



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

Johns Manville Corporation

717 17th Street
Denver, CO 80202

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 of the Florida Building Code.

DESCRIPTION: JM PVC Single Ply Roof Systems over Wood 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 new NOA consists of pages 1 through 10.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0627.01
Expiration Date: 09/22/21
Approval Date: 09/22/16
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ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Materials:	PVC
Deck Type:	Wood
Maximum Design Pressure:	-60 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
JM PVC	50 mil x roll width x 100' 60 mil x roll width x 100' 80 mil x roll width x 75'	ASTM D4434	PVC polyester reinforced membrane with DuPont™ Elvaloy® KEE. Available in 3.25', 5', 6.5', 10', and 12' rolls.
JM PVC Fleece Backed	50 mil x roll width x 90' 60 mil x roll width x 90' 80 mil x roll width x 75'	ASTM D4434	PVC polyester reinforced membrane backed with a lightweight polyester fleece. Available in 6.33' and 12' rolls.
JM PVC SD Plus	50 mil x roll width x 100' 60 mil x roll width x 100' 80 mil x roll width x 75'	ASTM D4434	PVC polyester reinforced membrane. Available in 5' and 10' rolls.
DynaFast 180 S	39-3/8" wide x 49'2"	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet.
JM PVC Profile	1-1/2" wide x 1-1/4" high x 10' long	Proprietary	Non-reinforced, extruded PVC for simulating the aesthetics of standing seam metal roofing.
JM PVC Spine	3/4" wide x 13/16" high x 7' long	Proprietary	Non-reinforced, extruded PVC for simulating the aesthetics of standing seam metal roofing.
JM PVC Penetration Pan	Various	ASTM D4434	Molded PVC for flashing penetration.
JM PVC Pipe Boots	Various	ASTM D4434	Non-reinforced molded PVC flashing penetrations.
JM PVC Universal Corner	Various	ASTM D4434	Non-reinforced molded PVC for inside and outside corner flashing.
JM PVC T-Joint Patch	Various	ASTM D4434	Non-reinforced PVC used to cover T-joints and fasteners.
JM PVC Detail Membrane	Various	ASTM D4434	Non-reinforced PVC used for pipe and corner flashing.
JM PVC Detail Strip	Various	ASTM D4434	PVC used to waterproof joints.
JM PVC Coated Metal	Various	ASTM D4434	JM PVC laminated onto galvanized steel for metal flashings and edge details.
JM PVC Walkpad	Various	ASTM D4434	Textured PVC walk pad.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
JM PVC Heavy-Duty	Various	ASTM D4434	Textured PVC walk pad.
JM PVC Split Pipe Boot	Various	ASTM D4434	Reinforced PVC used to flash vent stacks and other round penetrations

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI	Isocyanurate Insulation with glass reinforced facers.	Johns Manville
ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI	Isocyanurate Insulation with glass reinforced facers.	Johns Manville
ENRGY 3 FR, ENRGY 3 FR 25 PSI	Isocyanurate Insulation with inorganic coated glass reinforced facers; bottom face is premium coated for combustible decks.	Johns Manville
Invinsa Roof Board	High density polyisocyanurate board.	Johns Manville
Invinsa FR Roof Board	Flame-resistant, High density polyisocyanurate board.	Johns Manville
JM SECUROCK Gypsum-Fiber Roof Board	Rigid, gypsum-based board stock.	Johns Manville



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	All Purpose Fasteners	Truss head, self-drilling fastener for wood, steel, and concrete decks.	#14 x 16” max.	Johns Manville
2.	JM PVC RhinoPlate	Membrane bonding plate.	3” round	Johns Manville
3.	High Load Fasteners	Insulation and membrane fastener for steel, wood, and concrete decks.	#15 x 14” max.	Johns Manville
4.	High Load Plate	Seam plate with reinforcing ribs and eyehooks.	2-3/8” round steel plate	Johns Manville
5.	High Load LH	#15 Large Head fastener for steel, wood, and concrete decks.	#15 x 14” max.	Johns Manville
6.	Polymer Membrane Batten	Plastic membrane batten strips.	1” x 250’ coil	Johns Manville
7.	APB Plates	Seam plate with reinforcing ribs and barbs.	2” round	Johns Manville
8.	Trufast Deep Well Coiled Batten Bar	Galvalume coated steel membrane batten.	1” x 100’ coil	Altenloh, Brink & Co. U.S., Inc.



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Momentum Technologies, Inc.	NX21J0A	ASTM D4434	06/01/11
	NX21J0B	ASTM D4434	07/20/11
	NX21J0C	ASTM D4434	06/01/11
Momentum Technologies Int.	CX23G3A	ASTM D4434	04/14/14
PRI Construction Materials Technologies, LLC.	JMC-088-02-01.4	ASTM D1876	09/06/13
	JMC-107-02-01.7	TAS 117(A)/(B)/(C) ASTM D5147/D903/D1876	03/31/16
	JMC-126-02-01	TAS114(J)	08/20/13
	JMC-141-02-01	TAS114(J)	04/18/13
	JMC-201-02-01A	TAS114(J)	07/02/14
Trinity ERD	J45020.09.13-1-R1	TAS 114(C)	09/12/13
FM Approvals	797-09040-267	FM 4470	01/04/13
UL LLC	R10167	UL 790	09/06/16



Membrane Type: Single Ply, PVC

Deck Type II: Wood, Insulated

Deck Description: Min. 1⁵/₃₂" plywood or wood plank attached to structural supports spaced a maximum 24" o.c. with 0.113" ring shank nails spaced 6" o.c.

System Type C: One or more layers of insulation simultaneously attached. Membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 0.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 0.5" thick	1 with 2	1:4
Invinsa Roof Board, Invinsa FR Roof Board, JM SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	1 with 2	1:4

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane: JM PVC or JM PVC SD Plus induction welded to JM PVC Rhino Plates which are fastened through the deck into the wood supports. The minimum embedment into the wood supports shall be 1.5". The minimum 2.5" wide side laps shall be sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7).



Membrane Type: Single Ply, PVC

Deck Type II: Wood, Insulated

Deck Description: Min. ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced a maximum 24" o.c. with 0.113" ring shank nails spaced 6" o.c.

System Type D(1): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI Minimum 0.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI Minimum 0.5" thick	N/A	N/A
Invinsa Roof Board, Invinsa FR Roof Board, JM SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane 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.

Membrane: JM PVC or JM PVC SD Plus is mechanically attached using All Purpose Fasteners and High Load Plates spaced 12" o.c. within 6" wide laps, spaced 72" o.c. and sealed with minimum 1.5" wide heat welds. The All Purpose Fasteners shall penetrate through the deck and into the wood supports. The minimum embedment into the wood supports shall be a 1.25".

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



Membrane Type: Single Ply, PVC

Deck Type II: Wood, Insulated

Deck Description: Min. 1⁵/₃₂" plywood or wood plank attached to structural supports spaced a maximum 24" o.c. with 0.113" ring shank nails spaced 6" o.c.

System Type D(2): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with High Load LH Fastener and Polymer Membrane Batten or High Load Fastener and Trufast Deep Well Coiled Batten Bar spaced 6" o.c. in the center of the minimum 4" torch welded side laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with minimum 2.5" wide side laps that shall be sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -60 psf. (See General Limitation #9).



Membrane Type: Single Ply, PVC

Deck Type II: Wood, Insulated

Deck Description: Min. 15/32" plywood or wood plank attached to structural supports spaced a maximum 24" o.c. with 0.113" ring shank nails spaced 6" o.c.

System Type D(3): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI Minimum 1.5" thick	N/A	N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the optional insulation with High Load Fastener & APB Plates or High Load Plates spaced 9" o.c. in the center of the minimum 4" torch welded side laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with minimum 2.5" wide side laps that shall be sealed with a minimum 1.5" wide heat weld.

Maximum Design Pressure: -60 psf. (See General Limitation #9).



WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

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 side lap 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. 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 to 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 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



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