



**BUILDING CODE COMPLIANCE OFFICE**  
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## PRODUCT CONTROL NOTICE OF ACCEPTANCE

**Republic Powdered Metals**  
2628 Pearl Road  
Medina ,OH 44258

Your application for Notice of Acceptance (NOA) of:

### **Geoflex PIB Single-Ply Roofing Membrane For Recover Application**

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.:** 01-0213.06  
**EXPIRES:** 03/29/2006

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:** 03/29/2001

**ROOFING SYSTEM APPROVAL**

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

Approval Date: **March 29, 2001**

Expiration Date: **March 29, 2006**

**TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
GEOFLEX 100F Membrane	42" x 60'	PA 110	45 to 60 mil PIB membrane laminated with a 40 mil polyester fabric and finished with a 2" wide prefabricated self-sealing edge.
GEOFLEX 100F Flashing	various	PA 110	100 mil PIB membrane.
GEOTRED			Rubber walkway pad with prefabricated sealing edge.
GEOFLEX 100D	various	PA 110	100 mil reinforced PIB membrane, double scaling edge and continuous end-lap expansion joints.
GEOFLEX 60U	42" x 25'	PA 110	White, 60 mil PIB membrane without fleece backing.
GEOFLEX Cover Tape			Self-sealing covering tape for counter flashing.
GEOFLEX Paste			For caulking "T" joints.
GEOFLEX Welding Solvent		PA 121	For welding and cleaning of GEOFLEX membrane.
GEOFLEX Primer		PA 121	Primer.
GEOFLEX Adhesive #111		PA 121	Brush on adhesive for application to substrate and fleece surface.
GEOTAC		PA 121	Cold adhesive for substrate only.



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
GEOFLEX Concrete Primer		PA 121	Concrete primer.
GEOFLEX Topcoat		PA 121	Polyisobutylene base roof coating, copper appearance.
GEOLASTIC Fill			Two component elastic filler for pitch pockets.
DURATHANE		PA 121	White, polyurethane elastic sealant for termination bar or reglet.
GEOREGLET			Mill finish, aluminum reglet.
GEOREGLET Fasteners		PA 114	Fasteners and washers for use with GEOREGLET.

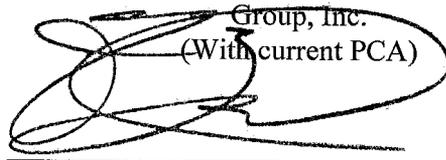
**TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
PYROX	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co. (With current PCA)
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products (With current PCA)
Hy-Therm White Line	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (With current PCA)
Hy-Therm AP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (With current PCA)
High Density Fiber Board	various	PA 110	Wood fiber insulation	Celotex Corp. (With current PCA)
Dekfast Fasteners #14		PA 114	Insulation fastener for steel and concrete decks	Construction Fasteners Inc. (With current PCA)
Dekfast Fasteners #15		PA 114	Insulation fastener for concrete decks	Construction Fasteners Inc. (With current PCA)



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Dekfast Hex Plate	2 7/8" x 3 1/4"	PA 114	Galvalume hex stress plate.	Construction Fasteners Inc. (With current PCA)
ISO 95+ GL		PA 110	Polyisocyanurate foam insulation	Firestone (With current PCA)
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	generic (With current PCA)
Asphalt Primer		ASTM D 41	Asphalt primer	generic
Roofing Nails	Minimum # 12	PA 114	Corrosion resistant annular ring shank nails	generic
Tin Caps	Min. 32 ga. x 1 5/8"		Corrosion resistant circular discs.	generic
Dens-Deck	4' x 8'	PA 110	Gypsum board	Georgia-Pacific (With current PCA)
Ultra/M-II AEF	various	PA 110	Polyisocyanurate foam insulation	Homasote Co. (With current PCA)
Gripdek Fastener		PA 114	Insulation fastener	ITW Buildex (With current PCA)
Roofgrip Fastener		PA 114	Insulation fastener	ITW Buildex (With current PCA)
Premium Metal Plate	3" square	PA 114	3" square galvalume AZ55 stress plate	ITW Buildex (With current PCA)
Standard Plastic Plate	3" round	PA 114	Polyolefin plastic plate	ITW Buildex (With current PCA)
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation	NRG Barriers, Inc. (With current PCA)
N.T.B. Magnum		PA 114	Glass reinforced nylon fastener for use in gypsum and cementitious wood fiber decks.	Olympic Manufacturing Group, Inc. (With current PCA)
Lite-Deck Fastener		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc. (With current PCA)



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Olympic Fastener		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc. (With current PCA)
Strap Toggle		PA 114	Steel bolt with CR-10 coating, steel toggle and plastic-strap	Olympic Manufacturing Group, Inc. (With current PCA)
N.T.B. Plate		PA 114	3" round galvalume AZ55 plate for use with N.T.B. fasteners	Olympic Manufacturing Group, Inc. (With current PCA)
N.T.B. Spin Weld Plate	2" round	PA 114	2" round amorphous nylon locking plate for use with N.T.B. fasteners with 1" head	Olympic Manufacturing Group, Inc. (With current PCA)
N.T.B. Plastic Plate	3" round	PA 114	3" round polypropylene stress plate for use with N.T.B. fasteners	Olympic Manufacturing Group, Inc. (With current PCA)
Olympic Standard	3" round	PA 114	3" round galvalume AZ55 steel plate	Olympic Manufacturing Group, Inc. (With current PCA)
Olympic Polypropylene	3.25" round	PA 114	Polypropylene plastic plate	Olympic Manufacturing Group, Inc. (With current PCA)
Fiberglas	various	PA 110	Fiber glass roof insulation	Owens-Corning Fiberglas Corp. (With current PCA)
Multi-Max FA	various	PA 110	Polyisocyanurate foam insulation	Rmax, In. (With current PCA)
UltraGard Gold SP	various	PA 110	Polyisocyanurate foam insulation	Johns Manville (With current PCA)



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
HD Insul-Fixx Fastener		PA 114	Insulation fastener for use in steel and concrete decks	SFS/Stadler (With current PCA)
Insul-Fixx Fastener		PA 114	Insulation fastener for steel and wood decks	SFS/Stadler (With current PCA)
Insul-Fixx S	3" square	PA 114	3" square galvalume AZ55 stress plate	SFS/Stadler (With current PCA)
Insul-Fixx P	3" round	PA 114	3" round polyethylene stress plate	SFS/Stadler (With current PCA)
Rawl Fasteners #14		PA 114	Insulation fastener for use in steel, wood or concrete	The Rawlplug Company Inc. (With current PCA)
Rawl 3" Plate	3" round	PA 114	3" round galvalume AZ55 steel plate	The Rawlplug Company Inc. (With current PCA)
Rawl 2" Plate	2" round	PA 114	2" round galvalume AZ55 membrane plate	The Rawlplug Company Inc. (With current PCA)
Tru-Fast TP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast (With current PCA)
Tru-Fast DP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast (With current PCA)
Tru-Fast Plastic Plate	3.04" round	PA 114	3.04" round polyethylene plastic plate	Tru-Fast (With current PCA)
Tru-Fast MP-3	3.23" round	PA 114	3.23" round galvalume AZ50 steel plate	Tru-Fast (With current PCA)
Perma Ply 28		ASTM 4601	62 base sheet	Johns Manville (With current PCA)
Ventsulation		ASTM 3909	62 base sheet	Johns Manville (With current PCA)
VaporChan	36' x 36" 85lb. roll	ASTM 4897	62 base sheet	Tamko (With current PCA)



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**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corporation	Wind Uplift	J.I. 0W2A7.AM	03/02/93
Factory Mutual Research Corporation	Wind Uplift	J.I. 1V1A4.AM	01/04/93
Canon Associates	Small Scale Static Uplift	TE 931221	12/21/93
Dynatech Engineering, Inc.	Wind Uplift	4391-5.95-1	05/01/95
Factory Mutual Research Corporation	Wind Uplift	J.I. 1V1A4.AM	08/17/95



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**APPROVED ASSEMBLIES**

**Membrane Type:** SINGLE PLY MEMBRANE

**Deck Type 7I:** Recover

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

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

**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): <b>ACFoam-II, Apache PYROX, Isotherm, UltraGard Gold SP</b> Minimum: 1.3" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): <b>E'NRG'Y-2, ISO-95+GL</b> Minimum: 1.4" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): <b>Hy-Therm AP</b> Minimum: 1.3" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): <b>Ultra/M-II AEF</b> Minimum: 1.4" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): <b>Multi-Max FA</b> Minimum: 1.5" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): <b>Extruded Polystyrene</b> Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): <b>Expanded Polystyrene</b> Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A

**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.**

<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): <b>ACFoam-II, UltraGard Gold SP</b> Minimum: 1.3" x 3' x 4'		(See RAS 117) [2]	6	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Apache PYROX, Isotherm</b> Minimum: 1.3" x 3' x 4'		[2]	6	1:2 ft. <sup>2</sup>
Approved Type(s): <b>E'NRG'Y-2</b> Minimum: 1.4" x 3' x 4'		[2]		1:2 ft. <sup>2</sup>

  
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Approved Type(s): <b>ISO-95+GL</b> Minimum: 1.4" x 3' x 4'	[2]	6	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Hy-Therm AP</b> Minimum: 1.3" x 4' x 4'	[3]	8	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Ultra/M-II AEF</b> Minimum: 1.4" x 4' x 8'	[4]	16	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Fiberglas</b> Minimum: 1 <sup>5</sup> / <sub>16</sub> " x 4' x 4'	[3]	8	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Dens Deck</b> Minimum: 1/2" x 4' x 8'	[4]	16	1:2 ft. <sup>2</sup>

<u>Insulation</u> <u>Top Layer</u>	<u>Fastener</u> <u>Type</u>	<u>Fastening</u> <u>Detail No.</u>	<u>Fasteners</u> <u>Per Board</u>	<u>Fastener</u> <u>Density</u>
(See RAS 117)				

Use one of the following over insulation listed as Base Layer.

Approved Type(s): <b>Fiberglas</b> Minimum: 1 <sup>5</sup> / <sub>16</sub> " x 4' x 4'	[3]	8	1:2 ft. <sup>2</sup>
Approved Type(s): <b>Dens Deck</b> Minimum: 1/2" x 4' x 8'	[4]	16	1:2 ft. <sup>2</sup>

**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.**

Vapor Retarder: (Optional) Any UL or FMRC approved vapor retarder may be installed over the deck or over the base layer of insulation.

Barrier: (Optional) Type II base sheet, 1" perlite, 1/2" or 5/8" gypsum board.

Membrane: GEOFLEX PIB membrane adhered to the insulation or Dens Deck substrate with GEOTAC adhesive applied at a rate of 1gal./100 ft.<sup>2</sup>, using the equipment and procedures required by the manufacturer for the installation of the adhesive, or applied in 3" wide ribbons of approved mopping asphalt 6"o.c..

Maximum Design Pressure: -45 psf.

Maximum Fire Classification: See General Limitation #1.



**Membrane Type:** SINGLE PLY MEMBRANE

**Deck Type 7:** Recover, Noninsulated.

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

**System Type E:** Membrane adhered to base sheet mechanically attached to deck.

**All General and System Limitations apply.**

**Vapor Retarder:** None.

**Barrier:** (Optional) Type II base sheet, 1" perlite, 1/2" or 5/8" gypsum board.

**Base Sheet:** PermaPly 28, Ventsulation or VaporChan adhered to the existing built up roof with gravel or debris removed with a full mopping of ASTM D 312 type III asphalt applied within the EVT range at a rate of 20-40 lbs./sq.

**Membrane:** GEOFLEX PIB membrane adhered to the base sheet or applied in 3" wide ribbons of approved mopping asphalt 6"o.c..

**Maximum Design Pressure:** -45 psf.

**Maximum Fire Classification:** See General Limitations #1.



Membrane Type: SINGLE PLY MEMBRANE

Deck Type 7I: Recover

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

System Type G: Membrane adhered to cellular concrete

All General and System Limitations apply.

<u>Insulation</u> <u>Base Layer</u>	<u>Fastener</u> <u>Type</u>	<u>Fastening</u> <u>Detail No.</u>	<u>Fasteners</u> <u>Per Board</u>	<u>Fastener</u> <u>Density</u>
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Approved types: Celcore Lightweight Concrete

**Note: Lightweight Concrete shall be installed over the existing roof in strict accordance with the South Florida Building Code and the manufacturers recommended procedures.**

Barrier: None.

Membrane: GEOFLEX PIB membrane adhered to the insulation or Dens Deck substrate with GEOTAC adhesive applied at a rate of 1 gal./1.5 sq. using the equipment and procedures required by the manufacturer for the installation of the adhesive.

Maximum Design Pressure: -45psf.

Maximum Fire Classification: See General Limitation #1.



**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 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 13.

**END OF THIS ACCEPTANCE**



Frank Zuloaga, RRC  
Roofing Product Control Examiner