

Evaluation Report PENUMWALL - Aluminum Metal Wall Assembly

Manufacturer:

ATAS International, Inc.
6612 Snowdrift Road
Allentown, PA 18106
(800) 468-1441

for

Florida Product Approval

FL 35063.3-R3

Florida Building Code 8th Edition (2023)

Method: 1 - D

Category: Structural Components

Sub - Category: Structural Wall

Product: PENUMWALL

Material: Aluminum

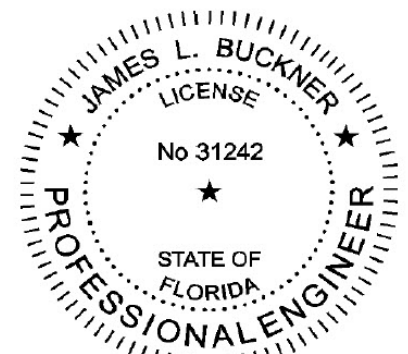
This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

Prepared by:

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Florida Evaluation ANE ID: 1916
Report No. 23-592-03- AL-PEN-ER8
Date: 8/20/2023

Contents:

Evaluation Report Pages 1 – 8



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Manufacturer:	ATAS International, Inc 6612 Snowdrift Road Allentown, PA 18106 (800) 468-1441 www.atas.com
Product Name:	PENUMWALL
Product Category:	Structural Components
Product Sub-Category	Structural Wall
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)
Product/System Description:	The PENUMWALL is a structural wall panel that is attached through-fastened, using color-matched exposed fasteners. An Aluminum rib wall panel fastened into structural Steel Supports.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: <ol style="list-style-type: none">1. Wall Panel2. Fasteners
Support:	Type: Steel Supports Orientation: Vertical or Horizontal (Design of steel support and its attachment to support framing is outside the scope of this evaluation.) Description: Material: Steel Thickness: 18 Gauge minimum Yield Strength: 50 ksi minimum Girt/Stud Size: 1-1/2" min. flange bearing
Performance:	Wind Resistance: <ul style="list-style-type: none">• Design Pressure: Refer to Table A (Refer to "Table A" attachment details herein)

- Performance Standards:** The product described herein has demonstrated compliance with:
- **ASTM E 330-14** – *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 performance standards listed above as referenced in the:
Florida Building Code 8th (2023)
International Building Code 2021
- 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 assurance entity through:

Architectural Testing, Inc., an Intertek Company, #: QUA 1844)

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

Wall Panel: ATAS PENUMWALL
Material: Aluminum
Thickness: 0.032" min.
Panel Width: 39-3/8" Coverage
Rib Height: 1-1/4"
Nominal
Tensile Strength 19,000 psi minimum
Corrosion Resistance: In compliance with FBC Section 1405.2

Fastener:

FASTENER: Panel to Support
Type: Self Drilling screw Hex Washer Head with WSW
Size: #14 – 16 x 7/8" min.
Corrosion Resistance: Per FBC Section 1405.17
Standard: Approved per FBC Section 1405.17

Installation:

Installation Method:

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

- Girt/Support Spacing: **Refer to Table A Below**
- Fastener spacing: **Refer to Table A Below**
(along the support)
- Rib Interlock: Snap Together
- Minimum fastener penetration thru support, 3/4".
(through flange of steel supports)

TABLE "A"				
ALLOWABLE DESIGN PRESSURES (ASD)				
Maximum Support Spacing:	2 FT	3 FT	4 FT	5 FT
Positive Design Pressure (PSF)	+133.3	+102.2	+71.1	+40.0
Negative Design Pressure (PSF)	-141.3	-106.2	-70.9	-35.8
Span Condition:	One or More Spans			
Fastener spacing to support:	7- 7/8" oc, Along supports - in each low cell			
Notes: <ul style="list-style-type: none"> • Positive Pressure Inward/Negative Pressure Outward • Allowable design pressure(s) for allowable stress design (ASD). • Diaphragm and axial load capacity are not included in this evaluation. 				

Orientation: Vertical or Horizontal

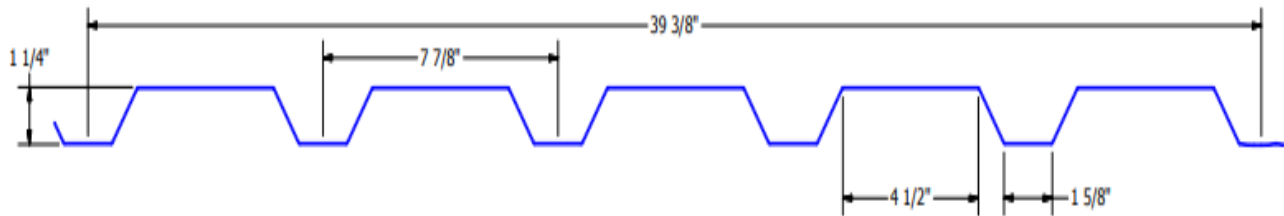
Install the PENUMWALL wall panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

1. ASTM E330-14
By Farabaugh Engineering and Testing, Inc. (FBC Organization #TST ID:1654)
 - Report # T358-19, Report Date: 12/31/19
2. Engineering Analysis
By CBUCK Engineering
3. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUCK Engineering
4. Quality Assurance
Architectural Testing, Incan Intertek Company, #: QUA 1844)
5. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering

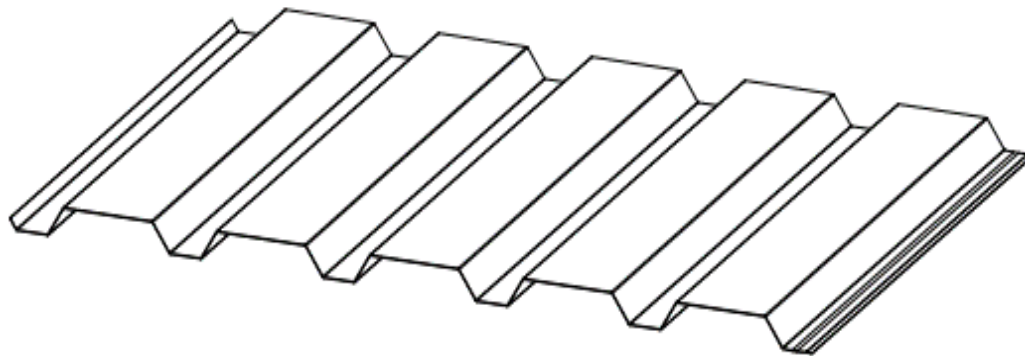
**Installation Method
ATAS International, Inc.
PENUMWALL Aluminum Wall Panel attached to Steel Supports**

Profile Drawings



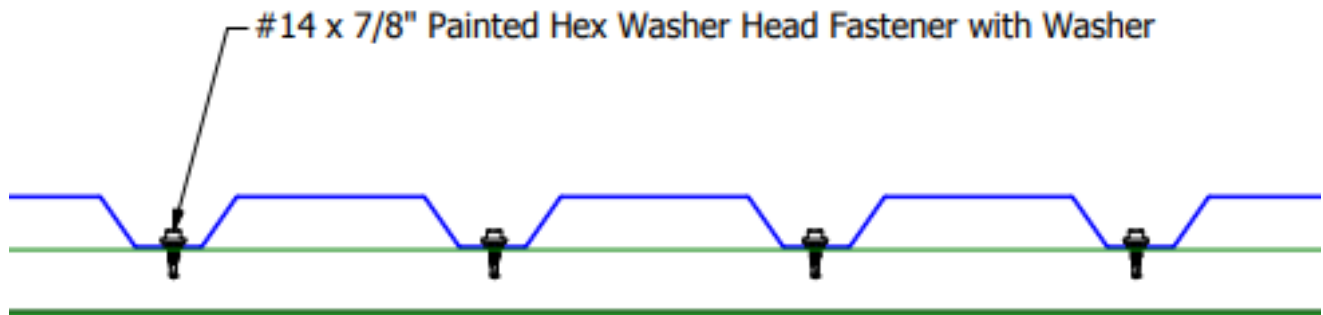
**TYPICAL METAFOR
PANEL SECTION VIEW**

Orientation: Vertical or Horizontal



**TYPICAL PANEL ASSEMBLY
ISOMETRIC VIEW**

**Installation Method
ATAS International, Inc.
PENUMWALL Aluminum Wall Panel attached to Steel Supports**



**TYPICAL PANEL ASSEMBLY
FASTENER INSTALLATION AND PANEL INTERLOCK VIEW**