



NEMO|etc.

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EVALUATION REPORT

Tarco Roofing

One Information Way, Suite 225
Little Rock, AR 72202
(254) 913-7750

Evaluation Report 4930.02.14-R4

FL16884-R4

Date of Issuance: 02/27/2014

Revision 4: 02/14/2018

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

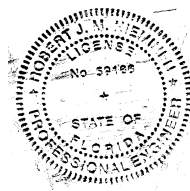
INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 4.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 02/14/2018. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment
Compliance Statement: LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments, as produced by Tarco Roofing, have demonstrated compliance with the following sections of the 6th Edition (2017) Florida Building Code through testing in accordance with applicable sections the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Property	Standard	Year
1507.1.1, R905.1.1 Exception	Unrolling, Breaking Strength, Pliability	ASTM D226	2009
1507.1.1, R905.1.1 Exception	Tear Strength	ASTM D1970	2015
1507.1.1, R905.1.1 Exception	Tear Strength	ASTM D4533	2015
TAS 110	Accelerated Weathering	ASTM D4798	2011

3. REFERENCES:

Entity	Examination	Reference	Date
ERD (TST6049)	Physical Properties	SC4950.02.14	02/27/2014
ERD (TST6049)	FBC 1507.1.1 (Exception)	TAR-SC16115.17	10/02/2017
UL, LLC (QUA9625)	Quality Control	Service Confirm, 10227624	Exp. 11/22/2019

4. PRODUCT DESCRIPTION:

- 4.1 LeakBarrier® EasyLay® UDL 15 consists of a woven-polymeric scrim with a textured fabric on the top surface; meets FBC 1507.1.1 & R905.1.1 (Exception).
- 4.2 LeakBarrier® EasyLay® UDL 30 (formerly "LeakBarrier® EasyLay® UDL Basic") consists of a woven-polymeric scrim with a textured fabric on the top surface; meets FBC 1507.1.1 & R905.1.1 (Exception).
- 4.3 LeakBarrier® EasyLay® UDL 50 consists of a woven-polymeric scrim with a non-woven fabric on the top surface and a rubberized polymeric coating on the back surface; meets FBC 1507.1.1 & R905.1.1 (Exception).

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.
- 5.3 Fire Classification is not part of this report; refer to current Approved Roofing Materials Directory or test report from accredited testing agency for fire ratings of this product.
- 5.4 LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this evaluation combined with supporting data for the prepared roof covering.

5.5 Allowable Roof Covers:

TABLE 1: ROOF COVER OPTIONS						
Underlayment	Asphalt Shingles	Nail-On Tile	Foam-On Tile	Metal	Wood Shakes & Shingles	Slate
EasyLay UDL 15	Yes	No	No	Yes	Yes	Yes
EasyLay UDL 30 (formerly "EasyLay® UDL Basic")	Yes	No	No	Yes	Yes	Yes
EasyLay UDL 50	Yes	No	No	Yes	Yes	Yes

5.6 Exposure Limitations:

LeakBarrier® EasyLay® UDL 15 shall not be left exposed for longer than **30-days** after installation.

LeakBarrier® EasyLay® UDL 30 (formerly "LeakBarrier® EasyLay® UDL Basic") and **LeakBarrier® EasyLay® UDL 50** shall not be left exposed for longer than **180-days** after installation.

6. INSTALLATION:

6.1 **LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments** shall be installed in accordance with **Tarco Roofing** published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below.

6.2 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.

6.3 LeakBarrier® EasyLay® UDL 15, UDL 30 (formerly "UDL Basic") or UDL 50:

6.3.1 Shall be installed in compliance with the requirements for ASTM D226, Type I or II underlayment in **FBC Table 1507.1.1 or R905.1.1** for the type of prepared roof covering to be installed, taking into account the wider sheet-width for double-layer applications.

6.3.2 For slopes 4:12 (18.4°) or greater: **LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments** shall be laid horizontally, parallel to the eave with the printed side up, flat and unwrinkled and have minimum 4-inch side (horizontal) laps and minimum 8-inch end (vertical) laps. Side (horizontal) laps shall run with the flow of water in a shingling manner. End (vertical) laps shall be offset from course to course not less than 3 feet.

6.3.3 For slopes 2:12 (9.4°) to < 4:12 (18.4°): **LeakBarrier® EasyLay® UDL Synthetic Roof Underlayments** shall be applied in a double coverage method, flat and unwrinkled. Begin by applying a 24-inch wide starter-strip along the eaves. Then place a full-width sheet over the starter, with the lower edge flush to the starter's lower edge. Apply succeeding 48-inch wide courses up the roof slope, overlapping each previous course a minimum of 20-inches in a "shingle fashion" with minimum 12-inch end (vertical) laps. End (vertical) laps shall be offset from course to course not less than 3 feet.

6.3.4 Where laps or joints require sealant or adhesive use plastic cement recommended by **Tarco Roofing**. **Tarco Roofing** recommends sealing all laps and joints where the underlayment will be exposed to wind-driven rain.

6.3.5 Attachment: Use corrosion-resistant or stainless steel roofing nails with 3/8-inch diameter heads or low-profile plastic cap-nails with 1-inch diameter heads spaced 9-inch o.c. at all laps and 12-inch o.c. at two (2) staggered rows in the field of the sheet. If wind or rain is expected prior to finished roofing application, use 1-inch diameter plastic cap nails.

Code Reference: The Exception statement in FBC 1507.1.1 and FBC R905.1.1 requires use of metal cap nails where the ultimate design wind speed, V_{ult} , equals or exceeds 150 mph.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the noted QA agency for information on product locations covered for **F.A.C. 61G20-3** QA requirements. The following plants have qualified products under their respective physical properties specifications.

<u>Plant</u>	<u>Specification</u>	<u>Product(s)</u>
Gujarat, India	FBC 1507.1.1 (Exception)	LeakBarrier® EasyLay® UDL 15, LeakBarrier® EasyLay® UDL 30 (formerly "LeakBarrier® EasyLay® UDL Basic"), LeakBarrier® EasyLay® UDL 50

9. QUALITY ASSURANCE ENTITY:

UL, LLC. – QUA9625; (414) 248-6409; karen.buchmann@ul.com

- END OF EVALUATION REPORT -