



**NEMO|etc.**

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ENGINEER

EVALUATE

TEST

CONSULT

**P.E. EVALUATION REPORT (PEER)**

**The Garland Company, Inc.**

3800 East 91<sup>st</sup> Street  
Cleveland, OH 44105  
(216) 430-3516

**PEER-GRL-001.A.R6**

**FL2330-R9 (NON-HVHZ)**

Date of Issuance: 03/02/2009

**Revision 6: 12/17/2023**

**SCOPE:**

This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C. 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. The product described herein has been evaluated for compliance with the **8<sup>th</sup> Edition (2023) Florida Building Code** [sections noted herein](#).

**DESCRIPTION: Garland Cements, Adhesives and Coatings (NON-HVHZ)**

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

**CONTINUED COMPLIANCE:** This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

**ADVERTISEMENT:** The Florida Product Approval Number (FL#) preceded by the words "Nemo P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

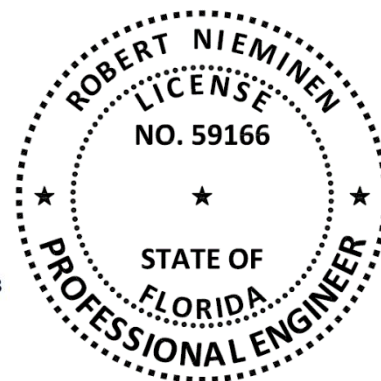
**INSPECTION:** Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 5.

**Prepared by:**

Digitally signed by  
Robert Nieminen  
Date: 2023.12.19  
'11:48:23 -05'00

This item has been digitally signed and sealed by Robert Nieminen, P.E.  
Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.  
Robert Nieminen, Florida P.E. 59166, FBC ANE1983  
NEMO ETC, LLC, Florida CA #32455



**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 PEERs 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, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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**ROOFING COMPONENT EVALUATION:**
**1. SCOPE:**

**Product Category:** Roofing

**Sub-Category:** Cements – Adhesives - Coatings

**Compliance Statement:** Garland Cements, Adhesives and Coatings, as produced by The Garland Company, Inc., have demonstrated compliance with the following sections of the **8<sup>th</sup> Edition (2023) Florida Building Code** through testing in accordance with the Standards set forth herein. Compliance is subject to the [Installation Requirements](#) and [Limitations of Use](#) set forth herein.

**2. STANDARDS:**

| <u>SECTION</u>    | <u>PROPERTY</u>   | <u>STANDARD</u> |
|-------------------|-------------------|-----------------|
| 1507.10.2         | Material standard | ASTM D41        |
| 1507.10.2, 1509.2 | Material standard | ASTM D2824      |
| 1507.10.2         | Material standard | ASTM D3019      |
| 1507.10.2, 1509.2 | Material standard | ASTM D4479      |
| 1507.10.2         | Material standard | ASTM D4586      |
| 1507.10.2         | Material standard | ASTM D5643      |
| 1507.10.2, 1509.2 | Material standard | ASTM D6083      |
| TAS 110           | Material standard | ASTM D7311      |

**3. REFERENCES:**

| <u>ENTITY</u>     | <u>EXAMINATION</u>   | <u>REFERENCE</u>      | <u>DATE</u> |
|-------------------|----------------------|-----------------------|-------------|
| FM (TST 1897)     | FM 4470              | 3019046               | 03/04/2005  |
| FM (TST 1897)     | FM 4470              | 3021718               | 04/11/2005  |
| NEMO (TST6049)    | ASTM D6083 (Table 2) | 4S-GRL-18-002.02.19.A | 02/20/2019  |
| NEMO (TST6049)    | Various properties   | 4p-GRL-19-SSLAP-01.A  | 10/08/2019  |
| NEMO (TST6049)    | Various properties   | 4p-GRL-19-SSLAP-02.A  | 04/27/2020  |
| NEMO (TST6049)    | Various properties   | 4p-GRL-21-SSLAP-01.A  | 07/23/2021  |
| NEMO (TST6049)    | ASTM D4586, T2       | 4p-GRL-22-SSLAP-01.A  | 01/30/2023  |
| NEMO (TST6049)    | ASTM D4479, T1       | 4p-GRL-22-SSLAP-01.B  | 01/30/2023  |
| NEMO (TST6049)    | ASTM D3019, T3       | 4p-GRL-22-SSLAP-01.C  | 01/30/2023  |
| NEMO (TST6049)    | ASTM D5643           | 4p-GRL-22-SSLAP-01.D  | 01/30/2023  |
| NEMO (TST6049)    | Various properties   | 4p-GRL-22-SSLAP-01.E  | 01/30/2023  |
| NEMO (TST6049)    | ASTM D2824, T1       | 4p-GRL-22-SSLAP-01.F1 | 01/30/2023  |
| NEMO (TST6049)    | ASTM D41             | 4p-GRL-22-SSLAP-01.G  | 01/30/2023  |
| NEMO (TST6049)    | ASTM D7311           | 4p-GRL-22-SSLAP-01.H  | 06/07/2023  |
| PRI (TST5878)     | ASTM D6083 (Table 2) | 416T0008              | 05/21/2021  |
| UL LLC (QUA 9625) | Quality Control      | Service Confirmation  | 08/04/2021  |
| UL LLC (QUA 9625) | Quality Control      | Florida BCIS          | Current     |

#### 4. PRODUCT DESCRIPTION:

| TABLE 1: EVALUATED CEMENTS, ADHESIVES AND COATINGS |                                   |                              |                 |
|----------------------------------------------------|-----------------------------------|------------------------------|-----------------|
| USE                                                | PRODUCT                           | MATERIAL STANDARD            | MANUFACTURING   |
| PRIMER                                             | Black Knight Primer               | Published Data Verified      | Wickliffe, OH   |
|                                                    | Garla-Prime VOC                   | ASTM D41                     | Cleveland, OH   |
| FLASHING / DETAILING                               | Black Knight Mastic               | ASTM D5643                   | Wickliffe, OH   |
|                                                    | Garla-Flex                        | Published Data Verified      | Cleveland, OH   |
|                                                    | Green-Lock Plus Flashing Adhesive | N/A (not codified)           | Spring Lake, MI |
|                                                    | Silver-Flash                      | Published Data Verified      | Cleveland, OH   |
| REPAIR                                             | Flashing Bond                     | ASTM D4586, Type II, Class 1 | Cleveland, OH   |
| ADHESIVE                                           | Weatherking Flashing Adhesive     | Published Data Verified      | Cleveland, OH   |
| ADHESIVE / FLOOD COAT                              | Garlastic KM Plus                 | Published Data Verified      | Chandler, AZ    |
|                                                    | Green-Lock Plus Membrane Adhesive | N/A (not codified)           | Spring Lake, MI |
|                                                    | HPR All-Temp Asphalt              | Published Data Verified      | Canton, OH      |
|                                                    | Weatherking                       | ASTM D3019, Type III         | Cleveland, OH   |
|                                                    | Weatherking Plus WC               | ASTM D3019, Type III         | Cleveland, OH   |
|                                                    | WeatherScreen                     | ASTM D4479, Type I           | Cleveland, OH   |
| COATING                                            | CPR™ Base Coat                    | Published Data Verified      | Cleveland, OH   |
|                                                    | CPR™ White Coat                   | ASTM D6083, Type I (Table 2) | Cleveland, OH   |
|                                                    | LiquiTec™                         | ASTM D6083, Type I (Table 2) | Fontana, CA     |
|                                                    | Energizer K Plus FR               | ASTM D4479, Type I           | Cleveland, OH   |
|                                                    | Garla-Brite                       | ASTM D2824, Type I           | Cleveland, OH   |
|                                                    | White Knight Plus                 | ASTM D7311                   | Fontana, CA     |

#### 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 PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 **Garland Cements, Adhesives and Coatings** are components for use in Approved roof assemblies. Refer to the "Approved Use" in [Section 4](#) for each component. The coatings noted herein are not purported to be Roofing Systems, and their use shall be governed by and limited to applications where Roof System Product Approval is not necessary (e.g., maintenance and repair) or where the components are called out in a Roof System Product Approval.
- 5.6 For maintenance coatings, the existing roof system and/or substrate shall meet wind uplift requirements of the project to the satisfaction of the Authority Having Jurisdiction.
- 5.7 All products listed herein shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3** requirements.

## 6. INSTALLATION:

- 6.1 **Garland Cements, Adhesives and Coatings** products shall be installed in accordance with **The Garland Company, Inc.** published installation instructions, subject to the Limitations in Section 5 and the Approved Use in [Section 4](#).
- 6.2 **Application Rates:** The rates below reflect those recommended by The Garland Company at the time of this PEER publication. Rates vary depending on substrates and substrate porosity.

| TABLE 2: APPLICATION RATES |                                                    |                                                                                         |
|----------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------|
| PRODUCT                    | APPLICATION                                        | RATE                                                                                    |
| Energizer K Plus FR        | Non-reinforced                                     | 3 gal/sq.                                                                               |
|                            | Reinforced                                         | Base Coat: 3.0-3.5 gal/sq.<br>Finish Coat: 3.0-3.5 gal/sq.                              |
| Garla-Brite                | Non-reinforced                                     | Two (2) coats at 0.5 to 0.75 gal/sq./coat                                               |
| CPR™ Seam Sealer BG        | Non-reinforced                                     | Crack and seam ( $\leq 1/8"$ wide) filler                                               |
| CPR™ Seam Sealer TG        | Reinforced                                         | Joints $> 1/8"$ wide with Grip Polyester Soft                                           |
| CPR™ Base Coat             | Partially reinforced<br>(seams and flashings only) | Horizontal surfaces: 1.5 gal/sq.<br>Vertical surfaces: 0.5 gal/sq.                      |
| CPR™ Top Coat              | Partially reinforced<br>(seams and flashings only) | Horizontal surfaces: 1.5 gal/sq.<br>Vertical surfaces: 1.0 gal/sq.                      |
| LiquiTec™                  | Non-reinforced or<br>Partially reinforced          | Base Coat: 1.5-2.0 gal/sq.<br>Finish Coat: 1.0-2.0 gal/sq.                              |
|                            | Reinforced                                         | Base Coat: 3.0-4.0 gal/sq.<br>Finish Coat: 2.0 gal/sq.                                  |
| White Knight Plus          | Non-reinforced or<br>Partially reinforced          | Base Coat: 1.5-2.0 gal/sq.<br>Finish Coat: 1.0-2.0 gal/sq. (perpendicular to base coat) |
|                            | Reinforced                                         | Base Coat: 3.0-4.0 gal/sq.<br>Finish Coat: 2.0 gal/sq.                                  |

### 6.3 Allowable Substrates:

| TABLE 3: MAINTENANCE COATINGS |                   |                        |                     |
|-------------------------------|-------------------|------------------------|---------------------|
| SUBSTRATE*                    |                   |                        | COATING             |
| TYPE                          | SURFACE           | CONDITION              |                     |
| Built-up roof (BUR)           | Granule or Sanded | New or Existing (aged) | Energizer K Plus FR |
| Modified Bitumen              | Granule or Sanded | Existing (aged)        |                     |
| Metal                         | N/A               | New or Existing (aged) | Garla-Brite         |
| Built-up roof (BUR)           | Granule or Sanded | New or Existing (aged) |                     |
| Modified Bitumen              | Granule or Sanded | New or Existing (aged) |                     |

\*Note: Prime substrates in accordance with The Garland Company published requirements.

| TABLE 4: CPR™ SYSTEM                              |                                                |                |                                 |               |
|---------------------------------------------------|------------------------------------------------|----------------|---------------------------------|---------------|
| SUBSTRATE                                         | SEALER                                         | BASE COAT      | FABRIC <sup>1</sup>             | FINISH COAT   |
| Metal; aluminum, galvanized steel or coated metal | CPR™ Seam Sealer BG and/or CPR™ Seam Sealer TG | CPR™ Base Coat | (Optional) Grip Polyester Soft™ | CPR™ Top Coat |

<sup>1</sup> Garland UniBond ST adhesive-tape may be used in lieu of Grip Polyester Soft to seal and reinforce seams metal substrates.

| TABLE 5: LIQUITEC™ SYSTEM |         |                 |        |           |                                 |             |
|---------------------------|---------|-----------------|--------|-----------|---------------------------------|-------------|
| SUBSTRATE                 |         |                 | PRIMER | BASE COAT | FABRIC <sup>2</sup>             | FINISH COAT |
| TYPE                      | SURFACE | CONDITION       |        |           |                                 |             |
| Modified bitumen, SBS     | Granule | Existing (aged) | None   | LiquiTec™ | (Optional) Grip Polyester™ Soft | LiquiTec™   |
| Single Ply, PVC           | N/A     | Existing (aged) | None   | LiquiTec™ | (Optional) Grip Polyester™ Firm | LiquiTec™   |

<sup>2</sup> Garland UniBond ST adhesive-tape may be used in lieu of Grip Polyester Soft or Grip Polyester Firm to seal and reinforce seams and flashings on metal and single ply substrates.

| TABLE 6: WHITE KNIGHT PLUS SYSTEM |                   |                        |        |                   |                                 |                   |
|-----------------------------------|-------------------|------------------------|--------|-------------------|---------------------------------|-------------------|
| SUBSTRATE                         |                   |                        | PRIMER | BASE COAT         | FABRIC <sup>3</sup>             | FINISH COAT       |
| TYPE                              | SURFACE           | CONDITION              |        |                   |                                 |                   |
| Built-up roof (BUR)               | Sanded            | Existing (aged)        | None   | White Knight Plus | (Optional) Grip Polyester™ Soft | White Knight Plus |
| Metal, coated-steel               | N/A               | New or Existing (aged) | None   | White Knight Plus | (Optional) Grip Polyester Soft  | White Knight Plus |
| Modified Bitumen, APP             | Granule           | Existing (aged)        | None   | White Knight Plus | (Optional) Grip Polyester Soft  | White Knight Plus |
| Modified Bitumen, SBS             | Granule or Sanded | Existing (aged)        | None   | White Knight Plus | (Optional) Grip Polyester Soft  | White Knight Plus |

<sup>3</sup> Garland UniBond ST adhesive-tape may be used in lieu of Grip Polyester Soft to seal and reinforce seams and flashings on metal and single ply substrates

## 7. BUILDING PERMIT REQUIREMENTS:

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

## 8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by F.A.C. [Rule 61G20-3](#) QA requirements. Refer to [Section 4](#) herein for products and production locations having met codified material standards.

## 9. QUALITY ASSURANCE ENTITY:

[UL, LLC – QUA9625](#): (360) 817-5512; [bsai.inspections@ul.com](mailto:bsai.inspections@ul.com)

- END OF PEER -