

Evaluation Report "E375" Soffit Panel Metal Soffit Assembly

Manufacturer
Englert, Inc.

1200 Amboy Avenue
Perth Amboy, NJ 08862
(732) 826-8614

for

Florida Product Approval

FL 17216.1 R4

Florida Building Code 8th Edition (2023)

Method: 2 - B

Category: Panel Walls

Sub - Category: Soffit

Prepared by:

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

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

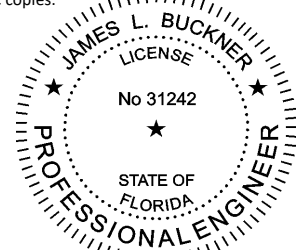
Project Manager: Diana Galloway

Report No. 23-555-E375-ER

(Revises 20-234-E375-ER, FL17216.1 R3)

Date: 08/16/2023

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.



Date: 2023.08.16
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Evaluation Report

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Manufacturer:	Englert, Inc. 1200 Amboy Avenue Perth Amboy, NJ 08862 (732) 826-8614 http://www.englertinc.com/
Product Name:	"E375" Soffit Panel
Product Category:	Panel Walls
Product Sub-Category	Soffits
Compliance Method:	State Product Approval Rule 61G20-3.005 (2) (b)
Product/System Description:	"E375" Soffit Panel Corrugated lapped Soffit panel fastened into structural Steel Supports.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Soffit Panel 2. Fasteners
Support:	Type: Steel Girts/Supports (Design of steel support and its attachment to support framing is outside the scope of this evaluation.) Description: Material: Steel Thickness: 20 Gauge minimum (0.034") Yield Strength: 50 ksi minimum Girt/Support Size: 2" min. flange bearing
Performance:	Wind Resistance: Design Pressure: (Refer to "Table A" attachment details herein)

Refer to Table "A"

Performance Standards:	The product described herein has demonstrated compliance with: • ASTM E330-14 – Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
Code Compliance:	The product(s) described herein have demonstrated compliance with the intent and principles of the standards adopted by the Florida Building Code 8th Edition (2023).
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:	• <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”. • <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. • Soffit panels shall comply with labeling requirements per FBC Section 1709.1. • 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 Soffit 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 assurance entity through Keystone Certifications, Inc. (FBC Organization ID# QUA 1824).

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

Soffit Panel:

Material:
Thickness:
Panel Width:
Rib Height:
Steel Yield Strength:
Alum Alloy Type:
Corrosion Resistance:

"E375"

Steel or Aluminum
Refer to Table A
12" (max.) Coverage
3/8"
40 ksi min.
3105-H24, in compliance with ASTM B 209
Kynar 500 paint finish
(In compliance with FBC Section 1405.2)

Fasteners:

FASTENER 1:

Type:
Size :
Corrosion Resistance:
Standard:

Panel to Support
Pancake-Head Screw
10 – 16 x 1"
Per FBC Section 1405.17
SAE J78-1979

Sealant:

Type:
Size:
Location:

Gunable Non-curing Butyl Sealant
1/2" wide bead
All panel interlocks

Installation:

Installation Method:

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

- Girt/Stud Spacing: **24" (2'-0")**
- Fastener spacing: **12" o.c.**
(along the support, at each panel interlock)
- Minimum fastener penetration thru bottom of support, **3/4"**.
(through flange of steel supports)

TABLE A E375 Soffit Panel ALLOWABLE LOADS							
#	MAT'L	THICKNESS	MAX. SUPPORT SPACING	SPAN CONDITION	FASTENER SPACING	SEALANT	DESIGN PRESSURE (PSF)
1.	STEEL	24 ga.	24" (2'-0")	TRIPLE	12" o.c.	YES	+ 33 - 70
2.	ALUM	0.032"	24" (2'-0")	TRIPLE	12" o.c.	NO	+ 33 - 70
3.	ALUM (Perforated or ½ Perforated)	0.032"	24" (2'-0")	TRIPLE	12" o.c.	NO	+ 33 -53.3
NOTES: • Negative Pressure Outward/Positive Pressure Inward • 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.							

Install the "E375" Soffit Panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). 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.

Evaluation

Reference Data:

1. ASTM E330-02 Test Report
By Architectural Testing, Inc.(FBC Organization ID# TST 1558)
Report #D7940.04-109-44, Date: 7/25/14
2. Quality Assurance
Keystone Certifications, Inc. (FBC Organization ID# QUA 1824)
Englert, Inc. Licensee #420
3. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

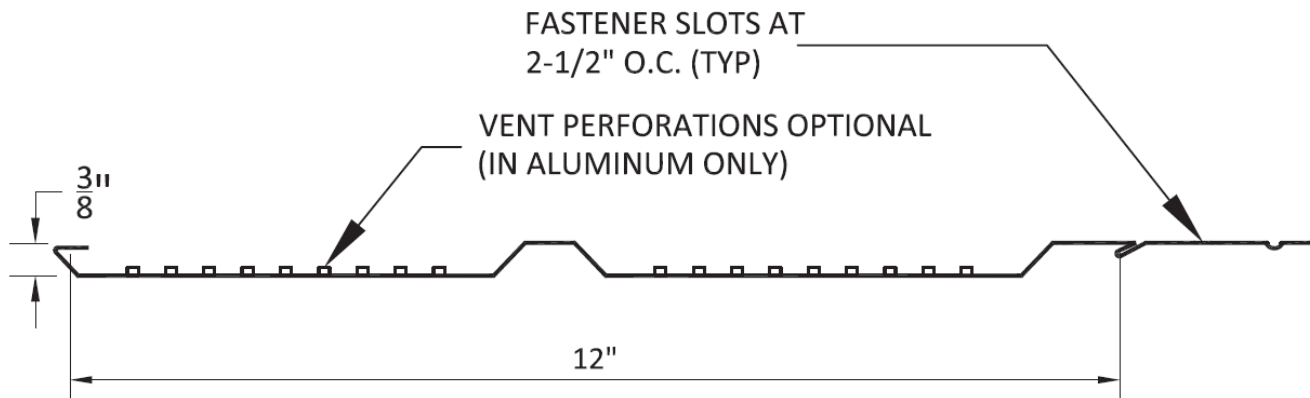
Additional

Standards Tests:

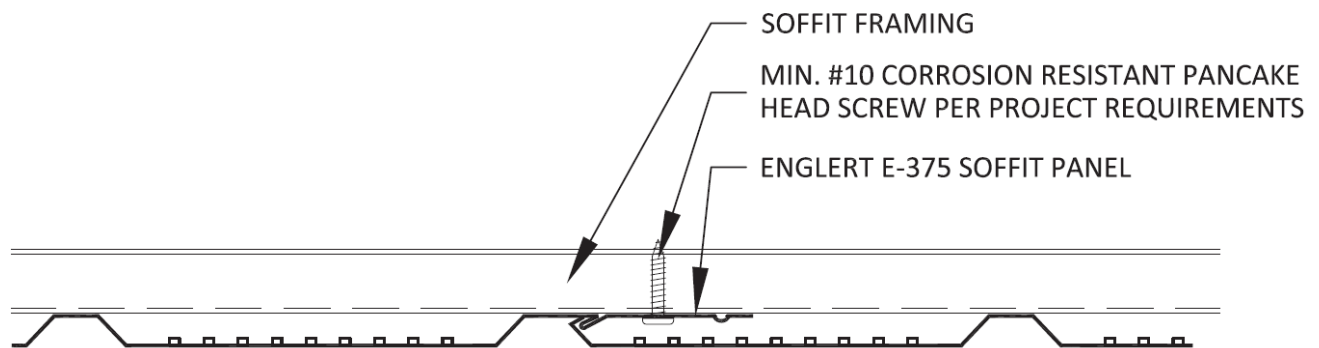
(Performed but not evaluated in this report.)

1. ASTM E331-00 Water Penetration Test & ASTM E283-04 Air Leakage Test
By Architectural Testing, Inc. (FBC Organization ID# TST 1558)
Report #D7940.04-109-44, Date: 7/25/14

Installation Method Englert, Inc. "E375" Soffit Panel



PROFILE VIEW



TYPICAL ASSEMBLY PROFILE VIEW
(TYPICAL FASTENING PATTERN ALONG SUPPORTS)