| | | | | NEMO etc. ate of Authorization #32455 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245 | | |
|-----------------------------------|----------|--------------------------|--------------|--|--|--|
| ENGINEER | EVALUATE | TEST | CONSULT | CERTIFY | | |
| | | EVALUATION REPORT | | | | |
| Carlisle Coatings & Waterproofing | | | Evaluation R | Evaluation Report C39180.12.11-R5 | | |
| 900 Hensley Lane | | | | FL6785-R9 | | |

900 Hensley Lane Wylie, TX 75098 (717) 245-7000 FL6785-R9 Date of Issuance: 12/09/2011 Revision 5: 06/17/2019

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 evaluated for compliance with the **6**th **Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: CCW Roof Underlayments

LABELING: Labeling shall be in accordance with the requirements 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

CERTIFICATION OF INDEPENDENCE:



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 06/17/2019 This does not serve as an electronically signed document.

- 1. NEMO|etc. 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. 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: | | | | | |
|-----|---|---|-------------------------------------|---|--|--|
| | demonstrated com | Roofing Underlayment nent: CCW Roof Underlaymo pliance with the following secti the following Standards. Com set forth herein. | ons of the 6th Ec | lition (2017) Florida Building | Code through testin | |
| 2. | STANDARDS: | | | | | |
| | <u>Section</u> 1507.1.1, T1507.1.1, 1 R905.1.1, TR905.1.1, I | | ties | <u>Standard</u> ASTM D1970 | <u>Year</u> 2015 | |
| | 1507.3.3, R905.3.3 TAS 110 | Physical Proper Accelerated We | | FRSA/TRI April 2012 (04-12) ASTM D4798 | 2012 2011 | |
| 3. | REFERENCES: | | | | | |
| | Entity ERD (TST6049) MTI (TST2508) MTI (TST2508) ICC-ES (EVL2396) ICC-ES (EVL2396) NEMO (TST6049) NEMO (TST6049) NEMO (TST6049) NEMO (TST6049) NEMO (TST6049) UL, LLC. (QUA9625) UL, LLC. (QUA9625) | Examination ASTM D1970 (TX) ASTM D1970 (PA) ASTM D1970 (PA) 2015 IBC/IRC Compliand 2015 IBC/IRC Compliand FRSA/TRI April 2012 (04 ASTM D1970 (adhesion) ASTM D1970 & D4798 (I ASTM D1970 & FRSA/TR Quality Control Quality Control | e -12) (PA&TX) (TX) PA) | Reference C41280.10.12 PX02M0A PX13M0B ESR-1556 ESR-2206 4S-CRL-18-004.12.18-1 4S-CRL-18-004 4j-CRL-19-SSUDL-03.A 4j-CRL-19-SSUDL-02.A 4S-CRL-18-004.06.19.A TGDY.R18678 Listing Service Confirmation | Date 10/05/2012 01/17/2011 01/18/2011 02/01/2018 06/01/2018 12/17/2018 01/21/2019 05/28/2019 06/03/2019 06/12/2019 06/12/2019 06/12/2019 06/12/2019 04/13/2017 | |
| 4. | PRODUCT DESCRIPTI | | | | | |
| 4.1 | Product WIP 100 | Specification ASTM D1970 | <u>Plant(s)</u> Carlisle, PA | <u>Description</u> self-adhering, fiberglass reinforced, granule surfaced, rubberized asphalt roof underlayme | | |
| 4.2 | WIP 100SG | ASTM D1970 | Carlisle, PA | self-adhering, fiberglass reinforced, granule surfaced, rubberized asphalt roof underlaymen | | |
| 4.3 | WIP 250HT | ASTM D1970 and FRSA/TRI April 2012 (04-12) | Carlisle, PA | self-adhering, fiberglass reinforced, film surfaced, rubberized asphalt roof underlayment | | |
| 4.4 | WIP 300HT | ASTM D1970 and FRSA/TRI April 2012 (04-12) | Terrell, TX | self-adhering, coated-polyolefin-composite film surfaced, rubberized asphalt roof underlaymen | | |
| 4.5 | WIP 400HT | ASTM D1970 and FRSA/TRI April 2012 (04-12) | Terrell, TX | self-adhering, polypropylene film surfaced, rubberized asphalt roof underlayment | | |
| 4.6 | WIP GRIP | ASTM D1970 | Carlisle, PA | self-adhering, fiberglass re surfaced, rubberized aspha | | |



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 Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 **CCW 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 <u>Allowable Roof Covers</u>:

| TABLE 1: ROOF COVER OPTIONS | | | | | | |
|-----------------------------|---------------------|--------------|--------------|-------|---------------------------|----------------------------------|
| Underlayment | Asphalt Shingles | Nail-On Tile | Foam-On Tile | Metal | Wood Shakes & Shingles | Slate & Synthetic Slate/Shake |
| WIP 100 | Yes | No | No | No | No | No |
| WIP 100SG | Yes | No | No | No | No | No |
| WIP 250HT | Yes | Yes | No | Yes | No | No |
| WIP 300HT | Yes | Yes | No | Yes | No | Yes |
| WIP 400HT | Yes | Yes | No | Yes | No | Yes |
| WIP GRIP | Yes | No | No | No | No | No |

5.6 <u>Allowable Substrates</u>:

| | TABLE 2: SUBSTRATE OPTIONS | |
|--------------------|---|--------------------------------|
| Underlayment | Primer | Substrates |
| WIP 100, WIP 250HT | (Optional) CCW-702 or CAV-GRIP | plywood |
| WIP 100, WIP 250HT | None | ASTM D226 felt |
| WIP 100SG | CCW-702 or CAV-GRIP | plywood |
| WIP 300HT | (Optional) CCW-702 or CAV-GRIP | plywood, OSB or ASTM D226 felt |
| WIP 400HT | (Optional) CCW-702 or CAV-GRIP | plywood, OSB or ASTM D226 felt |
| WIP GRIP | (Optional) ASTM D41, CCW-550, CCW-702 or CAV-GRIP | plywood |
| | ASTM D41, CCW-550, CCW-702 or CAV-GRIP | OSB |

5.7 <u>Exposure Limitations</u>:

WIP 100 and WIP 100SG shall not be left exposed for longer than 30-days after installation.

WIP GRIP shall not be left exposed for longer than 90-days after installation.

WIP 250HT, WIP 300HT and WIP 400HT shall not be left exposed for longer than 180-days after installation

5.8 <u>Tile Slippage Limitations [per FRSA/TRI April 2012 (04-12)]</u>:

When loading roof tiles on the underlayment in direct-deck tile assemblies, tile shall be staged atop a fastened batten or toe-board, regardless of slope.



| CCW Roof Underlayments shall be installed in accordance with Carlisle Coatings & Waterproofing published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below. |
|--|
| 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. Prime the substrate (if applicable) with CCW-702 or CAV-GRIP Primer. Priming is required when temperatures are below 40°F. |
| WIP 100, WIP 100SG, WIP 250HT, WIP 300HT, WIP 400HT and WIP GRIP: |
| Non-Tile Applications: |
| Shall be installed in compliance with the requirements for ASTM D1970 underlayment in FBC Table 1507.1.1 or R905.1.1 for the type of prepared roof covering to be installed, and CCW published requirements. |
| Nail-On Tile Applications (WIP 250HT, WIP 300HT or WIP 400HT only): |
| Reference is made to FRSA/TRI April 2012 (04-12) Installation Manual for Self-Adhered Membrane, and CCW published requirements. |
| For mechanically fastened tile roofing over a 2-ply system, consisting of Base Sheet and Self-Adhered Membrane, fastening of the ASTM D226, Type II base sheet shall be in accordance with CCW requirements, but not less than that the densities set forth in FRSA/TRI April 2012 (04-12), Table 1. |
| Refer to Section 5.8 for tile staging limitations. |
| Building Permit Requirements: |
| As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product. |
| MANUFACTURING PLANTS: |

8.

6.

6.1

6.2

6.3 6.3.1

6.3.2

7.

INSTALLATION:

Contact the manufacturer or the named QA entity for plants covered under Rule 61G20-3 QA requirements. Refer to Section 4 herein for product & production locations having met codified physical properties specifications.

9. **QUALITY ASSURANCE ENTITY:**

UL, LLC- QUA9625; (847) 664-3281

- END OF EVALUATION REPORT -