



Product Evaluation Report
RAPID ROOFING SOLUTIONS, LLC.

Retro Rapid Panel over Rapid Re-Roof System

Florida Product Approval # 48039.1

Florida Building Code 2023

Per Rule 61G20-3

Method: 1 -D

Category: Structural Components

Subcategory: Roof Deck

Compliance Method: 61G20-3.005(1)(d)

NON HVHZ

Product Manufacturer:

Rapid Roofing Solutions, LLC.

9000 W Colonial Drive, Suite 401

Ocoee, FL 34761

Engineer Evaluator:

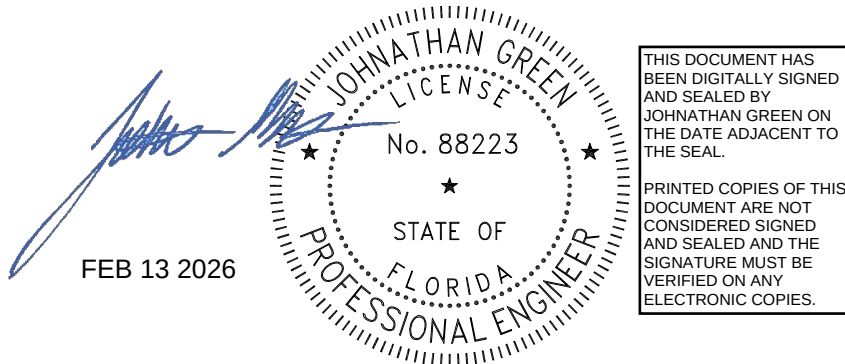
Johnathan Green, P.E. #88223

Florida Evaluation ANE ID: 12901

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Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2023, Sections 1504.3.2, 1504.7.
Product Description:	Retro Rapid Panel 24 Ga. Steel Roof Panel, 18" or 24" Coverage, standing seam structural roof panel over Rapid Re-Roof System over existing 3" trapezoidal 24 Ga. 24" wide roof panel. Structural Application.
Retro Rapid Roof Panel Panel Material/Standards:	Material: 24 Ga. Steel, conforming to Florida Building Code 2023 Section 1507.4.3. Yield Strength: Min. 50.0 ksi. Corrosion Resistance: Panel Material shall comply with Florida Building Code 2023, Section 1507.4.3.
Panel Dimension(s):	Thickness: 0.024" nominal Coverage: 18" or 24" nominal coverage Rib: 2 3/4" tall trapezoidal rib Panel Seam: Mechanically seamed Panel Seam Cap: 24 Ga. Steel with (2) beads of factory applied sealant.
Panel Clips:	Product Name: Standard Clip Type: Fixed, 16 Ga. steel, 8" long, 3 1/8" tall Product Name: Super Clip Type: Fixed, 16 Ga. steel, 16" long, 3 1/8" tall Product Name: 24 Ga. Low Multi-Span Clip (MS Clip), 3 1/8" tall Type: Fixed, 24 Ga. ASTM A792 50 ksi Corrosion Resistance: Per Florida Building Code 2023 Section 1506.7
Panel Clip Fastener:	(2) 3/4-14 x 1 1/4" HWH SD no washer per clip Corrosion Resistance: Per Florida Building Code 2023, Section 1517.6
Rapid Re-Roof System Framing:	1.5"x3"x 16 Ga. ASTM A653(55ksi) Hat at 5'-0" O.C. attached to 16 Ga. Zee Bracket with (2) 3/4-14 x 1 1/4" HWH (5/16") SD2 no washer at 24" O.C.
Zee Bracket:	1"x1"x1"x 8" long 16 Ga. ASTM A653 Grade 50 Zee at every existing panel clip 5'-0" O.C. max. The Zee is attached to the existing panel rib at the existing panel clip w/ (3) 3/4-14 x 1 1/4" HWH (5/16") SD2 no washer per zee.
Existing Roof Panel Panel Material/Standards:	Minimum: 24 Ga. 50.0 ksi steel.
Panel Dimension(s):	Width: 24" maximum width Rib: 3" tall trapezoidal rib Panel Seam: Snap or Mechanically seamed
Panel Clips:	High or Low Floating panel clip w/ min. 22 Ga. top and 16 Ga. base.
Panel Clip Fastener:	(2) 3/4-14 x 1 1/4" HWH SD no washer per clip
Additional Panel Fasteners:	(1) 3/4-14 x 2" HWH (3/8") SD3 no washer on both sides of the existing panel rib in the panel pan attaching to minimum 16 Ga. steel framing.
Substrate Description:	Min. 16 Ga. Steel Framing. Must be designed in accordance w/ Florida Building Code.



Allowable Design Pressures:

Panel System:	18" Wide Retro Rapid 24 Ga.		
Panel Clip:	Standard Clip	Super Clip	24 Ga. MS Clip
Clip Spacing (O.C.):	5'-0"	5'-0"	5'-0"
Allowable Design Pressure (PSF):	-46.9	-57.3	-104.1

*Design Pressures includes a Safety Factor = 2.0

Panel System:	24" Wide Retro Rapid 24 Ga.		
Panel Clip:	Standard Clip	Super Clip	24 Ga. MS Clip
Clip Spacing (O.C.):	5'-0"	5'-0"	5'-0"
Allowable Design Pressure (PSF):	-39.0	-52.1	-98.9

*Design Pressures includes a Safety Factor = 2.0.

Code Compliance:

The product described herein has demonstrated compliance with The Florida Building Code 2023, Section 1504.3.2, 1504.7.

Evaluation Report Scope:

The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2023, as relates to Rule 61G20-3.

Performance Standards:

The product described herein has demonstrated compliance with:

- ASTM E 1592-05 (2017) Test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference.
- FM 4471-92, Foot Traffic Resistance Test

Reference Data:

1. ASTM E 1592-05 (2017)
Force Engineering & Testing (FBC Organization # TST-5328)
Report No. 815-0019T-26
2. FM 4471-95, Foot Traffic Resistance Test
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
Report No. 815-0019T-26
3. Certificate of Independence
By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing
(FBC Organization # ANE ID: 12901)

Test Standard Equivalency:

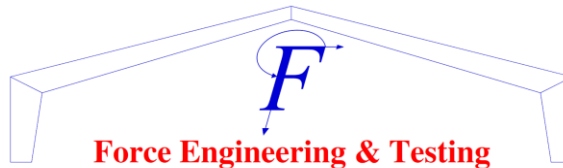
The FM 4471-95 test standard is equivalent to the FM 4471-92 test standard.

Quality Assurance Entity:

The manufacturer has established 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.



Minimum Slope Range:	Minimum Slope shall comply with Florida Building Code 2023, including Section 1507.4.2 and in accordance with Manufacturers recommendations.
Installation:	Install per manufacturer's recommended details.
Insulation:	Manufacturer's approved product (Optional)
Roof Panel Fire Classification:	Fire classification is not part of this evaluation.
Shear Diaphragm:	Shear diaphragm values are outside the scope of this report.
Design Procedure:	Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2023 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with Florida Building Code 2023 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.



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DETAIL AT ATTACHMENT POINTS

