

AAA ENGINEERING

CONSULTING INC.

10000 10th Ave. S.W.

Edmonton, Alberta T6A 0K1

Canada

Software licensed to

Job Title: RONNIE MUNSON

Job No

356-22-0558

Sheet No

SO 8 /30

Rev

Part

Ref

By: AF

Date: 24-Mar-22

Chk: OA

File: 356-22-0558.sld

Date/Time: 24-Mar-2022 19:59

Client

REAL STEEL METAL BUILDINGS

Combination Load Cases Cont...

Comb.	Combination L/C Name	Primary	Primary L/C Name	Factor
		2	ROOFLIVE	0.75
		9	EZP	0.53
31	D+0.75LR+0.53EZN	1	DEAD	1.00
		2	ROOFLIVE	0.75
		10	EZN	0.53
32	0.6D+0.7EXP	1	DEAD	0.60
		7	EXP	0.70
33	0.6D+0.7EXN	1	DEAD	0.60
		8	EXN	0.70
34	0.6D+0.7EZP	1	DEAD	0.60
		9	EZP	0.70
35	0.6D+0.7EZN	1	DEAD	0.60
		10	EZN	0.70

Beam Displacement Detail Summary

Displacements shown in *italic* indicate the presence of an offset

Beam	L/C	d	X	Y	Z	Resultant	
			(in)	(in)	(in)	(in)	
1804	Max X	11.0+LR	33.600	0.272	-0.002	0.000	0.272
1332	Min X	11.0+LR	33.600	-0.271	-0.002	0.000	0.271
121	Max Y	20.0 6D+0.6W	16.800	-0.046	0.289	-0.004	0.293
2826	Min Y	11.0+LR	24.000	0.013	-0.785	0.005	0.786
314	Max Z	23.0 6D+0.6W	18.000	0.000	-0.001	0.458	0.458
314	Min Z	12.0+0.6WXP	18.000	0.010	0.000	-0.393	0.394
2826	Max Rot	11.0+LR	24.000	0.013	-0.785	0.005	0.786

Beam Maximum Forces by Section Property

Section		Axial		Shear		Torsion		Bending	
		Max Fx	Max Fy	Max Fx	Max Fy	Max Mx	Max My	Max Mz	Max Mz
(kip)	(kip)	(kip)	(kip)	(kip)	(kip)	(kip in)	(kip in)	(kip in)	(kip in)
TS252514GA	Max +ve	3.251	1.025	1.253	2.984	12.382	12.382	14.502	
	Max -ve	-9.216	-0.900	-1.284	-2.984	-12.621	-12.621	-9.021	
TS252514GAD14	Max +ve	4.623	0.712	2.307	3.713	13.966	16.744		
	Max -ve	-4.043	-0.753	-1.772	-3.713	-13.720	-14.524		
TS252514GADWS	Max +ve	5.788	1.732	1.817	3.130	9.493	48.319		
	Max -ve	-8.409	-1.733	-1.818	-3.143	-10.923	-48.341		
TS252514GAQ14	Max +ve	0.247	0.884	0.382	15.517	8.689	10.185		
	Max -ve	-1.434	-0.731	-0.402	-15.536	-9.133	-10.904		
CS252514GA	Max +ve	0.704	0.069	0.082	0.001	1.140	1.701		
	Max -ve	-0.448	-0.068	-0.054	-0.001	-1.769	-1.699		
C351514GA	Max +ve	1.830	0.150	0.046	0.000	1.060	2.613		
	Max -ve	-2.108	-0.144	-0.047	-0.000	-1.058	-2.225		

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Beam Maximum Forces by Section Property Cont...

Section		Axial		Shear		Torsion		Bending	
		Max Fx	Max Fy	Max Fx	Max Fy	Max Mx	Max My	Max Mz	Max Mz
(kip)	(kip)	(kip)	(kip)	(kip)	(kip)	(kip in)	(kip in)	(kip in)	(kip in)
C401014GAD	Max +ve	3.835	0.084	0.084	0.091	0.312	2.395	2.791	
	Max -ve	-0.979	-0.122	-0.055	-0.050	-8.235	-3.771		

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REAL STEEL METAL BUILDINGS

Reaction Summary

	Node	L/C	Horizontal			Vertical			Horizontal			Moment		
			FX	FY	FZ	FX	FY	FZ	MX	MY	MZ	MX	MY	MZ
Max FX	39	11-D+LR	0.915	1.803	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min FX	54	11-D+LR	-0.931	1.814	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max FY	73	11-D+LR	-0.665	7.792	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min FY	37	20-D+0.6W	-0.296	-2.793	-0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max FZ	40	12-D+0.6WXP	-0.245	0.802	0.518	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min FZ	53	23-D+0.6W	-0.067	-0.050	-0.585	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max MX	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min MX	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max MY	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min MY	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max MZ	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Min MZ	1	11-D+LR	0.042	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Statics Check Results

L/C	FX (kip)	FY (kip)	FZ (kip)	MX (kip-in)	MY (kip-in)	MZ (kip-in)
1:DEAD	Loads	-0.000	-33.197	0.000	-16.8E+3	-7.98E+3
1:DEAD	Reactions	0.000	33.197	-0.000	16.8E+3	7.98E+3
	Difference	0.000	0.000	-0.000	-0.002	0.002
2:ROOF LIVE	Loads	0.000	-101.994	-0.000	-52E+3	-24.5E+3
2:ROOF LIVE	Reactions	-0.000	101.994	0.000	52E+3	24.5E+3
	Difference	0.000	-0.000	-0.000	-0.006	0.008
3:WIND XP	Loads	17.947	99.962	2.100	51.3E+3	-11.7E+3
3:WIND XP	Reactions	-17.947	-99.962	-2.100	-51.3E+3	11.7E+3
	Difference	0.000	0.000	0.004	-0.001	-0.005
4:WIND XN	Loads	17.993	51.060	1.140	26.2E+3	-11.5E+3
4:WIND XN	Reactions	-17.993	-51.060	-1.140	-26.2E+3	11.5E+3
	Difference	0.000	0.000	-0.000	0.002	-0.002
5:WIND ZP	Loads	0.001	73.916	15.650	39E+3	-3.76E+3
5:WIND ZP	Reactions	-0.001	-73.916	-15.650	-39E+3	3.76E+3
	Difference	-0.000	0.000	0.000	0.004	-0.004
6:WIND ZN	Loads	0.000	25.023	14.714	13.9E+3	-3.53E+3
6:WIND ZN	Reactions	-0.000	-25.023	-14.714	-13.9E+3	3.53E+3
	Difference	-0.000	0.000	0.000	0.001	-0.001
7:EXP	Loads	0.872	0.000	0.000	0.000	-530.902
7:EXP	Reactions	-0.872	0.000	-0.000	-0.000	530.902
	Difference	0.000	0.000	-0.000	0.000	0.000
8:EXN	Loads	-0.872	0.000	0.000	0.000	530.902
8:EXN	Reactions	0.872	-0.000	0.000	0.000	-530.902
	Difference	-0.000	-0.000	0.000	0.000	-0.000
9:EZP	Loads	0.000	0.000	0.872	104.611	-209.222
9:EZP	Reactions	0.000	0.000	-0.872	-104.611	209.222
	Difference	0.000	0.000	-0.000	0.000	-0.000
10:EZN	Loads	0.000	0.000	-0.872	-104.611	209.222
10:EZN	Reactions	-0.000	-0.000	0.872	104.611	-209.222
	Difference	-0.000	-0.000	0.000	-0.000	0.000

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Failed Members
There is no data of this type.

EVALUATION REPORT

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ASC PROFILES LLC

2110 Enterprise Blvd.

West Sacramento, CA 95691

(800) 733-0955

www.ascprofiles.com

AEP SPAN AND ASC BUILDING PRODUCTS:
SINGLE SKIN STEEL ROOF AND WALL
PANELS WITH EXPOSED FASTENERSCSI Section:
07 61 00 Sheet Metal Roofing
07 64 00 Sheet Metal Wall Cladding

1.0 RECOGNITION

ASC Profiles LLC Single Skin Steel Roof and Wall Panels with Exposed Fasteners have been evaluated for use as exterior roof and wall covering panels. The structural and fire-resistance properties of the panels have been evaluated for compliance with the following codes:

- 2018, 2015, and 2012 International Building Code® (IBC)
- 2018, 2015, and 2012 International Residential Code® (IRC)
- 2019 California Building Code® (CBC) – Attached supplement
- 2019 California Residential Code® (CRC) – Attached supplement
- 2020 City of Los Angeles Building Code (LABC) – Attached supplement
- 2020 City of Los Angeles Residential Code (LARC) – Attached supplement

2.0 LIMITATIONS

Use of the ASC Profiles LLC Single Skin Steel Roof and Wall Panels and fasteners recognized in this report is subject to the following limitations:

- 2.1 Metal panels used in roof applications shall be applied to a solid or closely fitted deck, except where the roof covering is specifically designed to be applied to spaced support members. The panel installation tables in this report provide applicable substrate limitations.
- 2.2 Calculations demonstrating compliance with this report shall be submitted to the building official for approval. The calculations shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 2.3 The manufacturer's recommended roof slopes are defined within the OVERVIEW portion of this report. The minimum roof panel slopes shall conform to IBC Section 1507.4.2 or IRC Section R905.10.2, or as stated in this report.

The product described in this Uniform Evaluation Report (UES) Report has been evaluated as an alternative building design or method of construction in order to safety and comply with the intent of the provisions of the code, as noted in this report, and for at least equivalence to that prescribed in the code, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

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2.9.4 Air and Water Infiltration: Air and water infiltration resistance is outside the scope of this report. Weather protection shall comply with Sections 2.4 and 2.5 of this report.

2.9.5 Hail Resistance: Hail resistance is outside the scope of this report.

2.9.6 Wind-blown Debris Resistance: Wind-blown debris resistance is outside the scope of this report.

2.10 The Single Skin Steel Roof and Wall Panels recognized in this report are produced by ASC Profiles LLC in Sacramento, California and Salem, Oregon.

3.0 PRODUCT USE

General Design and Installation shall be in accordance with the referenced codes in Section 1.0 of this report, the information provided in this report, ASC Profile's product installation guides. Where conflicts occur, the more restrictive shall govern.

4.0 PRODUCT DESCRIPTION

4.1 Panels: The panels are available in various configurations as illustrated in the figures accompanying the tables in this report. Panels are either unpainted or are provided with a painted finish. Additional information on the panel configurations is provided in the OVERVIEW portion of this report.

The roof panels comply with requirements for metal roof panels in Chapter 15 of the IBC, and Section R905 of the IRC. The wall panels comply with requirements for steel wall coverings in Chapter 14 of the IBC, and Section R703 of the IRC.

4.2 Base Materials: All No. 18 and No. 20 gage panels are manufactured from sheet steel with G90 galvanized coatings conforming to ASTM A653 SS Grade 40.

All No. 22 and No. 24 gage panels are manufactured from AZ50 aluminum-zinc alloy coated steel sheet conforming to ASTM A792 SS grade 50, or from G90 galvanized sheet per ASTM A653 SS grade 50.

All No. 26 and No. 29 gage panels are manufactured from AZ50 aluminum-zinc alloy coated steel sheet conforming to ASTM A792 SS grade 80. The panels are also available pre-painted in accordance with ASTM A755.

4.3 Fasteners: The fasteners size and type requirements are identified in the panel installation tables within this report. All fasteners shall be zinc-plated with an added corrosion resistant coating, or of a 300 series stainless steel construction. Self-lapping metal to metal fasteners shall

comply with ASTM C1513. Fasteners installed into treated wood shall be 300 series stainless steel or designed specifically for use with treated wood.

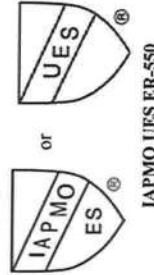
4.4 Substrates: ASC Profiles roof and wall panels may be fastened to numerous substrates including, but not limited to, the following:

- Cold formed steel in accordance with AISI S100
- Hot rolled steel in accordance with AISI 360
- Concrete in accordance with ACI 318
- Plywood and OSB in accordance with DOC PS-1 and DOC PS-2
- Dimensional lumber in accordance with ANSI/AWC NDS®

The panel installation tables within this report provide applicable substrate and fastening requirements. For other support conditions, structural calculations complying with the applicable code shall be submitted to the building official for approval.

5.0 IDENTIFICATION

A permanent label or a die-stamp label bearing the name and address of the manufacturer, the model number, and this evaluation report number (Evaluation Report ER-550) identifies the products listed in this report. The identification labels also include the IAPMO Uniform Evaluation Service Mark of Conformity, and either one of the following Marks of Conformity may be used:



6.0 SUBSTANTIATING DATA

Data submitted in conformance with IAPMO UES Evaluation Criteria Single Skin Steel Roof and Wall Panels, EC-011, revised July 2019. All product testing is from laboratories in compliance with ISO/IEC 17025.



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Fasteners:

Below is a summary of the fastener size and types specified within this report. Fastener size and type shall be compatible with the material type, thickness, and grade of the supporting members. Section 4.3 of this report provides additional fastener requirements. Hex washer head (HWH) fasteners are shown below. However, alternative fastener heads are acceptable. Fasteners require sealing washers for weather-tight applications.



#12 metal-to-metal fastener (self-drilling point shown)



#14 metal-to-wood fastener (milled point shown)



#9 metal-to-wood fastener (dimensional lumber only; self-piercing point shown)



Side Lap Screw (#12 minimum, #14 most common)

To assist in the evaluation of panel shear resistance, fastener connection shear strengths have been provided in Table B of this report for #12 fasteners into steel supports. These capacities are based on AISI S100, Section J4.3 for fastener shear strength and shear strengths limited by tilting and bearing. The capacities listed within Table B of this report are used to determine edge (perimeter) fastening requirements for shear resistance. The general notes and shear and flexibility tables of this report provide further information.

Table B

Substrate		#12 Fastener Connection Shear Strengths (lbs)											
		Panel Gauge / Grade											
		29ga (.0139") Gr60	26ga (.0173") Gr60	24ga (.0232") Gr50	22ga (.0294") Gr50	20ga (.0354") Gr40	18ga (.0459") Gr40	16ga (.0590") min.	18ga (.0459") min.	20ga (.0354") min.	22ga (.0294") min.	16ga (.0590") min.	18ga (.0459") min.
Steel (Gr 50 min.)	ASD	222	333	276	414	293	440	371	557	378	567	491	737
	LRFD	222	333	276	414	293	440	371	557	378	567	491	737
	WD	222	333	276	414	293	440	371	557	378	567	491	737
	φW	222	333	276	414	293	440	371	557	378	567	491	737
Steel (Gr 33 min.)	ASD	219	329	242	363	227	341	213	320	213	320	213	320
	LRFD	222	333	276	414	293	440	371	557	378	567	491	737
	WD	222	333	276	414	293	440	371	557	378	567	491	737
	φW	222	333	276	414	293	440	371	557	378	567	491	737



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13.0 Strata Rib®

Figure 13.1 - Basic Dimensions and Panel Attachment (Strata Rib):

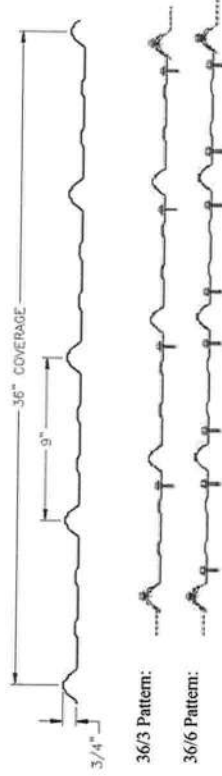


Table 13.1 - Section Properties (Strata Rib):

Gauge	Weight psf	Base Metal Thickness t in	Yield Strength Fy ksi	Tensile Strength Fu ksi	Gross Section Properties					
					Area A _g in ² /ft	Moment of Inertia I _g in ⁴ /ft	Distance to N.A. from Bottom y _b in	Positive Section Modulus S _x ⁺ in ³ /ft	Negative Section Modulus S _x ⁻ in ³ /ft	
29	0.65	0.0139	80	82	0.1914	0.0103	0.16	0.0170	0.0664	
26	0.81	0.0173	80	82	0.2382	0.0130	0.16	0.0211	0.0817	

Gauge	Area A _e in ²	Effective Section Properties			Uniform Load Only		
		Positive Moment of Inertia I _e ⁺ in ⁴	Distance to N.A. from Bottom y _b in	Section Modulus S _e ⁺ in ³	Negative Moment of Inertia I _e ⁻ in ⁴	Distance to N.A. from Bottom y _b in	Section Modulus S _e ⁻ in ³
29	0.0285	0.0103	0.16	0.0170	0.0070	0.34	0.0144
26	0.0379	0.0130	0.16	0.0211	0.0090	0.32	0.0181

		I _y = (2I _e - I _g)/3	
		in ⁴ /ft	in ⁴ /ft
29	0.0103	0.0130	0.0081
26	0.0130	0.0130	0.0103



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Table 13.2 - Inward (Positive) Uniform Allowable Loads (Strata Rib):

Gauge	Span	Limit Condition	Panel Span (Support Spacing)					
			16"	2'-0"	2'-6"	3'-0"	4'-0"	6'-0"
29	Single Span	ASD, WtQ	230	102	65	45	33	25
		LRF, ϕW	365	162	103	72	53	40
		L240	-	85	43	25	16	11
	Double Span	L180	-	-	58	33	21	14
		L120	-	-	-	32	21	15
		ASD, WtQ	185	84	54	38	28	21
26	Single Span	LRF, ϕW	279	126	81	57	42	32
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	227	104	67	47	35	26
26	Single Span	LRF, ϕW	342	157	101	70	52	39
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	126	81	56	41	32
26	Single Span	LRF, ϕW	453	200	128	89	65	50
		L240	-	107	55	32	20	13
		L180	-	-	73	42	27	18
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	233	105	68	47	34	27
26	Single Span	LRF, ϕW	350	159	102	71	52	40
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	131	85	59	43	33
26	Single Span	LRF, ϕW	429	197	128	89	65	50
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	131	85	59	43	33

Table 13.3 - Allowable Reactions at Supports (Strata Rib):

Gauge	Condition	Reactions at Supports based on Web Crippling			
		Bearing Length of Webs			
		ASD (Pn/Q) (lb/ft width)	LRFD (ϕP_n) (lb/ft width)	ASD (Pn/Q) (lb/ft width)	LRFD (ϕP_n) (lb/ft width)
29	End	131	151	168	200
	Interior	187	212	233	278
	End	196	224	249	299
26	End	285	321	351	424
	Interior	321	351	424	478
	End	285	321	351	424



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Table 13.4 - Outward (Negative) Uniform Allowable Loads (No. 29 gauge Strata Rib):

Gauge	Span	Limit Condition	Panel Span (Support Spacing)					
			16"	2'-0"	2'-6"	3'-0"	4'-0"	6'-0"
			ASD, WtQ	LRF, ϕW	ASD, WtQ	LRF, ϕW	ASD, WtQ	LRF, ϕW
29	Single Span	ASD, WtQ	230	102	65	45	33	25
		LRF, ϕW	365	162	103	72	53	40
		L240	-	85	43	25	16	11
	Double Span	L180	-	-	58	33	21	14
		L120	-	-	-	32	21	15
		ASD, WtQ	185	84	54	38	28	21
26	Single Span	LRF, ϕW	279	126	81	57	42	32
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	227	104	67	47	35	26
26	Single Span	LRF, ϕW	342	157	101	70	52	39
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	126	81	56	41	32
26	Single Span	LRF, ϕW	453	200	128	89	65	50
		L240	-	107	55	32	20	13
		L180	-	-	73	42	27	18
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	233	105	68	47	34	27
26	Single Span	LRF, ϕW	350	159	102	71	52	40
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	131	85	59	43	33
26	Single Span	LRF, ϕW	429	197	128	89	65	50
		L240	-	-	-	-	-	-
		L180	-	-	-	-	-	-
	Double Span	L160	-	-	-	-	-	-
		L120	-	-	-	-	-	-
		ASD, WtQ	285	131	85	59	43	33



EVALUATION REPORT

Number: 550

Originally Issued: 01/31/2018

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Valid Through: 01/31/2022

Originally Issued: 01/31/2018

Revised: 02/16/2021

Valid Through: 01/31/2022

Table 13.5 - Outward (Negative) Uniform Allowable Loads (No. 26 gauge Strata Rib):

[illegible]

Note: Shear Tables 12.6 & 12.7 based on 36/4 attachment pattern. Values acceptable for use (conservative) for 36/8 pattern.

Table 13.6 - Shear and Flexibility (No. 29 gauge Strata Rib, 36/4):

Diaphragm Shear Capacities, q (plf) and Flexibility Factors, F (10 ⁻⁶ in/lbs)																															
Side Seam Spacing		Attachment Spacing, (ft/in)																													
		16"			2'-0"			2'-6"			3'-0"			3'-6"			4'-0"			4'-6"			5'-0"			6'-0"					
		ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D	ASD	LRFD	S/D			
4'	Q	354	570	18.1	351	566	18.1	358	568	18.1	348	562	18.1	354	564	18.1	318	509	18.1	252	403	18.1	204	326	18.1	142	226	18.1	66		
	F	18.1	18.1	15.2	14.0	14.0	13.3	12.7	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4		
8'	Q	321	517	16.7	311	500	16.7	312	502	16.7	312	502	16.7	298	480	16.7	242	376	16.7	194	306	16.7	142	226	16.7	85	137	16.7	41		
	F	16.3	16.7	15.6	14.8	14.8	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2		
12'	Q	321	517	16.7	277	446	16.7	266	461	16.7	263	423	16.7	273	439	16.7	255	417	16.7	252	403	16.7	204	326	16.7	142	226	16.7	85	137	
	F	19.3	19.3	17.8	16.4	16.4	16.5	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7		
24'	Q	275	442	21.8	351	247	398	221	356	19.7	320	180	289	205	330	190	305	180	305	180	305	180	305	180	305	180	305	180	305	180	305
	F	20.5	20.5	19.7	17.7	17.7	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	
36'	Q	275	442	21.8	351	186	300	161	260	19.7	201	180	289	205	330	190	305	180	305	180	305	180	305	180	305	180	305	180	305	180	305
	F	20.5	20.5	19.7	17.7	17.7	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	
48'	Q	275	442	21.8	351	186	300	161	260	19.7	201	180	289	205	330	190	305	180	305	180	305	180	305	180	305	180	305	180	305	180	305
	F	20.5	20.5	19.7	17.7	17.7	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	
1' per span	Q	275	442	21.8	351	186	300	161	260	142	228	128	203	113	183	103	166	85	137												
	F	20.5	19.7	20.1	20.1	20.9	22.0	23.2	24.6	25.9	28.9																				
none	Q	169	273	120	193	97	156	80	129	68	110	59	95	52	84	47	75	38	61												
	F	23.4	24.0	23.5	25.5	27.4	29.6	31.9	34.3	36.8	41.9																				

Table 13.7 - Shear and Flexibility (No. 26 gauge Strata Rib, 36/4):

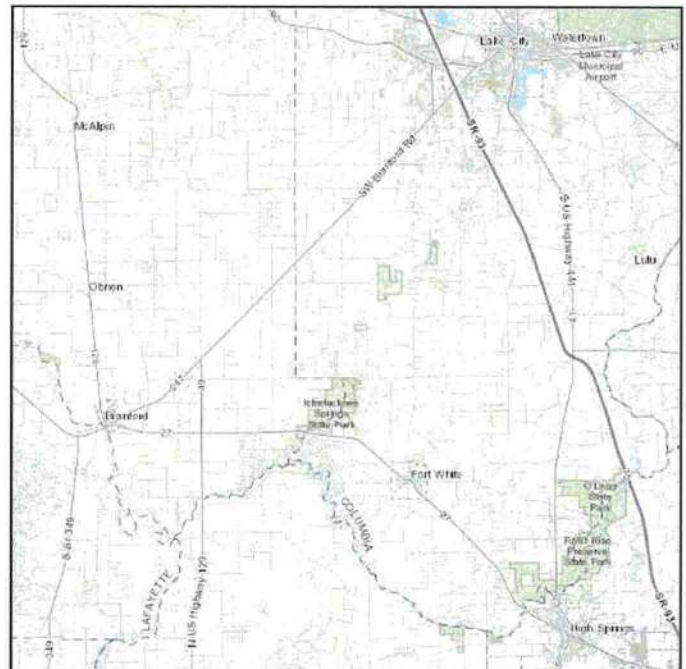
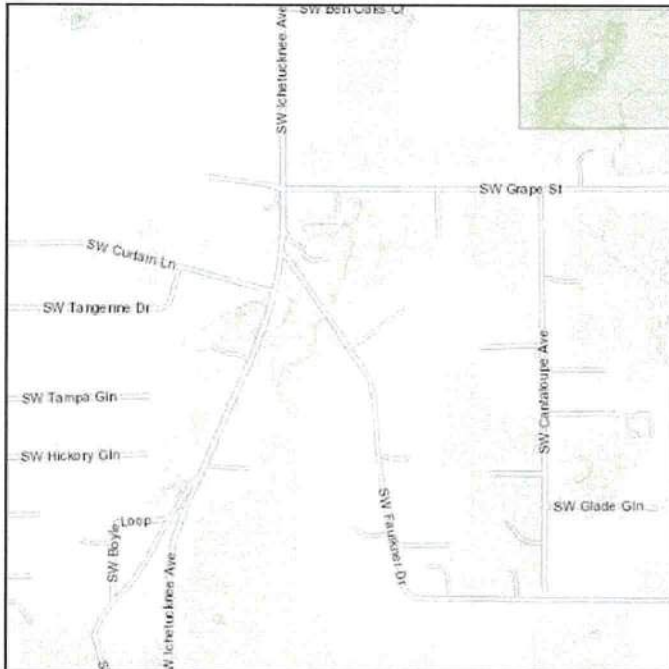
26ga Strata Rib 36/4 Attachment Pattern																				
Diaphragm Shear Capacities, q (psi) and Flexibility Factors, F (10^{-5} in/lbs)																				
Side Seam Spacing		Attachment Spacing, (ft/in)																		
		16"		2'-0"		2'-6"		3'-0"		3'-6"		4'-0"		4'-6"		5'-0"		6'-0"		
S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	S/D	L/RFD	
4"	F	12.7	11.0	10.3	439	707	435	700	433	703	433	697	352	563	285	456	198	317	9.0	
8"	F	389	643	387	623	387	624	388	624	388	625	371	597	352	563	285	456	198	317	11.0
12"	F	389	643	345	555	378	573	327	526	339	546	317	510	320	529	285	456	198	317	12.7
24"	F	342	550	272	437	307	495	275	442	247	398	224	360	255	411	238	391	198	317	16.7
36"	F	342	550	272	437	232	373	201	323	247	398	224	360	204	328	187	301	160	257	18.5
48"	F	342	550	272	437	232	373	201	323	176	284	157	253	204	328	187	301	160	257	19.5
1	F	342	550	272	437	232	373	201	323	176	284	157	253	141	227	128	206	107	172	20.5
per span	F	14.8	15.0	15.8	15.8	15.8	16.8	16.8	18.0	18.0	19.2	19.2	20.5	21.8	21.8	24.6	24.6	28.3	28.3	31.6
note	F	211	339	149	240	121	195	100	162	85	138	74	119	65	105	58	94	48	77	36.3

ASCE 7 Hazards Report

Address:
1382 SW Faulkner Dr
Fort White, Florida
32038

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see
Section 11.4.3)

Elevation: 48.88 ft (NAVD 88)
Latitude: 30.009273
Longitude: -82.758385



Wind

Results:

Wind Speed	119 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	98 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Mon Feb 28 2022

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

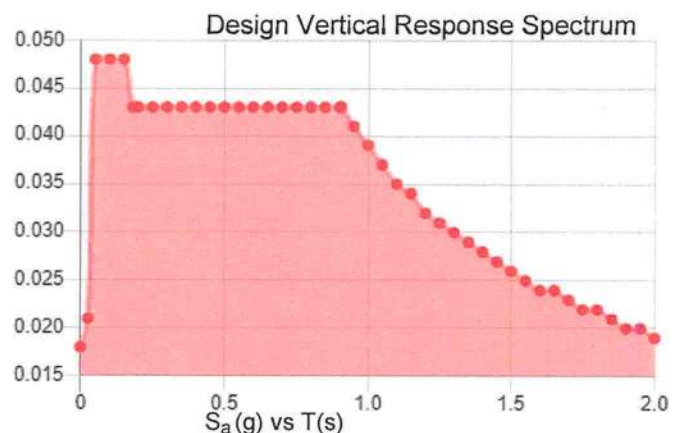
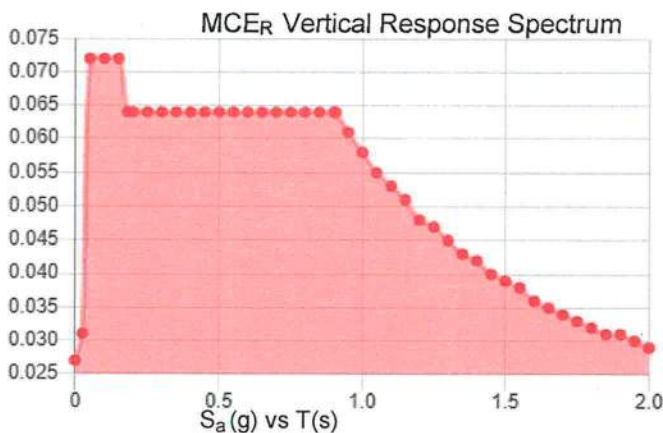
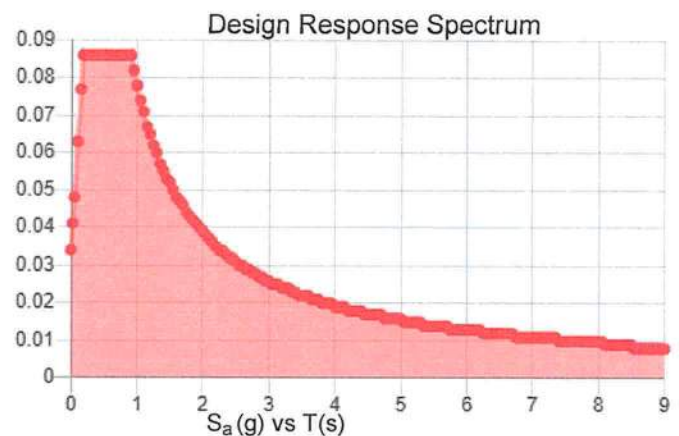
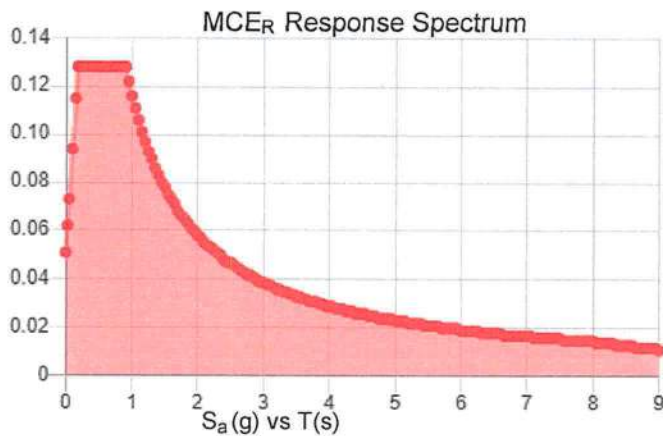
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_S :	0.08	S_{D1} :	0.078
S_1 :	0.048	T_L :	8
F_a :	1.6	PGA :	0.038
F_v :	2.4	PGA _M :	0.061
S_{MS} :	0.128	F_{PGA} :	1.6
S_{M1} :	0.116	I_e :	1
S_{DS} :	0.086	C_v :	0.7

Seismic Design Category B



Data Accessed: Mon Feb 28 2022

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Snow

Results:

Ground Snow Load, p_g : 0 lb/ft²
Elevation: 48.9 ft
Data Source: ASCE/SEI 7-16, Table 7.2-8
Date Accessed: Mon Feb 28 2022

Values provided are ground snow loads. In areas designated "case study required," extreme local variations in ground snow loads preclude mapping at this scale. Site-specific case studies are required to establish ground snow loads at elevations not covered.

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