CBUCK Engineering

Specialty Structural Engineering

CBUCK, Inc. Certificate of Authorization #8064

Evaluation Report

"Fluted Fascia"

Metal Wall Assembly

Manufacturer:

Berridge Manufacturing Company

1720 Maury Road Houston, TX 77026 (800) 231-8127

for

Florida Product Approval

FL 11462.1 R4

Florida Building Code 7th Edition (2020)

Method: 2-B

Category: Panel Walls

Sub - Category: Siding

Product: "Fluted Fascia" Wall Panel

Material: Stee

Support: Wood Sheathing

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-FF-S4W-ER

. (Revises 17-128-FF-S4W-ER, FL11462.1 R3)

Date: 09 / 17 / 20

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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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Manufacturer: Berridge Manufacturing Company

Product Name: "Fluted Fascia"

Product Category: Panel Walls

Product Sub-Category Siding

Compliance Method: State Product Approval Rule 61G20-3.005 (2) (b)

Product/System Description:

"Fluted Fascia" Wall Panel

Steel wall panel attached to Plywood Sheathing.

Product Assembly as Evaluated:

Refer to Page 4 of this report for product assembly components/materials &

standards:

Wall Panel
 Fasteners

Support: Type:

Wood Sheathing

(Design of support and its attachment to support framing is outside the scope of

this evaluation.)

Description:

15/32 or greater plywood

Performance: Wind Resistance:

Design Pressure: Positive: + 75 PSF
 (Refer to "Table A" attachment details herein)
 Negative: - 55 PSF



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Performance Standards:

The product described herein has demonstrated compliance with:

 ASTM E330-02 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure

Difference

Code Compliance:

The product described herein has demonstrated compliance with Florida Building Code 7th Edition (2020), Section 1708.2.

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:

- Diaphragm and axial load capacity 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".
- 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.
- 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.
- All metal components and fasteners shall be corrosion resistant in accordance with applicable sections of FBC.
- 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.
- Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in 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).

Quality Assurance:

The manufacturer has demonstrated compliance of wall panel products in accordance with the Florida Building Code and Rule 61G20-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality



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assurance entity through UL, LLC (FBC Organization #: QUA 9625).

Components/Materials (by Manufacturer):

Wall Panel: Berridge "Fluted Fascia"

Material: Steel

Thickness: 24 gauge (min.)
Panel Width: 10" (max.) Coverage

Rib Height: 3/8"
Yield Strength: 40 ksi min.

Steel Grade: 40

Corrosion Resistance: In compliance with FBC Section 1405.2

Fastener:

Type: Pancake-Head Wood Screw

Size: 10 x 1"

Standard/

Corrosion Resistance: Per FBC Section 1405.17

Installation:

Installation Method:

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

- Row Spacing: Refer to "TABLE A" Below (along the row, across the panel profile)
- Fastener spacing: Refer to "TABLE A" Below
 (along the length of the panel, in the groove of the male leg)
- Panel ribs shall be fully engaged to form an integral interlock.
- Minimum fastener penetration thru support, 3/16".
 (through plywood sheathing)

TABLE "A"			
		METHOD 1:	
Design Pressure:	Positive:	Negative:	
	+ 75 PSF	- 55 PSF	
Row Spacing:		16"	
Fastener Spacing:		10"	
Span Condition:		3 or more	

Notes:

- Positive Pressure Inward/Negative Pressure Outward
- Allowable design pressure(s) for allowable stress design (ASD).
- Fastener Attachment to Steel Supports May Be Designed By A Qualified
 Design Professional As Required By The Florida Building Code For Site Specific
 Projects.
- Diaphragm and axial load capacity are not included in this evaluation.

Install the "Fluted Fascia" 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



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supplemental guide for attachment.

Referenced Data:

 ASTM E330-02 Test & Uniform Static Air Pressure portion of TAS 202-94 By Hurricane Test Laboratory, LLC (FBC Organization #TST ID:1527) Report #: 0307-0805-05, Report Date: 12/16/05 Test Specimen(s) 1A, 1B

2. Quality Assurance

UL, LLC (FBC Organization #: QUA 9625)

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

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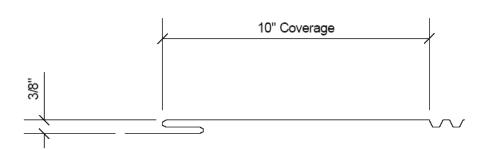
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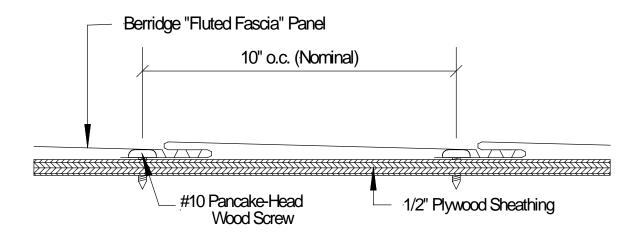
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Installation Method Berridge Manufacturing Company "Fluted Fascia" Steel Wall Panel attached to Plywood Sheathing

Drawings



Typical Panel Profile



Assembly Profile View

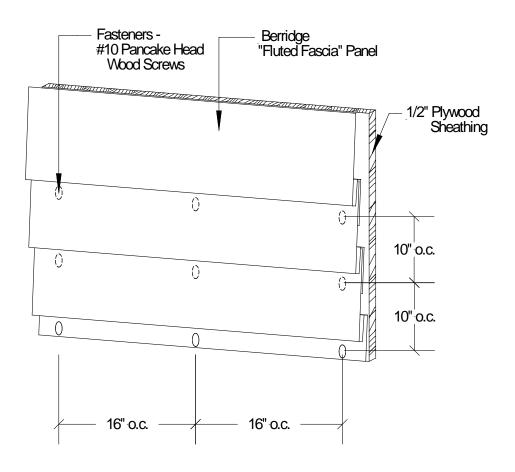
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Typical Elevation View Outside Of Wall Assembly