

PRODUCT EVALUATION REPORT
CSBS Manufacturing, LLC
(Ostro Steel Structures)

OSTRO-3000 Standing Seam Roof Panel Over Open Framing

Florida Product Approval Number FL44663.1

Category: Structural Components

Sub-Category: Roof Deck

Compliance Method: 61G20-3.005 (1)(D)
NON-HVHZ

Product Manufacturer

CSBS Manufacturing, LLC
(Ostro Steel Structures)
7821 Clarks Mill Road
Louisville, GA 30434

Manufacturing Location

OSTRO STEEL STRUCTURES
7821 Clarks Mill Road
Louisville, GA 30434

Engineer Evaluator

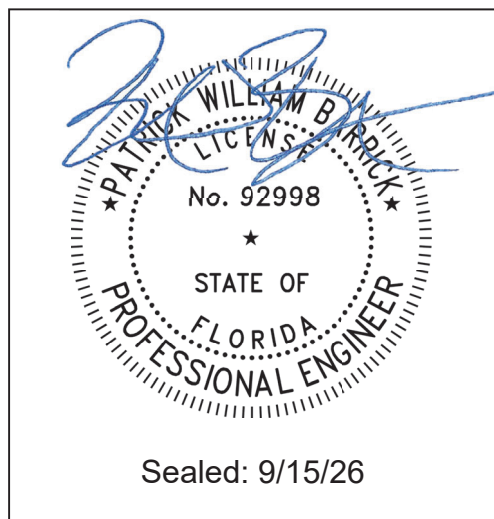
Patrick Barrick, P.E., Florida 92998

Validator

Dennis Johnson, P.E. Florida 54340
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Evaluation Report Pages 1-4 Dated 07-16-26



This document has been digitally signed and sealed by Patrick W. Barrick on the date below the seal.

Signature must be verified on any electronic copies.

Digitally signed by Patrick W
Barrick
Date: 2026.09.15 09:07:24 -05'00'

Compliance Statement

The product described in this report has demonstrated compliance with the 2026 (9th Edition) Florida Building Code Sections 1504.3.2, 1504.7, 1507.4, 2210.1 and 2210.1.2.

Product Description

OSTRO-3000 Cold-Formed Standing Seam structural roof panels applied over open framing:

1. 24 Gauge Triple-Lok (0.0232 Sheet Thickness) with a minimum Fy = 50 ksi and Fu = 60 ksi

Panel Material Standard

Formed steel in compliance with the 2026 (9th Edition) Florida Building Code Section 1507.4.3 with optional painted finish.

Roof Panel Clips

Product Name: NC34526
Type: Sliding Standing Seam Clips
Corrosion Resistance: Per 2026 (9th Edition) Florida Building Code Table 1504.3(2)

Panel Fastener

(2) 1/4 – 14 HWH SD per clip as indicated in the **Load Tables** of this Evaluation Report

Panel Seaming

(180°) Mechanically Seamed

Substrate Description

Minimum 16 gauge (0.059 steel thickness) open framing.
Framing must be designed in accordance with the 2026 (9th Edition) Florida Building Code

Reference Data

1. ASTM E1592-05
Encon Technology, Inc. (FBC Organization Number TST-6485) Report Numbers C2196-1 and C2196-2

Quality Assurance Entity

The manufacturer has established compliance of products in accordance with the 2026 (9th Edition) Florida Building Code as relates to Rule 61G20-3.005(3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.

Minimum Roof Slope

Minimum roof slope shall be ¼:12 in compliance with the 2026 (9th Edition) Florida Building Code, Including Section 1507.4.2 and in accordance with the Manufacturers recommendations.

Insulation

Manufacturer's approved products (optional)

Fire Classification

Fire Classification is outside the scope of this evaluation

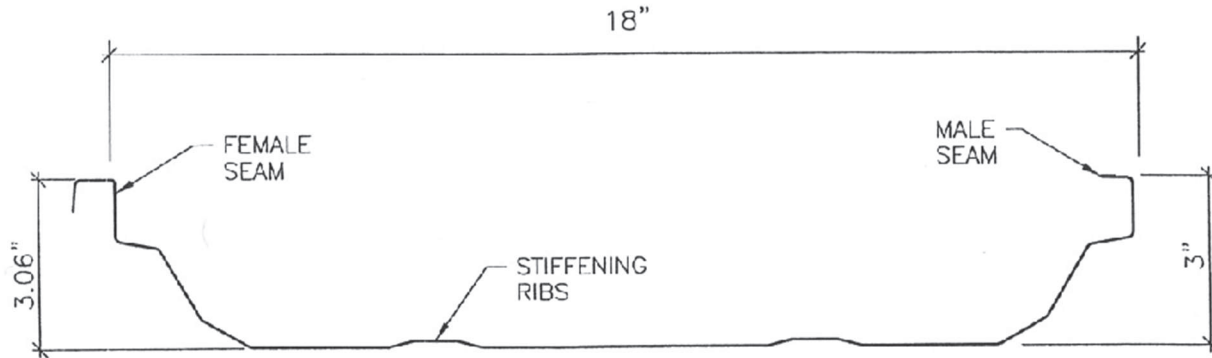
Shear Diaphragm

Shear Diaphragm is outside the scope of this evaluation

Design Procedure

Based on dimensions of the structure, appropriate wind loads are determined using chapter 16 of the 2026 (9th Edition) Florida Building Code for component loading of roof cladding. These component wind loads are compared to the allowable load listed in the **Load Tables** of this evaluation report. The design professional shall select appropriate fastener pattern and panel gauge to reference in the construction documents for proper installation. Design of support framing must be in compliance with the 2026 (9th Edition) Florida Building Code.

OSTRO-3000 Panel



OSTRO-3000 (18" Panel)					Section Properties					
Panel Gauge	Fy	Fu	Weight	Thickness	Negative Bending			Positive Bending		
	ksi	Ksi	psf	In.	Ixe	Sxe	Maxo	Ixe	Sxe	Maxo
					In ⁴	In ³	Kip-in	In ⁴	In ³	Kip-in
24	50	65	1.32	0.0220	0.551	0.2206	6.607	1.053	0.3492	10.458
22	50	65	1.73	0.0287	0.767	0.3797	11.370	1.442	0.4867	14.573

Note: Section Properties shown are for one full panel width (18").

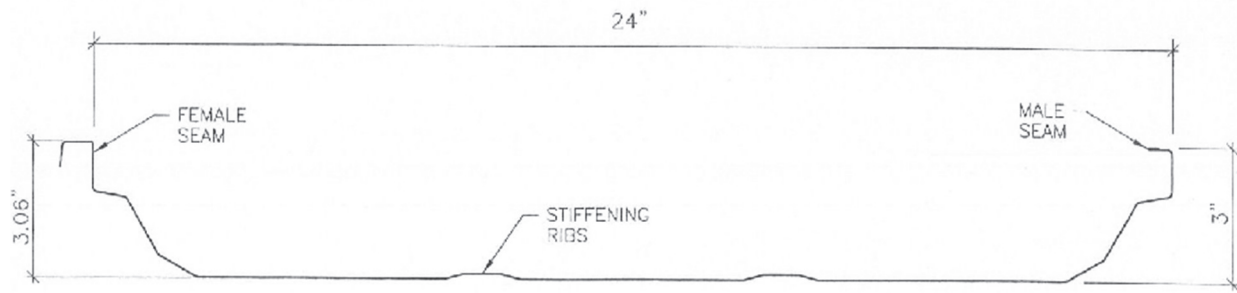
OSTRO-3000 (18" Panel) 24 Gauge				Allowable Gravity Load			
Span Type	Span (ft)						
	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
Single	699	559	466	399	290	229	185
2 Span	367	234	163	119	91.8	72.5	56.7
3-Span	458	293	203	149	114	90.6	73.4

OSTRO-3000 (18" Panel) 22 Gauge			Allowable Gravity Load				
Span Type	Span (ft)						
	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
Single	1128	902	719	528	404	319	259
2 Span	631	404	280	206	157	124	101
3-Span	789	505	350	257	197	156	126

Notes:

1. Allowable loads are based on uniform span length and uniformly distributed load.
2. Allowable gravity load is limited by bending, shear or deflection.
3. Allowable gravity loads are computed for a maximum total load deflection of L/60.
4. Weight of the panel must be included with gravity load combinations as appropriate.
5. This material is subject to change without notice.
6. This material has been developed in accordance with the 2016 North American Specification for Cold-Formed Structural Steel Members with Supplement 2 (2020).

The engineering data contained herein is for the express use of the customers of Ostro Steel Structures. and qualified design professionals.



OSTRO-3000 (24" Panel)					Section Properties					
Panel Gauge	Fy	Fu	Weight	Thickness	Negative Bending			Positive Bending		
	ksi	Ksi	psf	In.	Ixe	Sxe	Maxo	Ixe	Sxe	Maxo
24	50	65	1.21	0.0220	0.552	0.2214	6.629	1.144	0.3582	10.727
22	50	65	1.58	0.0287	0.770	0.3176	9.510	1.588	0.5056	15.140

Note: Section Properties shown are for one full panel width (24").

OSTRO-3000 (24" Panel) 24 Gauge				Allowable Gravity Load			
Span Type	Span (ft)						
	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
Single	699	559	397	291	223	179	143
2 Span	368	235	163	120	92.1	72.7	58.9
3-Span	460	294	204	150	115	90.9	73.7

OSTRO-3000 (24" Panel) 22 Gauge				Allowable Gravity Load			
Span Type	Span (ft)						
	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
Single	893	572	397	291	223	176	143
2 Span	528	338	234	172	132	104	84.5
3-Span	660	422	293	215	165	130	105

Notes:

1. Allowable loads are based on uniform span length and uniformly distributed load.
2. Allowable gravity load is limited by bending, shear or deflection.
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OSTRO-3000 (18" 24 Gauge) Design Uplift Pressures

Purlin Spacing	Ultimate Load (PSF)	Allowable Load (PSF)
5'-0"	80.0	40.0
4'-6"		47.9
4'-0"		55.8
3'-6"		63.7
3'-0"		71.6
2'-6"		79.5
2'-0"	175.0	87.5

OSTRO-3000 (18" 22 Gauge) Design Uplift Pressures

Purlin Spacing	Ultimate Load (PSF)	Allowable Load (PSF)
5'-0"	96.0	48.0
4'-6"		60.0
4'-0"		72.0
3'-6"		84.0
3'-0"		96.0
2'-6"		108
2'-0"	240.0	120.0

OSTRO-3000 (24" 24 Gauge) Design Uplift Pressures

Purlin Spacing	Ultimate Load (PSF)	Allowable Load (PSF)
5'-0"	60.0	30.0
4'-6"		32.0
4'-0"		34.0
3'-6"		36.0
3'-0"		38.0
2'-6"		40.0
2'-0"	84.0	42.0

OSTRO-3000 (24" 22 Gauge) Design Uplift Pressures

Purlin Spacing	Ultimate Load (PSF)	Allowable Load (PSF)
5'-0"	140.0	70.0
4'-6"		74.7
4'-0"		79.5
3'-6"		84.2
3'-0"		89.0
2'-6"		93.8
2'-0"	197.0	98.5