MIAMI-DADE

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
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CONTRACTOR ENFORCEMENT SECTION
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PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

G.A.F. Materials Corporation
1361 Alps Road
Wayne NJ 07470

Your application for Product Approval of:
GAF Everguard TPO Single Ply Roofing System over Steel Decking
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 approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime 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 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.: 00-0329.01
Expires: 07/13/2003

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 Dade County, Florida under the conditions set forth above.

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

Approved: 07/13/2000

Internet mail address: postmaster@buildingcodeonline.com **Homepage: http://www.buildingcodeonline.com**

ROOFING SYSTEM APPROVAL

Category:	Roofing	Approval Date: **July 13, 2000**
Sub-Category:	TPO, Single Ply Roofing	
		Expiration Date: **July 13, 2003**
Deck Type:	Steel	
Maximum Design Pressure	-67.5 psf	
Fire Classification:	See General Limitation #1	

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specification	Product Description
EverGuard TPOSR White Membrane	Various	ASTMD 4434	ThermoPlastic Olefin reinforce membrane.
EverGuard TPOSR Black Membrane	Various	ASTM D 4434	ThermoPlastic Olefin reinforce membrane..
EverGuard TPOSR EX - White Membrane	Various	ASTMD 4434	ThermoPlastic Olefin reinforce membrane.
EverGuard TPOSR EX Black Membrane	Various	ASTM D 4434	ThermoPlastic Olefin reinforce membrane..
EverGuard XHD Fasteners	l=2"-14"	PA 114	Self tapping coated screw w/#3 Phillips head.
EverGuard EGX plate	2-3/8" dia	PA 114	AZ55 Galvaluve coated barber steel plate used with fastener.
EverGuard EGHD plate	2" dia	PA 114	AZ55 Galvaluve coated barber steel plate used with fastener.
EverGuard Coated Metal	4' x 8' 4' x 10' sheets	US Commercial Standard CS-245-62	EverGuard membrane laminated 24 Ga. galvanized steel.
EverGuard Universal Corners	4" x 4" x 4" 20 pcs. crtn.	ASTM D 4434	Prefabricated molded one piece corners.
EverGuard Boots	1" - 8" od 6 pcs. crtn.	ASTM D 4434	Premolded vent pipe boots.

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Product	Dimensions	Test Specification	Product Description
EverGuard Bonding Adhesive	5 gallon pails	proprietary	Adhesive for fully adhered systems and membrane flashing.
EverGuard Membrane Plates	2" round	PA 117	Round 2" nylon reinforced seam plate.
EverGuard Insulation Plates	3" round	PA 117	Round 3" plastic plate.
EverGuard Insulation Plates	3" round	PA 117	Round 3" galvalume plate.
EverGuard Aluminum Termination Bar	1/8 x 1" x 10	PA 114	Lip termination bar.
EverGuard Expansion Joint Cover	4"-8" x 50'		Low profile expansion joint cover.
EverGuard Standard Walkway	1/8" x 30" x 36"		Standard duty walkway pad.
EverGuard Heavy Duty Walkway	1/4" x 30" x 36"		Heavy duty walkway pad.
EverGuard Isocyanurate Walkway	4' x 4', 4' x 8' various thicknesses		Polyisocyanurate insulation.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product	Dimensions	Test Specification	Product Description	Manufacturer
ACFoam II	various	PA 110	Polyisocyanurate foam insulation.	Atlas (with current NOA)
ACFoam III	various	PA 110	Polyisocyanurate foam insulation.	Atlas (with current NOA)
E'NERG'Y PSI-25	various	PA 110	Polyisocyanurate foam insulation.	Johns Manville (with current NOA)

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Product	Dimensions	Test Specification	Product Description	Manufacturer
E'NRG'Y-2 Plus	various	PA 110	Polyisocyanurate foam insulation.	Johns Manville (with current NOA)
Fesco Foam	various	PA 110	Polyisocyanurate foam / Fescoboard insulation.	Johns Manville (with current NOA)
UltraGard Premier	various	PA 110	Polyisocyanurate foam insulation.	Johns Manville (with current NOA)
UltraGard Gold	various	PA 110	Polyisocyanurate foam insulation.	Johns Manville (with current NOA)
Hy-Tec	various	PA 110	Polyisocyanurate foam insulation.	Celotex Corp. (with current NOA)
Hy-Therm SP	various	PA 110	Polyisocyanurate foam insulation.	Celotex Corp. (with current NOA)
Hy-Therm AP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current NOA)
ISO 95+, ISO 95+ GL	various	PA 110	Polyisocyanurate foam insulation.	Firestone (with current NOA)
Multi-Max, Multi-Max FA	various	PA 110	Polyisocyanurate foam insulation.	Rmax, Inc. (with current NOA)
Thermaroof Plus	various	PA 110	Polyisocyanurate foam insulation.	Rmax, Inc. (with current NOA)
Ultra/M-II	various	PA 110	Polyisocyanurate foam insulation.	Homasote Co. (with current NOA)
Pyrox	various	PA 110	Polyisocyanurate foam insulation.	Apache Products Co. (with current NOA)
White Line	various	PA 110	Polyisocyanurate foam insulation.	Apache Products Co. (with current NOA)
GAFTEMP Permalite	various	PA 110	Perlite insulation board.	GAF (with current NOA)
Celotherm	various	PA 110	Perlite insulation board	Celotex (with current NOA)

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Product	Dimensions	Test Specification	Product Description	Manufacturer
Conperl	various	PA 110	Perlite insulation board	Conglas (with current NOA)
Fesco Board	various	PA 110	Perlite insulation board	Johns Manville (with current NOA)
High Density Fiber Board	various	PA 100	Wood fiber insulation.	Celotex Corp. (with current NOA)
Armor Board High Density	various	PA 110	Wood fiber insulation	Allied Signal (with current NOA)
GAFTEMP High Density Fiberboard	various	PA 110	Wood fiber insulation.	GAF (with current NOA)
Roof Insulation Board	various	PA 110	Wood fiber insulation.	Georgia Pacific (with current NOA)
Fiberbase HD1, HD6	various	PA 110	Wood fiber insulation.	Temple Inland (with current NOA)
Structodek	various	PA 110	Wood fiber insulation.	Masonite (with current NOA)
Type X Gypsum	various		Fire resistant rated gypsum.	Generic
Dekfast Fasteners #12, #14 or #15	various	PA 114 PA 117	Insulation / membrane fasteners	Construction Fasteners Inc. (with current NOA)
Omega	various	PA 114 PA 117	Stainless steel insulation / membrane fasteners	Construction Fasteners Inc. (with current NOA)
HD Insul-Fixx Fastener	various	PA 114 PA 117	Insulation / membrane fasteners	SFS Stadler (with current NOA)
Insul-Fixx P	3" round	PA 114 PA 117	3" round polyethylene stress plate.	SFS Stadler (with current NOA)
Insul-Fixx S	3" round	PA 114 PA 117	3" round galvalume AZ55 stress plate.	SFS Stadler (with current NOA)

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Product	Dimensions	Test Specification	Product Description	Manufacturer
Insul-Fixx Fastener	various	PA 114 PA 117	Insulation fastener for steel and wood decks.	SFS Stadler (with current NOA)
Isofast Fasteners	various	PA 114 PA 117	Insulation / membrane fasteners	SFS Stadler (with current NOA)
Isofast Plate	various	PA 114 PA 117	Square or oblong galvalume steel plates for use with Isofast fasteners.	SFS Stadler (with current NOA)
Olympic Fastener #12, #14 or #15	various	PA 114 PA 117	Insulation / membrane fasteners.	Olympic (with current NOA)

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corporation	3003617	FM 4470	12/20/99
Underwriters Laboratories	File R1306	Fire Classification	05/20/99

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SYSTEMS:

Deck Type 2I: Steel, Insulated, New Construction

Deck Description: Minimum 22 ga. Grade E steel deck secured to supports space at maximum 6 ft o.c. with ITW Buildex Traxx/5 spaced at 6" o.c.

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

All General and System Limitations apply.

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One or more layers of the following insulations.				
Approved Type(s): **EverGuard Isocyanurate, GAFTEMP Isothem R, Isotherm RA, Pyrox, AC Foam II**				
Minimum: 1" x 4' x 4'	N/A	N/A	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.

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

Barrier: (Optional) 1/2" or 5/8" gypsum or Dens Deck secured to the deck with the insulation.

Membrane: EverGuard TPOSR or EverGuard TPOSR-EX Membrane attached through the prelimiary attached insulation as specified below.

Fastening: Membrane is mechanically attached using EverGuard XHD Fasteners and EverGuard EGX Plates spaced 6" o.c. within minimum 5" wide laps. Laps are spaced at maximum 114.5" o.c. and sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -45 psf (See General Limitation #7.)

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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Deck Type 2I: Steel, Insulated, New Construction

Deck Description: Minimum 22 ga. Grade E steel deck secured to minimum ¼" thick supports space at maximum 6 ft o.c. with ITW Buildex Traxx/4 or Traxx/5 spaced at 6" o.c. Deck side laps sre secured with ITW Buidex Traxx/1 fasteners spaced at maximum 30" o.c.

System Type D-1: Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One or more layers of the following insulations.				
Approved Type(s): **EverGuard Isocyanurate, GAFTEMP Isothem R, Isotherm RA, Pyrox, AC Foam II**				
Minimum: 1" x 4' x 4'	N/A	N/A	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.

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

Barrier: (Optional) 1/2" or 5/8" gypsum or Dens Deck secured to the deck with the insulation.

Membrane: EverGuard TPOSR or EverGuard TPOSR-EX Membrane attached through the prelimiary attached insulation as specified below.

Fastening: Membrane is mechanically attached using EverGuard XHD Fasteners and EverGuard EGHD Plates spaced 6" o.c. within minimum 5" wide laps. Laps are spaced at maximum 114" o.c. and sealed with a minimum 5" wide heat weld.

Maximum Design Pressure: -67.5 psf (See General Limitation #7.)

Maximum Fire Classification: See General Limitation #1.

Maximum Slope: See General Limitation #1.

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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 applied 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 may 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 TAS 105. If the fastener value, as field-tested, is 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 the 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 or Architect may be submitted. Said revised fastener spacing utilize the withdrawal resistance value taken from Miami-Dade Protocol TAS 105 and calculations in compliance with Miami-Dade Roofing Application Standard RAS 117.

7 Perimeter and corner areas shall comply with the enhanced uplift pressure of these areas, as calculated in compliance with Chapter 23 of the South Florida Building Code. Fastener densities shall be increase for both insulation and base sheet as needed calculated in compliance with Miami-Dade Roofing Application Standard TAS 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 Miami-Dade County Roofing Application Standard TAS 111 and the wind load requirements of Chapter 23 of the South Florida Building Code.

9 The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, corners). No 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.)**

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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 10.

END OF THIS ACCEPTANCE

Frank Zuloaga, RRC
Roofing Product Control Examiner