

## Evaluation Report

### **PREMISEAL™ Spray Polyurethane Foam Models 60, 70, 280, 285, 300 & 305 and RoofTite 60 & 70**

### **Spray Polyurethane Foam Roof System**

#### **Manufacturer:**

#### **Carlisle Roof Foam and Coatings a Carlisle Company**

100 Enterprise Drive  
Cartersville, GA 30120  
770-607-0755

*for*

#### **Florida Product Approval**

#### **# FL 27106.3 R2**

#### **Florida Building Code 7th Edition (2020)**

#### **Per Rule 61G20-3**

**Method: 1 - D**

**Category: Roofing**

**Sub - Category: Spray Applied Polyurethane Roof System**

**Spray Foam Product:** PREMISEAL™ Spray Polyurethane Foam  
**Description:** Spray Polyurethane Foam Roof System  
with mechanically attached Insulation Board  
**Support:** Steel Deck

This item has been electronically signed and sealed by James L. Buckner, P.E., on this date using a Digital Signature. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

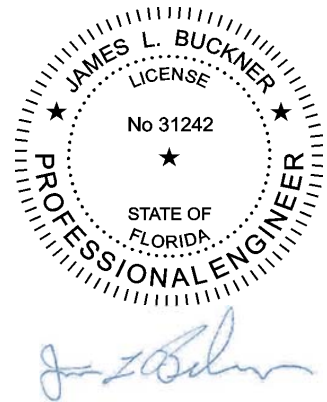
#### **Prepared by:**

James L. Buckner, P.E., SECB  
Florida Professional Engineer # 31242  
Florida Evaluation ANE ID: 1916  
Report No. 03-20-275-PS-SPF-ER  
Date: 10 / 15 / 2020

#### Contents:

Evaluation Report

Pages 1 – 5



2020.10.15 14:53:43 -04'00'

**Manufacturer:** Carlisle Roof Foam and Coatings, a Carlisle Company**Product Name:** PREMISEAL™ Spray Polyurethane Foam**Product Category:** Roofing**Product Sub-Category:** Spray Applied Polyurethane Roof System**Compliance Method:** State Product Approval Rule 61G20-3.005 (1) (d)**Spray Foam Description:** The Spray Polyurethane Foam is a two-component, closed-cell, spray applied polyurethane foam system. It is designed for use as a self-adhering, self-flashing, seamless roofing system providing wind uplift resistance for construction applications such as commercial, industrial and institutional projects.**Evaluated Models:** PREMISEAL™ 60, formally 280  
PREMISEAL™ 285  
PREMISEAL™ 70, formally 300  
PREMISEAL™ 305  
RoofTite 60  
RoofTite 70**Evaluated Use:** New Roof and Re-Roof Applications**Product Assembly as Evaluated:** Refer to Page 4 of this report for product assembly components/materials & standards:  
Layers From Top to Bottom  

- Liquid-Applied Coating (Self-adhered)
- Spray Polyurethane Foam (Spray Applied & Self Adhered)
- Insulation Board (Mechanically Attached with Screws and Plates)

**Support:** **Type:**  
Steel Deck  
(Design of steel deck and its attachment to support framing is outside the scope of this evaluation.)**Description:**

- WR Type B Steel Deck panel
- Corrugation height: 1-1/2"
- 22 Gauge minimum
- Yield Strength: 33 ksi minimum

**Slope:** Minimum slope shall be in compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.**Performance:** Wind Uplift Resistance  
\* Design Uplift Pressure: **- 97.5 PSF**

\* Allowable design pressure(s) for allowable stress design (ASD) with a margin of safety of 2 to 1.

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Performance Standards:</b>             | <p>The product described herein has been tested in compliance with:</p> <ul style="list-style-type: none"><li>• FM 4474 (11) – Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Test Equivalency:</b>                  | <p>The TAS 114-05 “J” standard version used to test the evaluated product assembly is equivalent with the prescribed standards in FM 4474-11, Appendix D adopted by the Florida Building Code 7th Edition (2020).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Code Compliance:</b>                   | <p>The product described herein has demonstrated compliance with the performance standards listed above as referenced in the Florida Building Code 7th Edition (2020), per Section 1504.3.1.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Evaluation Report Scope:</b>           | <p>This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Limitations and Conditions of Use:</b> | <ul style="list-style-type: none"><li>• PREMISEAL™ Spray Polyurethane Foam shall be installed by a Carlisle Roof Foam and Coatings Authorized spray foam applicator trained in the processing and application of SPF systems as well as the plural component polyurethane dispensing equipment.</li><li>• <u>Scope of “Limitations and Conditions of Use” for this evaluation:</u><br/>This evaluation report for “Optional Statewide Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under “Optional Statewide Approval”.</li><li>• <u>Option for application outside “Limitations and Conditions of Use”</u><br/>Rule 61G20-3.005(1)(e) allows engineering analysis for “project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code”. Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.</li><li>• The Scope of this evaluation is limited to structural uplift properties.</li><li>• Design of support system is outside the scope of this report. Deck shall be in compliance with applicable building code.</li><li>• Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.</li><li>• This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade &amp; Broward Counties)</li></ul> |
| <b>Quality Assurance:</b>                 | <p>The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through <b>Quality Control Consultants, LLC</b>. (FBC Organization ID# QUA 10385).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Components/Materials  
(by Manufacturer):****Liquid-Applied Coatings**

Per manufacturer's guidelines in compliance with FBC Section 1507.14.3.

**PREMISEAL™ Spray Polyurethane Foam**

Material: Polyurethane  
Core Density: 2.8 pcf Minimum (per ASTM D1622)  
Compressive Strength: 50 – 60 psi (per ASTM D1621)  
Tensile Strength: 65 – 65 psi (per ASTM D1623, Type C)

**Insulation Board:**

Product Name: Securock® Roofing Board  
Thickness: 1/2" (minimum)  
Compressive Strength: 1,800 psi (nominal)  
Material Standard: Per ASTM C1278

**Fasteners:**

Head Type: Phillips Head or Hex Head Wood Screws  
Size: # 15  
Penetration Though: 3/4" Minimum penetration through steel deck  
Corrosion Resistance: Per FBC Section 1506.6  
Standard: Per SAE J78-1979

**Plates:**

Material: Steel  
Diameter: 3"  
Corrosion Resistance: Per FBC Table 1507.4.3(2)

**Installation:****Installation Method:**

- **Surface Preparation:**  
The surface intended to be sprayed with the Premiseal™ Spray Polyurethane Foam must be clean, dry and free of all dirt and contaminants.
- **Insulation Board Application:**  
Fasten a minimum of 1/2" thick Securock® roof board to steel deck using # 15 sheet metal screws with 3" diameter steel plates. Attach insulation board with a minimum of 18 screws per 4' × 8' board or with a minimum fastener density of 1:1.78 fastener per ft<sup>2</sup>.
- **Foam Application:**  
Apply a minimum of 1" thick of Premiseal™ Spray Polyurethane Foam over the insulation board.
- **Protective Coating Application:**  
Apply protective coating per manufacturer's installation guideline.

Installation shall comply with this report, applicable code sections of FBC 7th Edition (2020) subject to the Limitations and Conditions of Use listed in this Evaluation Report and manufacturer's installation instructions as a supplemental guide for attachment.

**Referenced Data:**

1. TAS 114-05 (J) Uplift Resistance Test  
By Atlantic Caribbean Roof Consulting, LLC. (FBC Organization #TST ID: 4671)  
Report #: ACRC 14-010, Date: 04 / 03 /14
2. Equivalency of Test Standard Certification  
By James L. Buckner, P.E. @ CBUCK Engineering (FBC Organization # ANE 1916)
3. Quality Assurance  
Quality Control Consultants, LLC. (FBC Organization ID# QUA 10385)
4. Certification of Independence  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)