

Evaluation Report

Dutch Lap Wall Panel Metal Wall Assembly

Manufacturer:

Advanced Aluminum

2941 Parkway Street
Lakeland, FL 33811
(863) 648-5787

for

Florida Product Approval

FL 31737.1-R1

Florida Building Code 7th Edition (2020)

Method: 1 - D

Category: Structural Components

Sub - Category: Structural Wall

Product: Dutch Lap Wall Panel

Material: Steel

Panel Thickness: 29 gauge, Minimum

Panel Width: 36"

Support: 14 Ga. Steel Support

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.

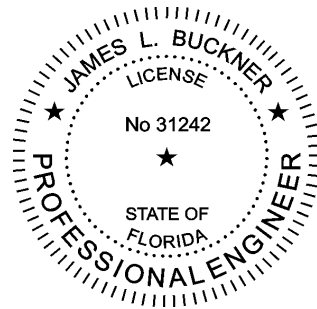
Prepared by:

James L. Buckner, P.E., S.E.C.B.
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Report No. 20-273-01-Dutch-S9S-ER
Date: 12 / 2110 / 2020

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Evaluation Report

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CBUCK, Inc.

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Manufacturer:	Advanced Aluminum 2941 Parkway Street Lakeland, FL 33811 (863) 648-5787 www.advaluminum.com		
Product Name:	Dutch Lap Wall Panel		
Product Category:	Structural Components		
Product Sub-Category	Structural Wall		
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)		
Product/System Description:	Steel Wall Panel Assembly steel panel, 29 Gauge, 36" wide wall panel mechanically attached to steel supports.		
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Wall Panel 2. Panel Fasteners		
Support:	Type: Steel Supports (Design of steel support and its attachment to support framing is outside the scope of this evaluation.) Description: Material: Steel Thickness: 14 Gauge minimum Yield Strength: 50 ksi minimum		
Performance:	Wind Resistance: • Positive Design Pressure: + 18.0 PSF - Negative Design Pressure: - 15.27 PSF <i>* Allowable design pressure(s) for allowable stress design (ASD).</i> (Refer to attachment details herein)		

Performance Standards:	The product described herein has demonstrated compliance with: • ASTM E 330-02 – <i>Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference</i>
Code Compliance:	The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in the: Florida Building Code 7th (2020) International Building Code 2018
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. • <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. • 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 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 (HVHZ) 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 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Farabaugh Engineering and Testing, Inc. (FBC Organization ID# QUA 7733).

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

Product Identification: Dutch Wall Panel
Orientation: Horizontal
Material: Steel
Thickness: 29 gauge (min.)
Panel Width: 36" Coverage
Rib Height: 1/2"
Yield Strength: 40 ksi min.
Corrosion Resistance: In compliance with FBC Section 1405.2

Fastener:

Type: Hex-Head self-drilling screws with EPDM washers
Size: 12 x 1-1/4" Min. Length
Corrosion Resistance: Per FBC Section 1506.6 and 1507.4.4
Standard: Per ANSI/ASME B18.6.4
Fastener Location: Refer to Drawings at the end of this report

Installation:**Installation Method:**

(Refer to drawings at the end of this report.)

- Support Spacing: **60" (5'-0")** max.
- Fastener spacing: 6" o.c. Nominal
- Minimum fastener penetration thru support, 3/4".
(through flange of steel supports)

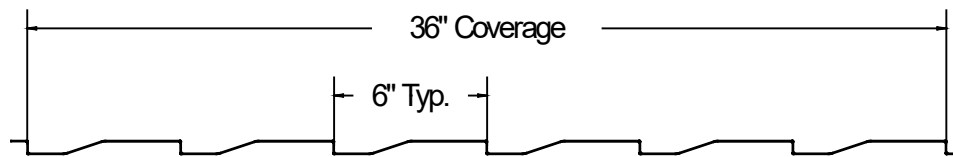
Install the "Dutch Wall Panel" system panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 7th Edition (2020). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation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

Referenced Data:

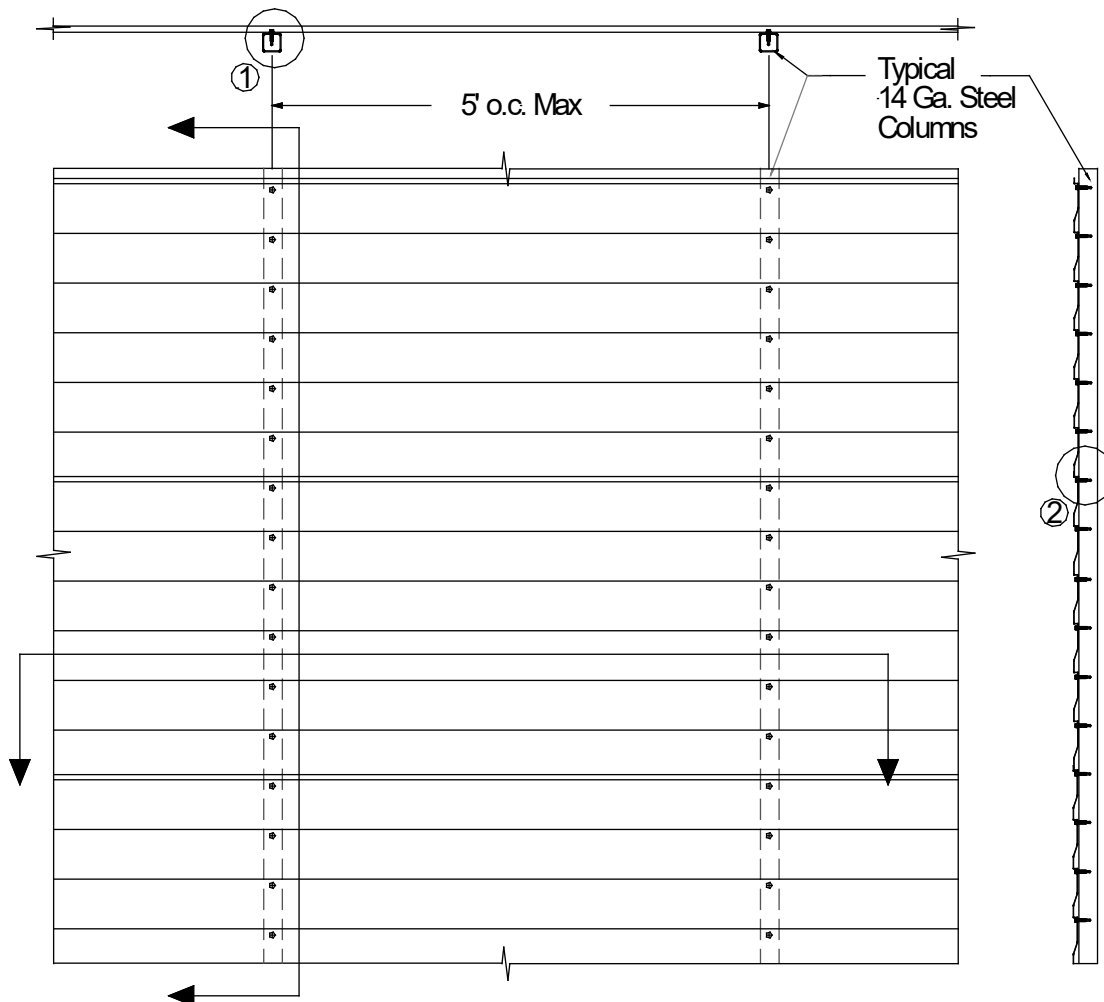
1. ASTM E330-02
By Farabaugh Testing & Engineering
(FBC Organization ID# TST 1654)
Report #: T145-20, Report Date: 2/20/20
1. Quality Assurance
Architectural Testing, Inc., an Intertek Company
(FBC Organization ID# QUA 1844).
2. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)

Installation Method
Advanced Aluminum
"Dutch Wall Panel" Attached to 14 Ga. Steel Supports

Profile Drawings



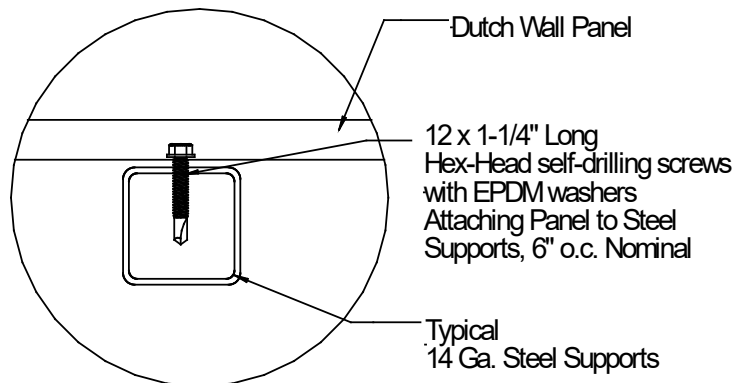
"Dutch Wall Panel"
Typical Panel Profile View (N.T.S.)



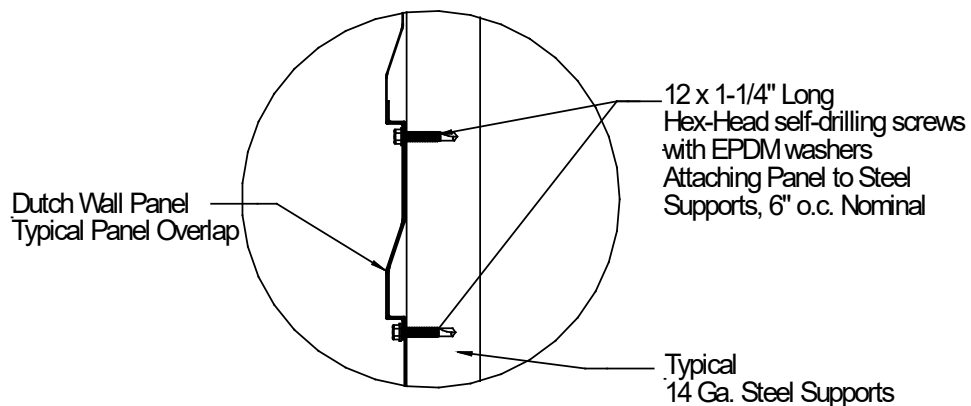
Typical Field of Panel Assembly

Elevation View (N.T.S.)

Installation Method Advanced Aluminum “Dutch Wall Panel” Attached to 14 Ga. Steel Supports



Detail ①



Detail ②