

metalunic4

Evaluation Report

Moderno Steel Wall Siding

Metal Wall/Soffit Assembly

Manufacturer:

Metalunic

101 rue Royal

Les Coleaux, QC

17X1A6

for

Florida Product Approval

FL 40690.3 R1

Florida Building Code 8th Edition (2023)

Method: 1 - D

Category: Structural Components

Sub - Category: Structural Wall

Product: Design Wall

Material: Steel

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:

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

Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Report No. 23-600.03-Mod-wood16oc-ER

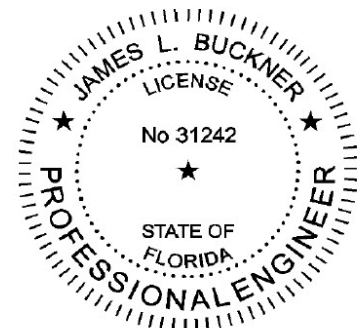
(Revises Report No. 22-464-03-Mod-wood16oc-ER, FL40690.3 R0)

Date: 12/26/2023

Contents:

Evaluation Report

Pages 1 – 8



James L. Buckner, P.E.
FL31242

2023.12.26
16:29:54 -05'00'

CBUCK, Inc.

Phone: (561) 491-9927 · Email: cbuck@cbuckinc.net · Website: www.cbuckinc.net
Main Office: 1374 Community Dr., Jupiter, FL 33458 ·

Manufacturer:	Metalunic 101 rue Royal Les Coleaux, QC 17X1A6 (450) 267-2330 www.metalunic.com
Product Name:	Moderno Steel Wall Siding
Product Category:	Structural Components
Product Sub-Category	Structural Wall
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)
Product/System Description:	The Moderno steel siding is a concealed fastener panel structural system attached to wood supports. Cladding applications include walls and soffits. Panels can be solid or vented. Installation can be horizontal or vertical or diagonal.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Wall Panel 2. Fasteners
Support:	Type: Wood Supports Orientation: Vertical or Horizontal or Diagonal (Design of wood support and its attachment to building framing is outside the scope of this evaluation.) Description: <u>Wood Nominal 2 x 2 Minimum</u> Material: Wood Face Width: Nominal 2" or Actual 1.5 inch minimum Thickness: Nominal 2" And at least 1.5 inches for 1 inch screw embedment Grade: Construction grade to include Spruce-Pine-Fir Girt/Stud/Lath: Component(s) design is outside the scope of this evaluation

Performance:

Wind Resistance:

Wood Support Spacing: **16 " O.C. maximum**

Panel to wood support **screw embedment = 1 " minimum**

See installation Instructions
for Panel screw locations

Wind Load Design Resistance

Positive + 67.7 PSF

Negative - 56.7 PSF

Notes:

- 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.

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 described herein has demonstrated compliance with the performance standards listed above as referenced in the:

Florida Building Code 8th Edition (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 including 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:

Keystone Certifications, Inc., #: QUA 1824)

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

Panel:

Material:
Thickness:
Panel Width:
Rib Height:
Nominal
Tensile Strength
Corrosion Resistance:

Metalunic Moderno

Steel
26 ga min.
5.65" Coverage
0.75"
40,000 psi minimum
In compliance with FBC Section 1507

Fastener:

Wood Screw:
Standard:

Panel to Support

#8-16 x 1" minimum Embedment into wood
Per FBC Section 1405.17

Board: Optional

Sheathing &/or Insulation

Referenced Data:

1. ASTM E330-14
Architectural Testing, Inc. (an Intertek company) - York, PA
FBC Organization Number TST1558
Org Type Product Testing Laboratory
Report # L7540.01-109-44 Report Date 03/24/21
2. Engineering Analysis
By CBUCK Engineering
3. Quality Assurance
Keystone Certifications, Inc.
Org Type Product Quality Assurance Entity
FBC Organization Number QUA1824
2. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering

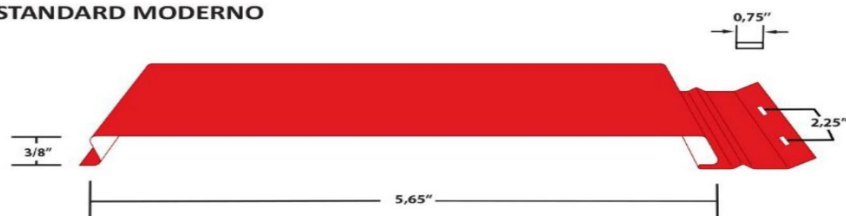
Prefinished steel siding with no screws apparent

MODERNO
REVÊTEMENT D'ACIER ARCHITECTURAL - ARCHITECTURAL STEEL SIDING

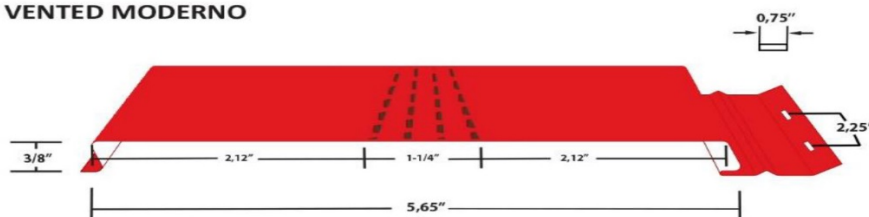


STANDARD AND VENTED PROFILES

STANDARD MODERNO



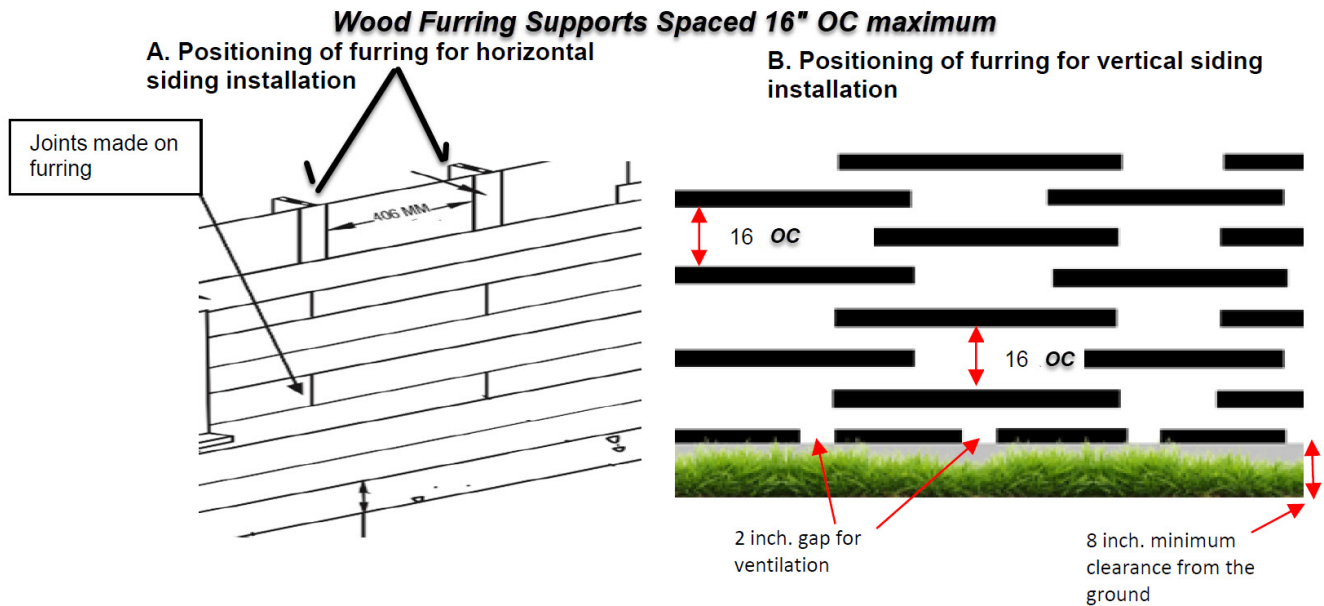
VENTED MODERNO



Installation Method Metalunic Moderno Steel Wall/Soffit Panel attached to Wood Supports

Install the Moderno Wall/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.

MODERNO STANDARD



Installation Method Metalunic Moderno Steel Wall/Soffit Panel attached to Wood Supports

Prefinished steel wall siding with concealed fasteners

Screw the panels in place on 16 inches on center, in the middle of the provided slots. Use screws recommended and supplied by Metalunic Design according to the type of furring used. It is crucial to drive the screws perpendicularly in the center of the panel slots and apply moderate contact. Screwing the fasteners at an angle must be avoided.

Screw Attachment at Each Furring Support



Moderate contact ✓



Heavy contact
(not recommended) ✗



Screw at 90 degrees ✓

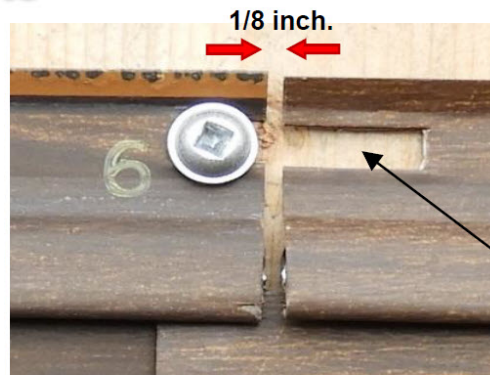


No angled screwing ✗

Installation Method Metalunic Moderno Steel Wall/Soffit Panel attached to Wood Supports

It is important to leave an expansion joint of 1/8 inch. between panels, to ensure sufficient space for expansion. Always add a screw to the panel joinning 2 pieces in order to have a beautiful joint.

Joints



Add screw

