

PRODUCT EVALUATION REPORT
Corle Building Systems

A-Panel (26 and 24 Gauge Grade 50) Through Fastened Wall Panel

Florida Product Approval Number: FL6282.1

Category: Structural Components
Sub-Category: Structural Wall

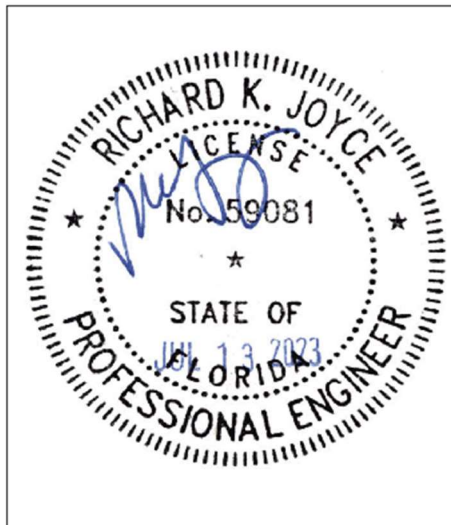
Compliance Method: 61G20-3.005 (1)(D)

Product Manufacturer:
Corle Building Systems
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Evaluation Report Pages 1-5 Dated 07-03-2023



Compliance Statement

The product described in this report has demonstrated compliance with the 2023 (8th Edition) Florida Building Code Sections 1404.5

Product Description

A-Panel Through Fastened structural roof panels applied over open framing:

1. A-Panel 26 Gauge Grade 50
(0.0190 Sheet Thickness) with a minimum $F_y = 50$ ksi and $F_u = 65$ ksi 12-12 Fastener Spacing

Panel Material Standard

Formed steel in compliance with the 2023 (8th Edition) Florida Building Code Section 1405.2 with optional painted finish.

Panel Fastener

Corrosion Resistant #12 – 14 HWH SD as indicated in the **Load Tables** of this Evaluation Report

Substrate Description

Minimum 16 gauge (0.0596 steel thickness) open framing.

Framing must be designed in accordance with the 2023 (8th Edition) Florida Building Code

Quality Assurance Entity

The manufacturer has established compliance of products in accordance with the 2023 (8th 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.

Insulation

Manufacturer's approved products (optional)

Fire Classification

Fire Classification is outside the scope of this evaluation.

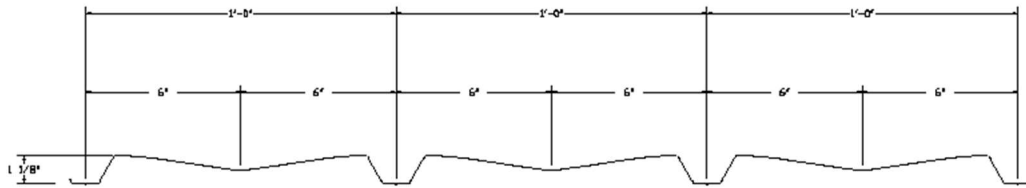
Shear Diaphragm

Shear Diaphragm is outside the scope of this evaluation.

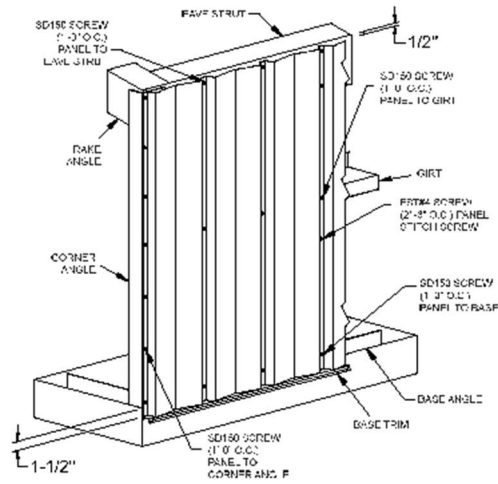
Design Procedure

Based on dimensions of the structure, appropriate wind loads are determined using chapter 16 of the 2023 (8th 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 2023 (8th Edition) Florida Building Code.

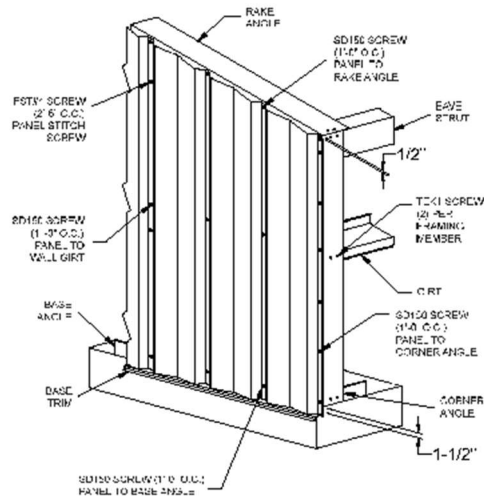
A or PAR Panel Fastener Patterns



"A" PANEL SIDEWALL



"A" PANEL ENDWALL



A / PBA Section Properties									
Panel Gauge	F _y	F _u	Weight	Negative Bending			Positive Bending		
				I _{xe}	S _{xe}	M _{axo}	I _{xe}	S _{xe}	M _{axo}
	Ksi	Ksi	psf	in ⁴	in ³	Kip-in	in ⁴	in ³	Kip-in
26	50	65	0.90	0.0273	0.0334	1.00	0.0250	0.0331	0.992
24	50	65	1.11	0.0367	0.0524	1.57	0.0333	0.0508	1.52

Notes:

1. All calculations for section properties of R panels are calculated in accordance with the 2016 edition North American Specification for Cold-Formed Members with Supplement 2 (2020).
2. I_{xe} is for deflection calculations.
3. S_{xe} is for bending calculations.
4. M_{axo} is for allowable bending moment calculations.
5. All values are for one foot of panel width.

The engineering data contained herein is for the express use of the customers of Corle Building Systems and qualified design professionals.

Span Load Tables

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT													
26 Gauge (F _y = 50 KSI)		Deflection Limit L/120											
SPAN TYPE	LOAD TYPE	SPAN IN FEET											
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
SINGLE	LIVE LOAD	165	105	73	54	41	32	26	19	15	11	9	7
	WIND PRESSURE	165	105	73	54	41	32	28	19	15	11	9	7
	WIND SUCTION	167	107	74	54	41	33	26	21	16	13	10	8
2 SPANS	LIVE LOAD	167	107	74	54	41	33	26	22	18	15	13	11
	WIND PRESSURE	167	107	74	54	41	33	28	22	18	15	13	11
	WIND SUCTION	144	107	74	54	41	33	26	22	18	15	13	11
3 OR MORE SPANS	LIVE LOAD	209	134	93	68	52	41	33	27	23	19	17	14
	WIND PRESSURE	209	134	93	68	52	41	33	27	23	19	17	14
	WIND SUCTION	163	130	93	68	52	41	33	27	23	19	17	14
SINGLE SPAN w/ 5' CANTILEVER AT ONE END	LIVE LOAD	114	56	32	20	13	9	7	5	4	3	2	2
	WIND PRESSURE	114	56	32	20	13	9	7	5	4	3	2	2
	WIND SUCTION	125	61	35	22	14	10	7	5	4	3	3	2
SINGLE SPAN w/ 17" CANTILEVER AT ONE END	LIVE LOAD	83	63	64	31	18	12	8	6	4	3	3	2
	WIND PRESSURE	83	63	64	31	18	12	8	6	4	3	3	2
	WIND SUCTION	82	82	70	34	20	13	9	6	5	4	3	2

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT													
24 Gauge (F _y = 50 KSI)		Deflection Limit L/120											
SPAN TYPE	LOAD TYPE	SPAN IN FEET											
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
SINGLE	LIVE LOAD	253	162	112	82	63	47	34	26	20	15	12	10
	WIND PRESSURE	253	162	112	82	63	47	34	26	20	15	12	10
	WIND SUCTION	262	167	116	85	65	51	38	28	22	17	14	11
2 SPANS	LIVE LOAD	282	187	118	85	65	51	41	34	29	24	21	18
	WIND PRESSURE	282	187	118	85	65	51	41	34	29	24	21	18
	WIND SUCTION	144	116	96	82	65	51	41	34	29	24	21	18
3 OR MORE SPANS	LIVE LOAD	327	209	145	106	81	64	52	43	36	30	24	19
	WIND PRESSURE	327	209	145	106	81	64	52	43	36	30	24	19
	WIND SUCTION	163	130	109	93	81	64	52	43	36	31	26	21
SINGLE SPAN w/ 5' CANTILEVER AT ONE END	LIVE LOAD	162	75	42	26	18	12	9	7	5	4	3	3
	WIND PRESSURE	152	75	42	26	18	12	9	7	5	4	3	3
	WIND SUCTION	168	82	47	29	19	13	10	7	6	4	4	3
SINGLE SPAN w/ 17" CANTILEVER AT ONE END	LIVE LOAD	130	130	85	42	24	16	11	8	6	4	4	3
	WIND PRESSURE	130	130	85	42	24	16	11	8	6	4	4	3
	WIND SUCTION	123	117	93	46	27	17	12	8	6	5	4	3

Notes:

1. Allowable loads are based on uniform span lengths and uniformly distributed load.
2. Live Load is limited by bending, shear, combined bending & shear, and web crippling.
3. Negative Wind Load does not include a 33.33% increase and does consider pull-over and pull-out on a minimum 16 gauge supporting member. (0.06", F_y = 55 ksi and F_u = 70 ksi supporting members).
4. Above loads are computed for a maximum total deflection as indicated.
5. The weight of panels must be deducted or added to the table values indicated above.
6. The material is subject to change without notice.
7. These data have been developed in accordance with the 2016 version of the North American Specification for Cold-Formed Steel Structural Members with Supplement 2 (2020).
8. The engineering data contained herein is for the express use of the customer of Corle Building Systems and qualified design professionals.