

Evaluation Report
POLYCON HFO PC2800
Spray Applied Polyurethane Foam Roof System

Manufacturer:

PolyCon, LLC

1755 Transcentral Court, Ste. 400

Houston, TX 77032

281-219-9400

for

Florida Product Approval

FL 47854.5

Florida Building Code 8th Edition (2023)

Inside HVHZ

Method: 1 - D

Category: Roofing

Sub - Category: Spray Applied Polyurethane Roof System

Product: PolyCon HFO PC2800

Description: Spray Polyurethane Foam Roof System

Application Type: Reroof or Recover Application

System Type: Mechanically Attached Insulation, Fully Adhered Roof Cover

Existing Substrate: over BUR, Modified Bitumen or Single Ply

Support: Plywood Deck

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Prepared by:

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Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

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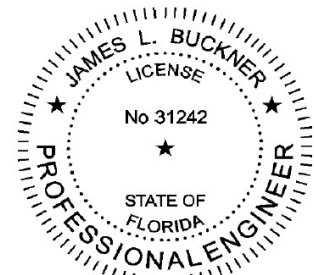
Report No. 25-763-PC2800-R-W-hz-ER

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Contents:

Evaluation Report

Pages 1 – 5



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FL31242



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CBUCK, Inc.

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Main Office: 1374 Community Drive., Jupiter, FL 33458

Manufacturer:	PolyCon, LLC 1755 Transcentral Court, Ste. 400 Houston, TX 77032 281-219-9400 www.polyconspf.com
Product Name:	PolyCon HFO PC2800
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 Use:	Reroof or Recover Roof Applications
Product Assembly as Evaluated:	MECHANICALLY ATTACHED INSULATION, FULLY ADHERED ROOF COVER 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) - Primer - Gypsum Board (Mechanically Attached to Deck) - Generic BUR, Modified Bitumen or Single Ply (Fully Adhered to Deck)
Support:	Type: Wood Deck (Design of support and its attachment to support framing shall be in compliance with current code and is outside the scope of this evaluation.) Description: 19/32" or greater plywood or wood plank Over 2' x 6' wood studs spaced 24" with #8d 2-1/2" ring shank nails, 4" o.c. Support shall be in compliance with the requirements as described in current code.
Slope:	Minimum slope shall be 1/4 : 12 And 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: - 67.5 PSF <i>*Allowable design pressure(s) for allowable stress design (ASD) with a margin of safety of 2 to 1.</i>

Performance Standards: The product described herein has been tested in compliance with:

- TAS 114-11 "J"

Code Compliance: The product described herein has demonstrated compliance with the performance standards listed above as referenced in the:
Florida Building Code 8th Edition (2023)
For use: Inside HVHZ

Evaluation Report Scope: 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.

Limitations and Conditions of Use:

- POLYCON HFO PC2800 Spray Polyurethane Foam shall be installed by a **PolyCon** 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.
- The Recovering requirements "Section 1521 Existing Roofing" FBC 8th (2023) shall be complied with as a condition of this evaluation
- Compliance with the requirements of section 1521 is site specific and therefore is outside the scope of this evaluation.
- Scope of "Limitations and Conditions of Use" for this evaluation:
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".

RECOVER SYSTEM LIMITATIONS:

- The moisture content of an existing roof system shall be in compliance with applicable Building Code.
- Existing low slope roof systems shall be tested for uplift resistance in compliance with Testing Application Standard TAS 124 to the calculated design pressures of the field, perimeter and corner areas, determined in compliance with applicable Building Code.
- Lightning rods shall be masked prior to foaming. Lightning rod cables shall not be embedded in the polyurethane foam and should be removed prior to foaming. Electrical and mechanical conduits should be relocated or raised above the finished roof surface.

GENERAL LIMITATIONS:

- All attachment and sizing of perimeter Nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
- Spray polyurethane foam shall be sprayed when substrate temperature in min. 50°F. Ambient humidity applications limits shall be min. 50°F. Spray polyurethane foam shall be applied to dry, clean substrate. Contractor shall monitor and record environmental conditions in the Job Log in compliance with RAS 109. Job Log shall be maintained at the job site and accessible to the Building Official.
- 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).
- Flashings and waterproof coverings for expansion joints shall be of compatible materials and in accordance with Polycon, LLC published literature.
- Miscellaneous materials such as adhesives, elastomeric caulking compounds, metal, vents and drains shall be a composite part of the roof system and shall be compatible with the foam and coating.
- Material Labeling: Polycon, LLC products listed herein shall be identified, on products and/or containers/packaging, with the Florida product approval number and the manufacturer's name or logo, per the intent of code section 1523.5 and Rule 61G20-3.
- 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.
- Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- Option for application outside "Limitations and Conditions of Use"
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.
- The scope of this evaluation is limited to structural uplift properties.
- Design of support system is outside the scope of this report. Deck shall be in compliance with applicable building code.
- This evaluation report does evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

Quality Assurance:

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 Intertek Testing Services NA, Inc. (FBC Organization ID# QUA 1673).

**Components/Materials
(As Evaluated):**

Liquid-Applied Coating

Per manufacturer's guidelines in compliance with FBC Section 1521.18.

Spray Polyurethane Foam

Per manufacturer's guidelines in compliance with FBC Section 1521.18.

Product: POLYCON HFO PC2800

Material : Polyurethane

PolyCon HFO PC2800 Spray Foam System consists of:

Component A PolyCon Iso & Component B PolyCon HFO Spray Foam

Min. Thickness: 1.0 inch

PolyCon HFO PC2800 Typical Properties:

Physical Property	Standard	Value
Water Absorption (% by volume) (@ 73.4°F + 3.6°F for 96 hours @ 2 in. head)	ASTM D2842	< 1%
Dimensional Stability (% by volume) (At 158°F; 97 ± 3% R.H. 28 days)	ASTM D2126	< 15 %
Water Vapor Permeability (@ 74°F)	ASTM E96	1.1 perm-inch
Compressive Strength	ASTM D1621	45 psi
Tensile Strength	ASTM D1623	60 psi
Shear Strength	ASTM C273	36 psi
Closed Cell Content	ASTM D1940 or ASTM D2856	92.5%

Note: The Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

Primer:

Product Name: PolyCon PC 50

Fasteners:

Type/Size: OMG XHD screws with 3" OMG Fastening Plates
Attachment: 16 fasteners per 4' x 8' board

Gypsum Board:

Type: SECUROCK
Size: 1/2" min.

Existing Roof Covers:

Granule Surfaced or Smooth Surface BUR, Modified Bitumen or Single Ply

Installation:**Installation Method:****REROOF or RECOVER applications:****MECHANICALLY ATTACHED INSULATION, FULLY ADHERED ROOF COVER**

Existing roof deck shall be in compliance with applicable Building Code and Roofing Application Standard RAS 109 & RAS 109 A.

- **Surface Preparation:**
The surface intended to be sprayed with the **POLYCON HFO PC2800** Spray Polyurethane Foam must be clean, dry and free of all dirt and contaminants.
- **Gypsum Board/Existing Roof System**
Thru fastened to wood deck with OMG XHD screws with 3" OMG Fastening Plates
16 fasteners per 4' x 8' board through existing Granule Surfaced or Smooth Surface BUR, Modified Bitumen or Single Ply. Fasteners shall penetrate deck a min. of 3/16".
- **Primer: PolyCon PC 50**
Applied at a rate of 1 gal/400 ft². Primer shall be applied in accordance with the manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.
- **Foam Application:**
Apply a minimum of 1" thick of **POLYCON HFO PC2800** Spray Polyurethane Foam over gypsum board
- **Protective Liquid Applied Coating Application:**
Apply protective liquid roof coating over **POLYCON HFO PC2800** Spray Polyurethane Foam per manufacturer's installation guideline.

Installation shall comply with this report, applicable code sections of FBC 8th Edition (2023) 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. Test Reports:

#	Test Standard	Test Lab	Test Report #	Report Date
1.	TAS 114-11 (J)	Atlantic Caribbean Roof Consulting, LLC.	ACRC 25-023	7/30/2025
2.	ASTM D2842	Intertek	106063026MID-011	1/21/2025
3.	ASTM D2126	Right Testing Lab	RTL1057-3	8/11/2025
4.	ASTM E96	Intertek	106063026MID-010	1/28/2025
5.	ASTM D1621	Intertek	106063026MID-009	1/28/2025
6.	ASTM D1623	Intertek	106063026MID-012	1/28/2025
7.	ASTM C273	Right Testing Lab	RTL1057-1	8/11/2025
8.	ASTM D6226	Intertek	106068099MID-004	1/28/2025
9.	ASTM E108	Intertek	86594	8/26/2025

2. Quality Assurance

Intertek Testing Services NA, Inc.
(FBC Organization ID# QUA 1673)

3. Certification of Independence

By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)