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 47854.2

Florida Building Code 8th Edition (2023)

Outside 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
System Type:	Mechanically Attached Insulation, Fully Adhered Roof Cover
Existing Substrate:	BUR, Modified Bitumen or Single Ply
Support:	Steel Deck

This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. 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
Project Manager: Diana Galloway
Report No. 25-763-PC2800-R-S-ER
Date: 10/16/2025

JAMES L. BUCKNER
LICENSE
No 31242
STATE OF FLORIDA
PROFESSIONAL ENGINEER

James L. Buckner, P.E.
FL31242
2025.10.21 13:10:36 -04'00'

Contents:

Evaluation Report Pages 1 – 5

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)
-

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

Description:
22 ga. min., Type B, 33 ksi steel;
Support shall be in compliance with the roof sheathing requirement 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: **- 97.5 PSF**

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

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: Outside 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:

- 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".
- 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.
- 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 1511 Existing Roofing" FBC 8th (2023) shall be complied with as a condition of this evaluation
- Compliance with the requirements of section 1511 is site specific and therefore is outside the scope of this evaluation.
- This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
- 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.

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 1507.15.

Spray Polyurethane Foam
Per manufacturer's guidelines in compliance with FBC Section 1507.14.
Product: POLYCON HFO PC2800
Material : Polyurethane

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:
SYSTEM TYPE: MECHANICALLY ATTACHED INSULATION, FULLY ADHERED ROOF COVER

Existing roof deck shall be in compliance with FBC Section 1511 and applicable Building Code.

- 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 steel 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 ½".

- Primer: **PolyCon PC 50**
  Applied at a rate of 1 gal/400 ft^2. 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 25-022	7/29/2025
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

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)