



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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DURO-LAST Roofing, Inc.
525 Morley Drive
Saginaw, MI 48601

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: DURO-LAST Single Ply PVC Roof Systems over Gypsum 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 and revises NOA No. 22-0411.08 and consists of pages 1 through 9.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA-No.: 23-0509.08
Expiration Date: 08/22/28
Approval Date: 08/31/23
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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: PVC
Deck Type: Gypsum
Maximum Design Pressure: -105 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>
Duro-Last Membrane	37 mil thick, Various widths x 150 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Membrane	45 mil thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Membrane	57 mil thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Fleece Membrane	47 mil thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Membrane	56 mil thick, Various widths x 100 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Fleece Membrane	80 mil thick, Various widths x 65 ft. rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Tuff Membrane	45 mil thick Various widths x 100 ft rolls	ASTM D4434	PVC polymer blend polyester reinforced fleece backed roofing membrane.
Duro-Tuff Membrane	57 mil thick Various widths x 100 ft rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Tuff Membrane	80 mil thick Various widths x 65 ft rolls	ASTM D4434	PVC polymer blend polyester reinforced roofing membrane.
Duro-Last Tab Sealer 4725	N/A	N/A	Solvent-based contact-bonding agent.
Duro-Blue Separation Slip Sheet	4 mil x 20' x 360'; 4 mil x 20' x 100'	N/A	Separation slip sheet produced from coextruded polyethylene film.
Duro-Last Duro-Weave Separation Slip Sheet	2.5 mil x 12' x 328'	N/A	Separation slip sheet produced from high density polyethylene tapes and coated on one side with low density polyethylene.



APPROVED INSULATIONS:

Product Name	Product Description	Manufacturer (With Current NOA)
N/A	N/A	N/A

TABLE 2**APPROVED FASTENERS/ADHESIVES:**

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Duro-Last Duro-Augur	Glass reinforced nylon fastener	Various Lengths	Duro-Last Roofing, Inc.
2.	Duro-Last Auger Plate	Galvalume steel stress plate for use with Duro-Last Duro-Augur fasteners	2" round	Duro-Last Roofing, Inc.
3.	Trufast Twin Loc Coiled Batten Bar	Batten bar for mechanical attachment of membrane	1" wide 0.040" wide 100' length	Altenloh, Brinck & Co. U.S., Inc.
4.	Trufast Twin Loc-Nail Batten Fastener	Two-piece assembled fastener. AZ-55 Galvalume or G-90 and stainless steel or coated steel fastener	Various lengths	Altenloh, Brinck & Co. U.S., Inc.
5.	Trufast Twin Loc-Nail Assembled Fastener	Three-piece assembled fastener. AZ-55 Galvalume or G-90 fastener	Various lengths	Altenloh, Brinck & Co. U.S., Inc.
6.	Duro-Fleece CR-20 Adhesive	Dual component, low-rise polyurethane foam adhesive	Kit covers 2,000 ft ²	Duro-Last Roofing, Inc.

TABLE 3

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
FM Approvals	3Y5A6.AM	Class 4470	03-10-95
	4D6A4.AM	Class 4470	08-90-99
	3005604	Class 4470	03-13-00
	3008342	Class 4470	10-19-00
	3030225	Class 4470	06-18-07
	3023458	Class 4450	07-18-06
	3040741	Class 4470	10-17-11
	3050118	Class 4470	01-20-14
UL LLC	R10128	UL790	08-23-23
Exterior Research & Design, L.L.C	02742.10.05	TAS 117(A) & (B)	10-12-05
	02745.08.06	TAS 117(A)	08-04-06
Intertek Testing Services, NA Inc.	3119586-001	TAS 111	07-10-07
PRI Construction Materials Technologies LLC	DLRI-021-02-01.12	ASTM D1761/D1876	06/27/17
		TAS 117-B	
	DLRI-099-02-01	TAS 114 (J)	07/20/16
NEMO ETC, LLC	4r-DL-19-SSTHP-01.A.R2	ASTM D4434	04-29-20
	4r-DL-19-SSTHP-01.B	ASTM D4434	04-29-20
	4p-DL-23-SSLAP-01.A	Various properties	06-09-23



APPROVED ASSEMBLIES

Membrane Type:	Single Ply, PVC
Deck Type 6:	Poured Gypsum, Non-insulated
Deck Description:	Poured gypsum
System Type E(1):	Membrane mechanically attached to roof deck

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.

Slip Sheet Optional: One (1) ply of Duro-Last Duro-Weave Separation Slip Sheet or Duro-Last Duro-Blue Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Last or Duro-Tuff membrane shall be mechanically attached 6" o.c. in rows spaced 48" o.c. with 2-1/2" Duro-Last Auger Fasteners and Auger Plates or Trufast Twin Loc Coiled Batten bar and 1.8" Trufast Twin Loc Nail batten Fastener. A 10" wide cover strip welded over the fastener rows with a 1-1/2" wide heat weld.

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



Membrane Type: Single Ply, PVC
Deck Type 6: Poured Gypsum, Non-insulated
Deck Description: Poured gypsum concrete
System Type E(2): Membrane mechanically attached to roof deck

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.

Slip Sheet Optional: One (1) ply of Duro-Last Duro-Weave Separation Slip Sheet or Duro-Last Duro-Blue Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Last or Duro-Tuff membrane shall be mechanically attached 3” o.c. in rows spaced 48” o.c. with Trufast Twin Loc Coiled Batten bar and 1.8” Trufast Twin Loc Nail Batten Fastener. A 10” wide cover strip welded over the fastener Rows with a 1-1/2” wide heat weld.

Maximum Design Pressure: -82.5 psf. (See General Limitation #7)



Membrane Type: Single Ply, PVC
Deck Type 6: Poured Gypsum, Non-insulated
Deck Description: Poured gypsum concrete
System Type E(3): Membrane mechanically attached to roof deck

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.

Slip Sheet Optional: One (1) ply of Duro-Last Duro-Weave Separation Slip Sheet or Duro-Last Duro-Blue Slip Sheet applied as per manufacturers installation instructions.

Membrane: Duro-Tuff membrane shall be mechanically attached 6" o.c. in rows spaced 48" o.c. with 1.8" Trufast Twin Loc-Nail Assembled Fastener. A 10" wide cover strip welded over the fastener rows with a 1-1/2" wide heat weld. Two (2) inch wide laps are sealed with a minimum 1-1/2" wide heat weld.

Maximum Design Pressure: -60 psf. (See General Limitation #7)



Membrane Type: Single Ply, PVC
Deck Type 6: Poured Gypsum, Non-insulated
Deck Description: Poured gypsum concrete
System Type F: Membrane adhered to roof deck

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.

Membrane: Duro-Fleece membrane shall be adhered with Duro-Fleece CR-20 Membrane Adhesive applied in a splatter pattern at a rate of 8.3 lbs./sq. The 4.5" wide laps are sealed with a minimum 1-1/2" wide heat weld.

Maximum Design Pressure: -105 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 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 and/or RAS 137. 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.)**
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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