MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

Tremco Incorporated
3735 Green Road
Bechwood, OH 44122

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 and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Tremco Built up Roofing System over Gypsum

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.

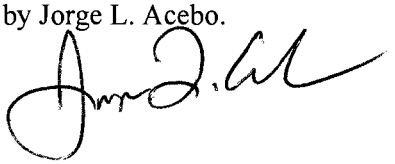
RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

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 renews NOA No. 02-0115.07 and consists of pages 1 through 8.
The submitted documentation was reviewed by Jorge L. Acebo.



ROOFING SYSTEM APPROVAL:

Category: Roofing
Sub-Category: Built-Up Roofing
Deck Type: Gypsum
Maximum Design Pressures **-72.5 psf**

TABLE 1
TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

Product	Dimensions	Test Specification	Product Description
BURMastic® Base Sheet Adhesive or Solvent Free Base Sheet Adhesive	5 gallon	Proprietary	Cold process adhesive used for adhering BURMastic Glass Ply or Composite Ply to Approved Insulations
BURMastic® Adhesive	5 or 55 gallon	Proprietary	Cold applied ply sheet and surfacing adhesive
BURMastic® Composite Ply	36" x 66.6'	ASTM D 4601 Type II	Type II asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing
BURMastic® FR		Proprietary	Cold applied, fire rated flood coat
BURMastic® Glass Ply	36" x 72'	ASTM D 4601 Type II	Asphalt impregnated polyester/glass/polyester composite for use in conventional and modified bitumen built-up roofing
Double-Duty Aluminum™	5 gallon	ASTM D 2824	Aluminum pigmented roof coating.
Fas-n-Free® Adhesive		Proprietary	One part, solvent free adhesive used for adhering Approved insulations to Approved substrates
FireKote®	5 and 55 gallon	Proprietary	Fire retardant, acrylic/polymer blend emulsion
Improved Polarcote®	5 and 55 gallon	Proprietary	Reflective, white elastomeric roof coating
Poly-THERM® Roofing Ply	10 squares per roll 39¾" wide	Proprietary	Continuous filament, spunbonded polyester ply sheet for use in conventional and modified bitumen built-up roof systems
Premium III™	100 lb.	ASTM D 312	Type III asphalt for use in built-up roofing systems
THERMastic® Adhesive	60 lb.	Proprietary	All purpose roof cement
THERMglass®		ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems
TREMprime™ Q.D.	1, 5 or 55 gallon	ASTM D 41	Asphalt based roofing primer
Therm MB FR	100 sq. ft./roll	ASTM D 5147	Modified bitumen, glass reinforced, fire resistant membrane
Therm™ 100	System		Tremco built-up roofing system using Thermastic and Thermglass
Therm™ 200	System		Tremco built-up roofing system using Polytherm and Thermastic
Tremprime® WB	5 gallon	Proprietary	Water based roofing primer

TABLE 2

APPROVED INSULATIONS:

Product	Dimensions	Test Specification	Product Description	Manufacturer (With current NOA)
ACFoam II	Various	TAS 110	Polyisocyanurate foam insulation	Atlas Energy Products
E'NRG'Y 2 E'NRG'Y 2 Plus	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville (NRG)
Multi-Max	Various	TAS 110	Polyisocyanurate foam insulation	R-Max
High Density Wood Fiberboard	Various	TAS 110	Wood fiberboard insulation	Celotex Corp.
Dens Deck	Various	TAS 110	Gypsum core insulation	Georgia Pacific
Perlite		TAS 110	Perlite insulation	Generic

TABLE 3

APPROVED FASTENERS:

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	NTB-1in. Head (with plate)	Glass reinforced nylon	0.75 in. (19mm) major thread dia.	Olympic Fasteners

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Applied Research Laboratories	27076	physical properties	
Construction Research Laboratories	4109	Uplift Resistance	05/19/84
Factory Mutual Research Corporation	J.I. #0P9A9.AM	Wind Uplift Classification	10/27/88
	J.I. #0R9A6.AM	Wind Uplift Classification	01/02/90
	J.I. #2Y5A2.AM	Wind Uplift Classification	11/16/94
	J.I. #1T6A9.AM	Wind Uplift Classification	08/24/91
	J.I. #0T3Q9.AM	Wind Uplift Classification	10/01/91
	J.I. #0Z8A3.AM	Wind Uplift Classification	06/13/95
	J.I. #2D1A8.AM	Class 4470	07/27/2000
	J.I. #0D0A9.AM	Class 4470	08/01/2000
	1995 FMRC	Insulation and fastener requirements	1/01/95
PRI Asphalt Technologies, Inc.	TRE-15-02-01	Physical Properties	05/25/99
Underwriters Laboratories, Inc.	R4170	Fire Classification	1/01/95
Exterior Research & Design, LLC.	4544.07.96-1	Wind Uplift TAS 114	07/30/96

APPROVED SYSTEMS

Deck Type 6I: Poured Gypsum, Insulated

Deck Description: Poured gypsum concrete

System Type B(1): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or adhesive.

All General Limitations apply.

Insulation Base Layer	Fastener Density ft²	Insulation Fasteners (Table 3)
AC-Foam II, E'NRG'Y-2 or Multi-Max, E'NRG'Y-2 Plus		
Minimum: 1.5" thick	1:1.3	See any approved fastener in table 3

Note: Base layer shall be mechanically attached with fasteners and density described above. 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 fastener details.

Insulation Top Layer	Fastener Density ft²	Insulation Fasteners (Table 3)
Celotex High Density Wood Fiberboard		
Minimum: ½" thick	N/A	N/A
Dens Deck		
Minimum: ¼ thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or 2.0 gallons per square for Fiberglas Roof Insulation. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer 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) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Three or four plies of THERMglas or PolyTHERM ply sheet adhered to insulation or base sheet with THERMastic, Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq for each ply or three or four plies of Approved Type IV or Type VI ply sheet adhered to insulation or base sheet with Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq for each ply.. (See specification number for appropriate number of plies).

Cap Sheet: None.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic or Tremlastic S surfaced with Double Duty Aluminum coating at ¾ gal./sq. or surfaced with Improved Polarcote or Polarcote FR in two coats at 1 gallon per square per coat.
2. Flood coat of THERMastic and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURMastic and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively.

Maximum Design Pressure: **-72.5 psf;** (See General Limitation #9)

Deck Type 6I: Poured gypsum, Insulated

Deck Description: Poured gypsum concrete

System Type B(2): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or adhesive.

All General Limitations apply.

Insulation Base Layer	Fastener Density ft²	Insulation Fasteners (Table 3)
AC-Foam II, E'NRG'Y-2 or Multi-Max, E'NRG'Y-2 Plus		
Minimum: 1.5" thick	1:1.3	See any approved fastener in table 3

Note: Base layer shall be mechanically attached with fasteners and density described above. 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 fastener details.

Insulation Top Layer	Fastener Density ft²	Insulation Fasteners (Table 3)
Celotex High Density Wood Fiberboard		
Minimum: ½" thick	N/A	N/A
Dens Deck		
Minimum: ¼" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or 2.0 gallons per square for Fiberglas Roof Insulation. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer 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) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Three or four plies of BURmastic Composite Ply, BURmastic Glass Ply or approved G2 fiberglass base ply sheet adhered in 3.5 gal./sq. ± 15% of BURmastic adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Base Sheet Adhesive or BURmastic Solvent Free Base Sheet Adhesive

Cap Sheet: None.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic or Tremlastic S surfaced with one of the following:
   Double Duty Aluminum coating at ¾ gal./sq.,
   60 lbs. #11 3M roofing granule's in wet Tremlastic
   Crushed Stone, nominal 3/64"-3/8" at 240lbs./sq. in wet Tremlastic or
   Improved Polarcote or Polarcote FR in two coats at 1 gallon per square per coat
2. Flood coat of BURMastic and gravel at application rates of 5-6 1/5 gal./sq. and 400 lbs./sq., respectively.

Maximum Design Pressure: **-72.5 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 Professional Engineer, Registered 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. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(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.)**

END OF THIS ACCEPTANCE