



**Product Evaluation Report**  
***BIGBEE STEEL BUILDINGS, INC.***

***Bigbee VR-216 & VR-218 Roof Panel over open framing***

**Florida Product Approval # 7413.3 R8**

Florida Building Code 2026

Per Rule 61G20-3

Method: 1 –D

Category: Structural Components

Subcategory: Roof Deck

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

NON HVHZ

**Product Manufacturer:**

***Bigbee Steel Buildings, Inc.***

P.O. Box 2314

Muscle Shoals, Alabama 35662

**Engineer Evaluator:**

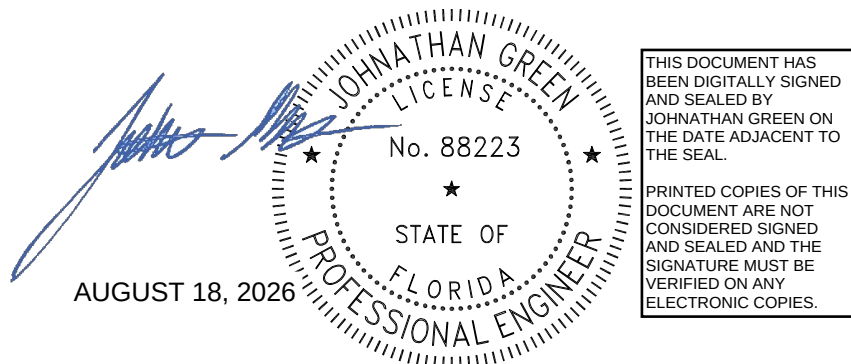
***Johnathan Green, P.E. #88223***

Florida Evaluation ANE ID: 12901

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AUGUST 18, 2026

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY JOHNATHAN GREEN ON THE DATE ADJACENT TO THE SEAL.

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**Compliance Statement:** The product as described in this report has demonstrated compliance with the Florida Building Code 2026, Sections 1504.3.2, 1504.7.

**Product Description:** Bigbee VR-216 or VR-218, 2" Mechanical Lock Standing Seam Roof Panel, 16" or 18" Wide. Structural Application.

**Panel Material/Standards:** Material: 24 Ga. or 22 Ga. Steel, conforming to Florida Building Code 2026 Section 1507.4.3.  
 Yield Strength: Min. 50.0 ksi  
 Corrosion Resistance: Panel Material shall comply with Florida Building Code 2026, Section 1507.4.3.

**Panel Dimension(s):** Width: 16" or 18"  
 Rib Height: 2" Tall Standing Seam Rib  
 Panel Seam: TripleLok or QuadLok Seam w/ mechanical seamer  
 Panel Rollformer: Generation I, Building Research Systems, Inc.

**Roof Panel Clips:** Product Name: MC1203 or MC1213 Sliding Clip Assembly  
 Corrosion Resistance: Per Florida Building Code 2026 Section 1506.7 and Section 1711 for installations within 3000 ft. of a saltwater coastline.

**Clip Fastener:** (2) ¼-14 HWH Self Driller per clip.  
 Corrosion Resistance: Per Florida Building Code 2026 Section 1506.6, 1507.4.4 and Section 1711 for installations within 3000 ft. of a saltwater coastline.

**Substrate Description:** Min. 16 Ga. Steel Framing. Framing must be designed in accordance w/ Florida Building Code 2026.

**Allowable Design Uplift Pressures:**

|                                                 |               |           |         |         |
|-------------------------------------------------|---------------|-----------|---------|---------|
| <b>Panel:</b>                                   | VR-216 24 Ga. |           |         |         |
| <b>Panel Seam:</b>                              | TripleLok     | TripleLok | QuadLok | QuadLok |
| <b>Clip Spacing (O.C.):</b>                     | 2'-0"         | 5'-0"     | 2'-0"   | 5'-0"   |
| <b>Maximum Allowable Design Pressure (PSF):</b> | -116.2        | -48.3     | -163.1  | -67.4   |

|                                                 |               |           |         |         |
|-------------------------------------------------|---------------|-----------|---------|---------|
| <b>Panel:</b>                                   | VR-218 24 Ga. |           |         |         |
| <b>Panel Seam:</b>                              | TripleLok     | TripleLok | QuadLok | QuadLok |
| <b>Clip Spacing (O.C.):</b>                     | 2'-6"         | 5'-0"     | 2'-6"   | 5'-0"   |
| <b>Maximum Allowable Design Pressure (PSF):</b> | -67.6         | -36.4     | -78.0   | -46.8   |

|                                                 |               |           |         |         |
|-------------------------------------------------|---------------|-----------|---------|---------|
| <b>Panel:</b>                                   | VR-218 22 Ga. |           |         |         |
| <b>Panel Seam:</b>                              | TripleLok     | TripleLok | QuadLok | QuadLok |
| <b>Clip Spacing (O.C.):</b>                     | 2'-6"         | 5'-0"     | 2'-6"   | 5'-0"   |
| <b>Maximum Allowable Design Pressure (PSF):</b> | -78.0         | -52.0     | -91.0   | -52.0   |

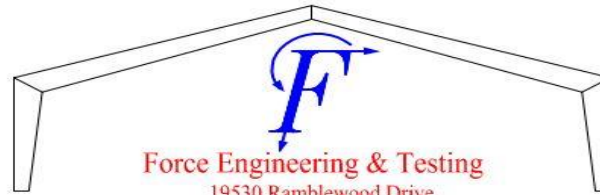
Design Pressures contains a factor of safety of 2.0.  
 Interpolation between the clip spacings is allowed.



|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Code Compliance:</b>           | The product described herein has demonstrated compliance with The Florida Building Code 2026, Section 1504.3.2, 1504.7.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Evaluation Report Scope:</b>   | The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2026, as relates to Rule 61G20-3.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Performance Standards:</b>     | <p>The product described herein has demonstrated compliance with:</p> <ul style="list-style-type: none"><li>▪ ASTM E 1592-05 (2017) Test method for structural performance of sheet metal roof and siding systems by uniform static air pressure difference.</li><li>▪ FM 4471-92, Foot Traffic Resistance Test.</li></ul>                                                                                                                                                                                                                                                      |
| <b>Reference Data:</b>            | <ol style="list-style-type: none"><li>1. ASTM E 1592-01<br/>Encon Technology Inc.<br/>Report No. C1432-1*, C1432-2*</li><li>2. ASTM E 1592-94<br/>Encon Technology Inc.<br/>Report No. C456-6*, C456-7*, C905-3*, C905-4*</li><li>3. FM 4471-95, Foot Traffic Resistance Test<br/>Encon Technology Inc.<br/>Report No. C1669-1*</li><li>4. Certificate of Independence<br/>By Johnathan Green, P.E. (No. 88223) @ Force Engineering &amp; Testing<br/>(FBC Organization # ANE ID: 12901)</li></ol> <p>*Bigbee is authorized to use Building Research System's Test reports.</p> |
| <b>Test Standard Equivalency:</b> | <ol style="list-style-type: none"><li>1. The ASTM E 1592-01 test standard is equivalent to the ASTM E 1592-05 (2017) test standard.</li><li>2. The ASTM E 1592-94 test standard is equivalent to the ASTM E 1592-05 (2017) test standard.</li><li>3. The FM 4471-95 test standard is equivalent to the FM 4471-92 test standard.</li></ol>                                                                                                                                                                                                                                      |
| <b>Quality Assurance Entity:</b>  | 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.                                                                                                                                                                                                                                                                                                                                   |
| <b>Minimum Slope Range:</b>       | Minimum Slope shall comply with Florida Building Code 2026, including Section 1507.4.2 and in accordance with Manufacturers recommendations.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Installation:</b>              | Install per manufacturer's recommended details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Limitation:</b>                | Metal hip and ridge covers are outside the scope of this evaluation report and must be in compliance with FBC 2026 Section 1504.3.1.1 through other product approval.                                                                                                                                                                                                                                                                                                                                                                                                           |



|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Insulation:</b>                     | Manufacturer's approved product (Optional)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Roof Panel Fire Classification:</b> | Fire classification is not part of this evaluation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Shear Diaphragm:</b>                | Shear diaphragm values are outside the scope of this report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Design Procedure:</b>               | Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2026 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. Support framing must be in compliance with Florida Building Code 2026 Chapter 22 for steel, and Chapter 16 for structural loading. |



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