRIPTION: Genflex EPDM Single Ply Roof Systems over Concrete 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 # 00-0807.03 and consists of pages 1 through 11.
The submitted documentation was reviewed by Frank Zuloaga, RRC

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	EPDM
Deck Type:	Concrete
Maximum Design Pressure	-45 psf
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
GenFlex II EPDM	Various widths x Various lengths x .045" or .060"	TAS 110	Un-reinforced EPDM Membrane
GenFlex II FRM	Various widths x Various lengths x .045" or .060"	TAS 110	Reinforced EPDM Membrane
GenFlex II FR EPDM	Various widths x Various lengths x .045" or .060"	TAS 110	Un-reinforced Fire Retardant EPDM Membrane
GenFlex Flex Flash E Uncured EPDM	6"-48" x various	TAS 110	Uncured EPDM flashing membrane
GenFlex Flex Flash N Uncured Neoprene	6"-48" x various	TAS 110	Uncured neoprene flashing membrane
GenFlex Seam Tape	3" x 100'	TAS 110	Extruded black rubber adhesive tape for membrane lapped seams
GenFlex Bar Anchor Cover Tape	6" x 100'	TAS 110	Extruded black rubber adhesive tape laminated to rubber strips
GenFlex Primer	1-5 gallon cans	TAS 110	Primer for pretreatment of adhered seams
GenFlex EPDM Bonding Adhesive Type E	5 gallon cans	TAS 110	Contact adhesive for mebrane to substrate
GenFlex G-400 Splice Adhesive	1-5 gallon cans	TAS 110	EPDM seam adhesive
GenFlex Edge Caulk	10 oz tubes or 1 gallon cans	TAS 110	Seam caulk for adhered seams
Genflex Waterstop	10 oz tubes	TAS 110	Butyl mastic for compression seal joints
GenFlex Pitch Pan Filler	1.5 gallon cans	TAS 110	Two component pourable urethane sealant

Product	Dimensions	Test Specification	Product Description
GenFlex Anchor Bars	16 Gauge x 10' x 1"	TAS 114	Bar anchors for mechanically attachment of the roof membrane
GenFlex Termination Bar	.09" x 1.25" x 10'	TAS 114	Membrane termination bar
GenFlex Termination Rings	16 Gauge x 1" rings	TAS 114	Termination bar for pipe flashings
GenFlex EPDM Pipe Boots		TAS 110	Prefabricated Pipe boots
GenFlex EPDM Peel and Stick Pipe Boots		TAS 110	Self adhering pipe boots
GenFlex EPDM Inside and Outside Corners		TAS 110	Pre-molded corners
FlexGuard Walkpad	3/8" x 2' x 3'	TAS 110	Membrane proction board
GenFlex ACE Coating	5 gallon cans	TAS 110	Acrylic base polymer coating for EPDM membrane

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Hy Therm, Pyrox, White Line	Isocyanurate Insulation	Apache Products Co.
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corp.
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
Styrofoam	Extruded polystyrense insulation	Dow
ISO 95+ GL, 95+ GW, FG	Isocyanurate Insulation	Firestone
ISO 95+ Composite	Isocyanurate Insulation with perlite facer	Firestone
Isotherm R (EnergyGuard)	Polyisocyanurate foam insulation	GAF
Dens Deck	Silicon treated gypsum	G-P Products
ENRGY 2, ENRGY PSI-25, UltraGard Gold	Isocyanurate Insulation	Johns Manville
Fesco Foam	Isocyanurate Insulation with perlite facer	Johns Manville
Expanded Polystyrene (EPS)	Expanded polystyrene insulation.	Generic
Extruded Polystyrene (XPS)	Extruded polystyrene insulation.	Generic
Wood Fiberboard	Regular wood fiber insulation	Generic

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
High Density Wood Fiberboard	High Density Wood Fiber insulation board.	Generic
Perlite Insulation Board	Perlite Insulation	Generic
Type X Gypsum	Gypsum Wallboard	Generic
Huntsman EPS	Expanded polystyrense insulation	Huntsman Corp.
FOAMULAR	Extruded polystyrense insulation	Owens Corning
Fiberglas	Fiber glass roof insulation.	Owens Corning
Multi Max	Isocyanurate Insulation	Rmax, Inc.
Thermaroof Composite	Isocyanurate Insulation with perlite facer	Rmax, Inc.
Structodeck	High density wood fiber	Wood Fiber Industries

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Dekfast Fasteners #14	Insulation and membrane fastener	Various	Construction Fasteners, Inc.
2.	Dekfast Hex Plate	Galvalume hex stress plate.	2 $^{7}/_{8}$" x 3 ¼"	Construction Fasteners Inc.
3.	Dekfast Lock Plate	Galvalume hex stress plate.	3" x 3 ¼"	Construction Fasteners Inc.
4.	#14 Roofgrip	Insulation and membrane fastener	Various	ITW Buildex
5.	Metal Plate	Galvalume AZ50 stress plate	3" square 3" round	ITW Buildex
6.	Plastic Plate	Polyethylene stress plate	3.2" round	ITW Buildex
7.	Olympic Fasteners	Insulation and membrane fastener	Various	Olympic Mfg. Group
8.	Olympic Standard	Galvalume AZ55 stress plate	3" round	Olympic Mfg. Group
9.	Olympic G-2	Galvalume AZ55 stress plate	3.5" round	Olympic Mfg. Group
10.	Olympic	Plastic plates for fasteners.	3" round	Olympic Mfg. Group

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
11.	Rawl Drive	Insulation fastener for concrete decks		Powers Fasteners, Inc.
12.	Rawl Spike	Insulation fastener for concrete decks		Powers Fasteners, Inc.
13.	Rawl	Galvalume AZ55 steel plate	3" round	Powers Fasteners, Inc.
14.	Insul-Fixx HD Fastener	Insulation fastener for use in wood, steel and concrete decks	Various	SFS Stadler, Inc.
15.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Stadler, Inc.
16.	Insul-Fixx PG	Polyethylene stress plate	3" round	SFS Stadler, Inc.
17.	Tru-Fast CF Fasteners	Insulation and membrane fastener	Various	The Tru-Fast Corp.
18.	Tru-Fast MP-3	Galvalume AZ50 steel plate	3.23" round	The Tru-Fast Corp.
19.	Tru-Fast Plastic Plate	Polyethylene stress plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Factory Mutual Research	J.I. 2X6A3.AM	Class I Fire: 1-60 & 1-90 Wind Uplift Classification	4/11/94
Underwriters Labratories, Inc.	R9334	Fire Classification	12/17/93
Underwriters Labratories, Inc.	91NK15494	Fire Classification	2/28/92

APPROVED ASSEMBLIES

Membrane Type: Single Ply, EPDM

Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type C: All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Extruded Polystyrene, Expanded Polystyrene (For use under wood fiber only)		
Minimum 1" thick	**N/A**	**N/A**
ACFoam II, WHITELINE, AP, Isotherm R, Hy-Therm		
Minimum 1.3" thick	**N/A**	**N/A**
ISO-95 FG, ISO-95 GL, GW, Rhoflex Isocyanurate,		
Minimum 1.4" thick	**N/A**	**N/A**
ACFoam Composite, Iso-95 Composite, Rhoflex Composite		
Minimum 1.5" thick	**N/A**	**N/A**
ENRGY 2, PSI-25		
Minimum 2" thick	**N/A**	**N/A**
Wood Fiber		
Minimum 1" thick	**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.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam-II, Isotherm R, WHITELINE, AP		
Minimum 1.3" thick	**1, 7, 11, 12 or 14**	**1:2 ft^2**
ISO-95 FG, GL, GW		
Minimum 1.4" thick	**1, 7 or 14**	**1: 2 ft^2**
ACFoam Composite, Iso-95 Composite		
Minimum 1.5" thick	**1, 7, 11, 12 or 14**	**1:2 ft^2**
ISO 95+ GL, ENRGY 2, ENRGY PSI-25, ACFoam-II		
Minimum 2" thick	**1, 7, 14 or 17**	**1:4 ft^2**
High Density Wood Fiber, Wood Fiber		
Minimum 1" thick	**1, 7, 11 or 12**	**1:2 ft^2**

Vapor Retarder:	Any UL or FMRC approved vapor retarder may be installed on the roof deck or over the first layer of insulation.
Barrier:	(Optional) ½" gypsum board loose laid and secured with the insulation assembly.
Membrane:	GenFlex II EPDM, GenFlex II FR EPDM, GenFlex II EPDM FRM adhered to the approved substrate with GenFlex bonding adhesive applied to both surfaces at the rate of 65 ft^2/gal.
Surfacing:	(Optional) Genflex ACE coating at an application rate of 1 gal./sq. with optional silica sand applied into the wet coating.
Maximum Design Pressure:	–45 psf (See General Limitation #9)

Membrane Type: Single Ply, EPDM

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete.

System Type D: Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Extruded Polystyrene, Expanded Polystyrene, Perlite Minimum 1" thick	**N/A**	**N/A**
Thermaroof Plus Minimum 1.5" thick	**N/A**	**N/A**
Fiberglas Minimum $^{15}/_{16}$" thick	**N/A**	**N/A**

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Isotherm R, WHITELINE, PYREX Minimum 1.3" thick	**N/A**	**N/A**
ISO-95 GL, GF, GW, Multi-Max, UltraGard Gold Minimum 1.4" thick	**N/A**	**N/A**
ACFoam Composite, Iso-95 Composite, Fesco Foam, Thermaroof Composite Minimum 1.5" thick	**N/A**	**N/A**
ENRGY 2, PSI-25 Minimum 2" thick	**N/A**	**N/A**
Wood Fiber Minimum 1" thick	**N/A**	**N/A**

One of the following is required over insulation listed as Base Layer and optional over insulation listed as Base or Top Layer.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Structodek, Sturdi-Top, High Density Wood Fiber Board Minimum ½" thick	**N/A**	**N/A**
Wood Fiber Minimum 1" thick	**N/A**	**N/A**

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

Vapor Retarder:	Any UL or FMRC approved vapor retarder may be installed on the roof deck or over the first layer of insulation.
Barrier:	(Optional) ½" gypsum board loose laid and secured with the insulation assembly.
Membrane:	GenFlex II EPDM, GenFlex II FR EPDM, GenFlex II EPDM FRM attached with bar anchors as described below or GenFlex II EPDM FRM attached with screws and discs as described below.
Fastening #1:	Bar anchors are placed over the roof membrane or in laps at a maximum of 72" o.c. and secured 6" o.c. through pre-drilled holes with Olympic #12, 14, Roofgrip #12, 14-10, Dekfast #12, 14, 15, Insulfixx, HD, Tru-Fast HD fasteners and the bars are covered with an adhered 6" lap, adhered 8" strip, lap with 5" wide seam tape or 6" wide cover tape.
Fastening #2:	DekFast #14 screws and 2" discs are placed 6" o.c. in 6" wide laps 7' o.c. in the GenFlex II FRM membrane, and the laps are sealed with lap adhesive and lap sealant following the GenFlex requirements.
Surfacing:	(Optional) Genflex ACE coating at an application rate of 1 gal./sq. with optional silica sand applied into the wet coating.
Maximum Design Pressure:	–45 psf (See General Limitation #7)

CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.

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.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE