

## Evaluation Report "FW-1025 Panel with Optional Seamlock" Metal Wall/soffit Assembly

### Manufacturer:

**Berridge Manufacturing Company**

**1720 Maury Road**

**Houston, TX 77026**

**(800) 231-8127**

*for*

**Florida Product Approval**

**# FL 17437.5 R4**

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

**Method: 2 - B**

**Category: Structural Components**

**Sub - Category: Structural Wall**

**Product:** "FW-1025" Wall Panel  
with Seamlock

**Material:** Aluminum

**Panel Thickness:** .032" &.040"

**Support:** Steel Supports

### Prepared by:

James L. Buckner, P.E., S.E.C.B.

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Project Manager: Diana Galloway

Report No. 20-227-FW1025-W-ER

*(New wall, rev 17-128-FW1025-AP-ER, FL17217.6 R2)*

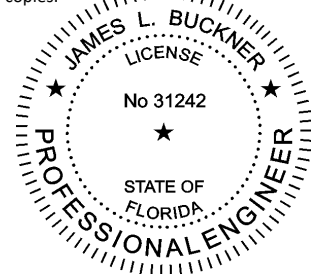
Date: 09 / 17 / 20

### Contents:

Evaluation Report

Pages 1 – 8

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.



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<b>Manufacturer:</b>	<b>Berridge Manufacturing Company</b> 1720 Maury Road Houston, TX 77026 (800) 231-8127 <a href="http://www.berridge.com">www.berridge.com</a>
<b>Product Name:</b>	<b>"FW-1025 Panel with Optional Seamlock</b>
<b>Product Category:</b>	Structural Components
<b>Product Sub-Category</b>	Structural Wall
<b>Compliance Method:</b>	State Product Approval Rule 61G20.005 (2) (b)
<b>Product/System Description:</b>	"FW-1025" Panel Structural wall/soffit panels with concealed fasteners, a flush seam and interlocking seam edge with optional seam lock feature designed to resist panel disengagement.
<b>Product Assembly as Evaluated:</b>	Refer to Page 4 of this report for product assembly components/materials & standards: <ol style="list-style-type: none"><li>1. Wall/Soffit Panel</li><li>2. Fasteners</li></ol>
<b>Support:</b>	<b>Type 1:</b> Steel Supports (Design of steel support and its attachment to support framing is outside the scope of this evaluation.) <b>Description:</b> Material: Steel Thickness: 16 Gauge minimum Yield Strength: 40 ksi minimum Girt/Stud Size: 2" min. flange bearing
<b>Performance:</b>	Wind Uplift Resistance: <b>Refer to TABLE A</b> <ul style="list-style-type: none"><li>• Design Uplift Pressure: (Refer to "Table A" attachment details herein)</li></ul>

<b>Performance Standards:</b>	The product described herein has demonstrated compliance with: ASTM E 1592-05 – <i>Test Method for Structural Performance of Sheet Metal Wall/soffit and siding Systems By Uniform Static Air Pressure Difference</i>
<b>Standards Equivalency:</b>	The ASTM E 1592-01 standard version used to test the evaluated product assembly is equivalent with the prescribed standards in ASTM E 1592-05 adopted by the Florida Building Code 7th Edition (2020).
<b>Code Compliance:</b>	The product described herein has demonstrated compliance with Florida Building Code 7th Edition (2020), Section 1708.2.
<b>Evaluation Report Scope:</b>	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 61G20.001.
<b>Limitations and Conditions of Use:</b>	<ul style="list-style-type: none"><li>• Soffit panels shall comply with labeling requirements per FBC Section 1710.9.</li><li>• Diaphragm and axial load capacity is outside the scope of this evaluation.</li><li>• <u>Scope of “Limitations and Conditions of Use” for this evaluation:</u> 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> 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>• This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.</li><li>• All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC.</li><li>• Design of support system is outside the scope of this report. Support shall be designed by others and shall comply with the FBC Chapters 22 for steel and Chapter 16 for structural loading.</li><li>• Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.</li><li>• Design of support system is outside the scope of this report. Support shall be designed by others and shall comply with the FBC Chapters 22 for steel.</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>	The manufacturer has demonstrated compliance of products in accordance with the Florida Building Code and Rule 61G20.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through UL, LLC.

**Components/  
Materials  
(by Manufacturer):**

**Wall/Soffit Panel:** Berridge "FW-1025" Panel  
 Panel Width: 10-1/4" Coverage  
 Rib Height: 1-1/2"  
 Material: Aluminum  
 Thickness: 0.032" Or 0.040"  
 Alloy Type: 3105-H14, in compliance with ASTM B 209  
 Corrosion Resistance: In compliance with FBC Section 1405.2

**Fastener:**

Type: Hex-Washer-Head Self-Drilling Screw  
 Size : #12 - 14 x 1-1/4" with 5/8" washer head  
 Corrosion Resistance: Per FBC Section 1405.17  
 Standard: Per SAE J78-1979

**Installation:**

**Installation Method:**

(Refer to "TABLE A" and drawings at the end of this report.)

Install per the following:

- Support spacing: Per Table "A"
- Fastener spacing: Per Table "A"
- Two (2) fasteners per max. support (girt/stud) and panel lap intersections
- Fasteners shall be centered in the flange of each attachment point.
- Panel ribs shall be fully engaged to form an integral interlock.
- Minimum fastener penetration thru flange of steel support: 3/4".
- Wall Panels are to be installed vertically.

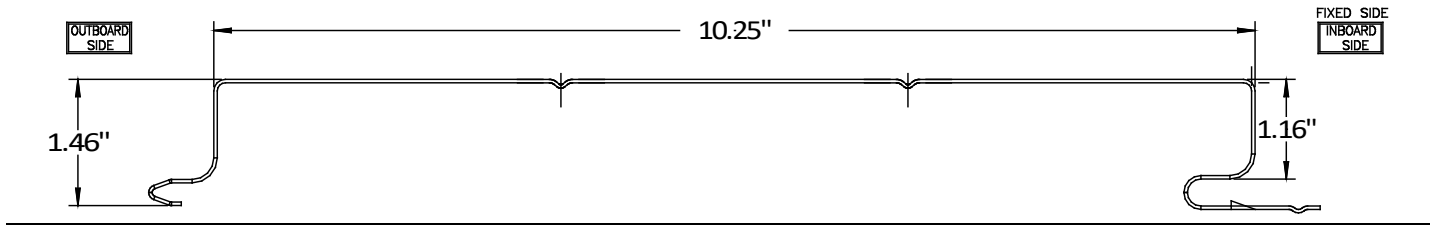
Install the "FW-1025" wall panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 7th Edition (2020). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

**"FW-1025" Panel Attachment Data**

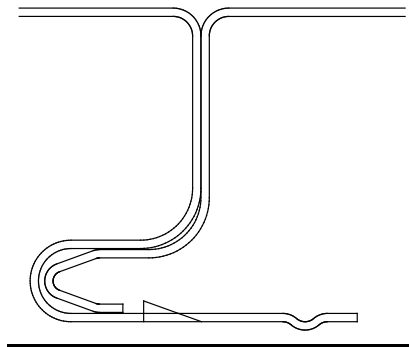
TABLE "A"										
ALLOWABLE LOADS										
	Application Type	Material Type	Panel Thickness	Fastener Type (Per Pg 4)	Support Type	Support Spacing (y) (max.)	Fastener Spacing (x) (exposure)	# Fasteners Per Attachment	Span Condition	Design Pressure
1.	Soffit/Wall	Alum	0.032"	#12	Steel Girts	24" (2'- 0")	10-1/4"	2	3 or more	- 46.5 PSF
2.	Soffit/Wall	Alum	0.040"	#12	Steel Girts	24" (2'- 0")	10-1/4"	2	3 or more	- 83.25 PSF
NOTES: <ul style="list-style-type: none"> <li>• Negative Pressure Outward/Positive Pressure Inward</li> <li>• Allowable design pressure(s) for allowable stress design (ASD).</li> <li>• Diaphragm and axial load capacity are not included in this evaluation Fastener Attachment to Steel Supports May Be Designed By A Qualified Design Professional As Required By The Florida Building Code For Site Specific Projects.</li> <li>• Diaphragm and axial load capacity are not included in this evaluation</li> </ul>										

1. TAS 125-03 Uplift Test (Per ASTM E 1592-01)  
By Force Engineering & Testing Inc., Inc.  
Report # 49-0022T-14 H, I, Report Date: 7/25/14,  
Test Specimen(s) # H (0.032")  
Test Specimen(s) # I (0.040")
2. Engineering Analysis  
By CBUCK Engineering
3. Quality Assurance  
UL, LLC (FBC Organization #: QUA 9625)
4. Certification of Independence  
By James L. Buckner, P.E. @ CBUCK Engineering  
(FBC Organization # ANE 1916)

**Installation Method  
Berridge Manufacturing Company  
"FW-1025" Wall/Soffit Panel"**

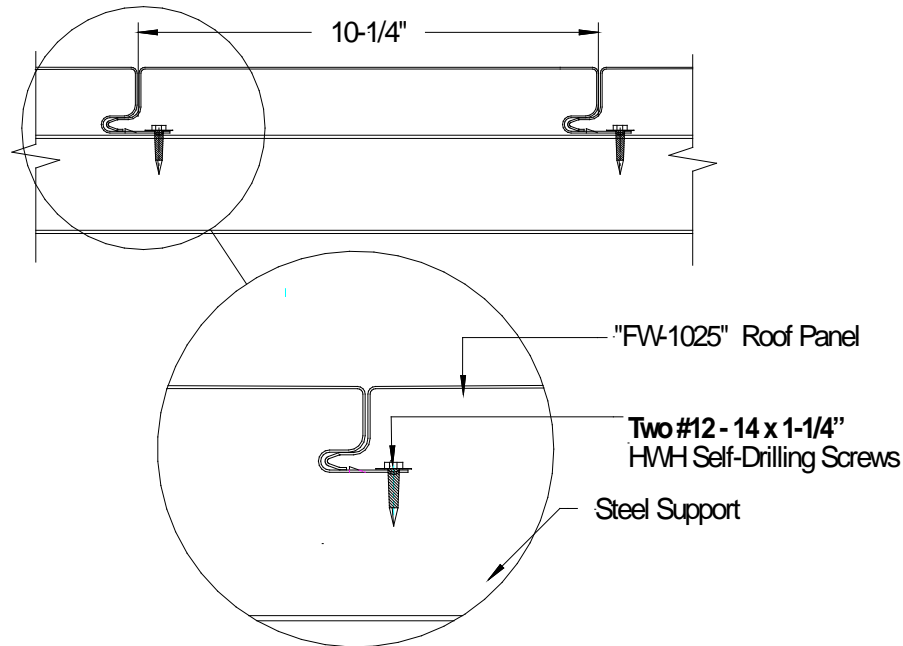


**Typical Panel Profile**



**"FW-1025" Panel  
Seamlock Detail View**

## Installation Method Berridge Manufacturing Company "FW-1025" Wall/Soffit Panel



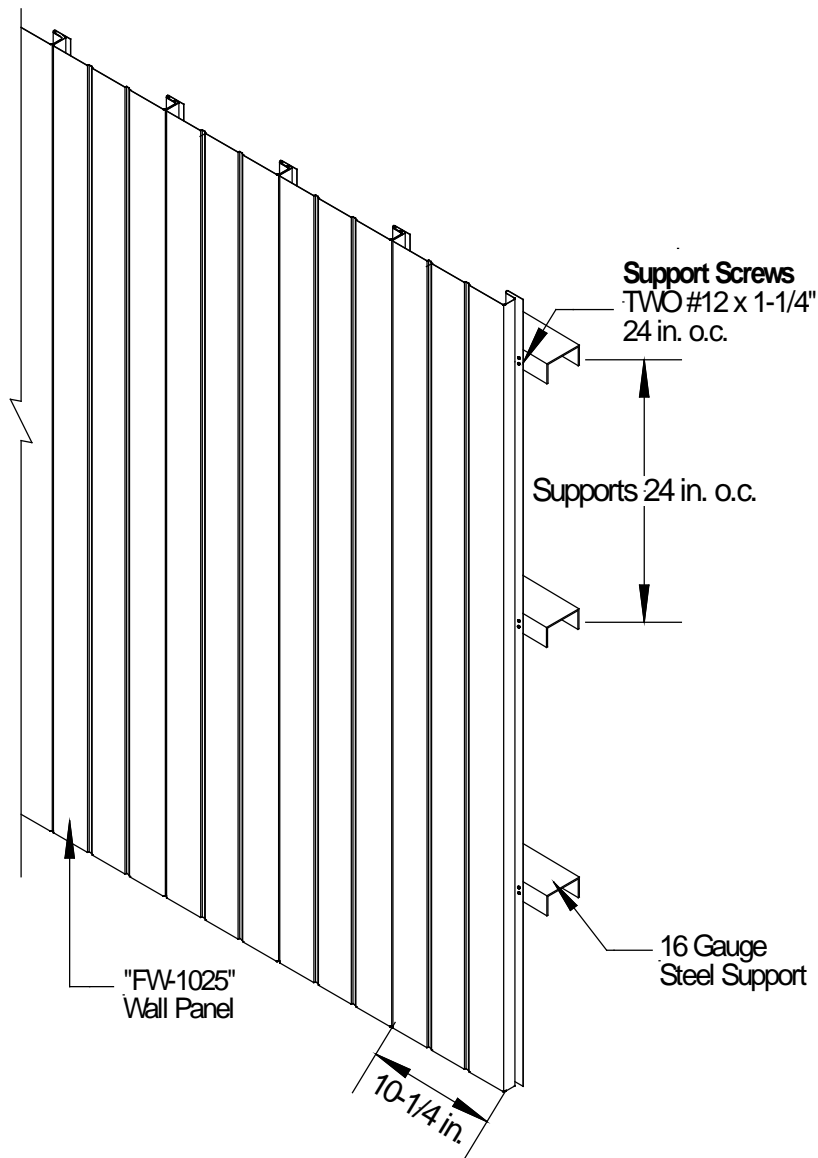
**Typical Panel Assembly  
 Section View**

**"FW-1025" Panel Attachment Data**

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- NOTES:
- Negative Pressure Outward/Positive Pressure Inward
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  - Diaphragm and axial load capacity are not included in this evaluation Fastener Attachment to Steel Supports May Be Designed By A Qualified Design Professional As Required By The Florida Building Code For Site Specific Projects.
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**Installation Method  
Berridge Manufacturing Company  
"FW-1025" Wall/Soffit Panel"**



**Typical Elevation View  
Outside Of Wall Assembly**