



401 S. Main Street
Suite 200
Mt. Airy, NC 27030
Phone: (336) 415-3540
Fax: (336) 719-2020

1009 East Avenue
North Augusta, SC 29841
Phone: (803) 279-7799
Fax: (803) 279-3848
www.MandA-inc.com

12 January 2021

**State of Florida- Metal Building Component Product Approval
Engineering Evaluation Report
M&A Project No. 20300S**

Prepared By: Wayne S. Moore, P.E.
FL PE No. 57170
M&A COA No. 8966

Manufacturer: Steel Buildings and Structures, Inc.
820 Reeves Drive
Mount Airy, NC 27030

Product: **Dutch Lap Metal Wall Panel**

Product Description: Low and high wind rated wall panels.

FL Product Code Approval No.: **FL27975**

Code Compliance Statement:

Moore and Associates Engineering and Consulting, Inc. (M&A) has reviewed the plans, calculations and testing information that applies to Florida Product Approval #FL27975 under the 2020 Florida Building Code, 7th Edition and finds them in compliance.

Certificate of Independence:

Wayne S. Moore, P.E. and M&A does not have, nor does it intend to acquire or will it acquire, a financial interest the company manufacturing or distributing the product or products being tested. Wayne S. Moore, P.E. is not employed by nor is M&A owned, operated or controlled by the company manufacturing or distributing the product or products being tested. Wayne S. Moore, P.E. and other M&A staff who are licensed Professional Engineers registered in the State of Florida who perform technical evaluations do not have, nor will they acquire, a financial interest in the company manufacturing or distributing the product or products for which test reports are being issued. Wayne S. Moore, P.E. and other M&A staff who are licensed Professional Engineers registered in the State of Florida who perform technical evaluations do not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product or products.



**National Society of
Professional Engineers®**

Supporting Documents:

Calculations: Structural calculations dated 11 January 2021 performed by John Smith, E.I.T. and checked by Wayne S. Moore, P.E.
Drawings: Drawings SK-1 and SK-8 signed/sealed by Wayne S. Moore, P.E.
Testing: ATLNC #0514.01-18 test report dated 06/12/2018 and signed/sealed by David Johnson, P.E.

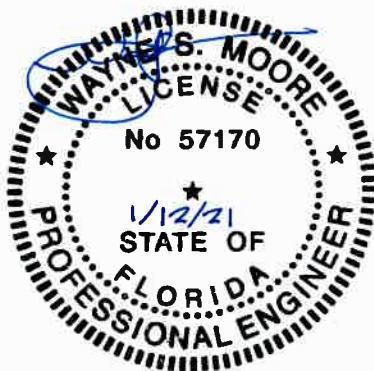
Limitations and Conditions of Use:

1. Structural calculations were performed in accordance with the 2020 FBC, 7th Edition and compared to test results performed under previous FBC given that testing of panel was performed to maximum deflection and that manufacturer utilizes same panel, supports and attachment fasteners.
2. Maximum allowable design pressure shall be as indicated on plans for each configuration.
3. This product is for use outside of the High Velocity Hurricane Zone (HVHZ).
4. This product shall be minimum 29 gauge thick galvalume coated steel with minimum yield stress of 80 ksi.
5. Panel material shall comply with 2020 FBC, 7th Edition Sections 1405.2, 1405.11 and 1405.17.
6. All supporting structural members shall be capable of supporting superimposed loads applied to this product.
7. Fasteners must consist of minimum 12-14 x 3/4" self-drilling fasteners (SDFs) with control seal washers.
8. Analysis/design was performed assuming a maximum mean roof height of 20'-0" and a roof slope of 3:12 (14 degrees) or less.
9. Product shall be installed into substrates shown on installation drawings and shall not exceed spacing limitations.
10. Site conditions that deviate from calculation, drawing and/or testing limitation noted shall require further analysis by a licensed Professional Engineer registered in the State of Florida.

Quality Assurance:

The manufacturer has demonstrated compliance of proper quality assurance/quality control (QA/QC) in accordance with the Florida Administrative Code Rule 61G20-3.005. Manufacturer's QA/QC plan and practices have been audited by an approved quality assurance entity (Subsection 3).

Signature/Seal:





MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING

1009 East Ave
North Augusta, SC 29841
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Structural Analysis/Design Calculations Project Data Sheet

Client:	SBSI
Client Project/ PO Number:	
Project Name:	SBSI - Keystone FPC (FL27975.1)
Project Location:	
Subject:	Design
Date:	1/12/2021
M&A Project Number:	20300S

	Engineer	Checked By	Approved By
Name:	John Smith		
Date:	1/12/2021		

Project:	The purpose of the above calculations is to find design wind pressures for a 15'x10' section of 29GA galvalume Dutch Lap Metal Wall Panels for Risk Category I and Exposure B for 105-140mph (Low) and 141-170mph (High) winds.
References:	2018 International Building Code (IBC) 2020 Florida Building Code (FBC) ASCE 7-16 Mathcad 6.0



Client: SBSI
Job Name: Keystone FPC Update
Subject: Design (Exp. B)

Job No. 20300S
Rev. 0
Date: 1/12/21

Sheet No. 1
Computed By: JS
Checked By: [Signature]

Dutch Lap Wall Panel Calc Set

Design Loads:

$$space_1 := 5 \cdot ft \text{ o.c.}$$

Low Wind Spacing

$$space_2 := 4 \cdot ft \text{ o.c.}$$

High Wind Spacing

$$Ht_{roof} := \frac{width}{2} \cdot 0.25 = 1.875 \text{ ft}$$

$$mean_{rft} := 20 \text{ ft} = 20 \text{ ft}$$

$$FS := 1.5$$

Note: Test Protocol ASTM E330 requires a 50% safety factor over design load pressures.

Risk Cat. I
Exposure B

$$width := 180 \cdot in$$

$$Ht := 120 \text{ in}$$

Low Wind 140mph (Vasd=108mph) Components and Cladding Doors and Window Pressures:

$$\lambda := 0.89$$

Adjustment Factor

$$mean_{rft} = 20 \text{ ft}$$

(Based on 2018 IBC (ASCE 7-16), Pg. 362)

Wall (Wind Area = 20 square ft):

Note: Values found from interpolation using Vasd wind speeds since structure is Risk I.

$$Pw_{net30pos108} := 20.04 \text{ psf} \cdot \lambda = 17.836 \text{ psf}$$

(Based on 2018 IBC (ASCE 7-16), Pg. 352-353)

$$Pw_{net30neg108} := -26.24 \text{ psf} \cdot \lambda = -23.354 \text{ psf}$$

Note: Used Zone 5 (more conservative)



Client: SBSI
Job Name: Keystone FPC Update
Subject: Design (Exp. B)

Job No. 20300S
Rev. 0
Date: 1/12/21

Sheet No. 2
Computed By: JS
Checked By: JS

High Wind 170mph (Vasd=132mph) Components and Cladding Doors and Window Pressures:

$\lambda := 0.89$ $mean_{r,ht} = 20 \text{ ft}$ (Based on 2018 IBC (ASCE 7-16), Pg. 362)
Adjustment Factor

Wall (Wind Area = 20 square ft):

Note: Values found from interpolation using Vasd wind speeds since structure is Risk I.

$Pw_{net30pos132} := 29.94 \text{ psf} \cdot \lambda = 26.647 \text{ psf}$ (Based on 2018 IBC (ASCE 7-16), Pg. 353)

$Pw_{net30neg132} := -39.2 \text{ psf} \cdot \lambda = -34.888 \text{ psf}$

Note: Used Zone 5 to be conservative.

CHAPTER 30

WIND LOADS: COMPONENTS AND CLADDING

30.1 SCOPE

30.1.1 Building Types. This chapter applies to the determination of wind pressures on components and cladding (C&C) on buildings.

1. Part 1 is applicable to an enclosed or partially enclosed

- Low-rise building (see definition in Section 26.2); or
- Building with $h \leq 60$ ft (18.3 m).

The building has a flat roof, gable roof, multispans gable roof, hip roof, monoslope roof, stepped roof, or sawtooth roof, and the wind pressures are calculated from a wind pressure equation.

2. Part 2 is a simplified approach and is applicable to an enclosed

- Low-rise building (see definition in Section 26.2); or
- Building with $h \leq 60$ ft (18.3 m).

The building has a flat roof, gable roof, or hip roof, and the wind pressures are determined directly from a table.

3. Part 3 is applicable to an enclosed or partially enclosed

- Building with $h > 60$ ft (18.3 m).

The building has a flat roof, pitched roof, gable roof, hip roof, mansard roof, arched roof, or domed roof, and the wind pressures are calculated from a wind pressure equation.

4. Part 4 is a simplified approach and is applicable to an enclosed

- Building with $60 \text{ ft} < h \leq 160 \text{ ft}$ ($18.3 \text{ m} < h \leq 48.8 \text{ m}$).

The building has a flat roof, gable roof, hip roof, monoslope roof, or mansard roof, and the wind pressures are determined directly from a table.

5. Part 5 is applicable to an open building of all heights that has a pitched free roof, monoslope free roof, or troughed free roof.

6. Part 6 is applicable to building appurtenances such as roof overhangs, parapets, and rooftop equipment.

7. Part 7 is applicable to non-building structures – circular bins, silos and tanks; and rooftop solar panels.

- Circular Bins, Silos and Tanks: $h \leq 120$ ft (38.6 m).
- Rooftop Solar Panels: Buildings of all heights with flat roofs or Gable or Hip Roofs with roof slopes less than or equal to 7 degrees

30.1.2 Conditions. A building that has design wind loads determined in accordance with this chapter shall comply with all of the following conditions:

1. The building is a regular-shaped building as defined in Section 26.2; and
2. The building does not have response characteristics that make it subject to across-wind loading, vortex shedding, or instability caused by galloping or flutter; nor does it have a site

location for which channeling effects or buffeting in the wake of upwind obstructions warrant special consideration.

30.1.3 Limitations. The provisions of this chapter take into consideration the load magnification effect caused by gusts in resonance with along-wind vibrations of flexible buildings. The loads on buildings that do not meet the requirements of Section 30.1.2 or that have unusual shapes or response characteristics shall be determined using recognized literature documenting such wind load effects or shall use the wind tunnel procedure specified in Chapter 31.

30.1.4 Shielding. There shall be no reductions in velocity pressure caused by apparent shielding afforded by buildings and other structures or terrain features.

30.1.5 Air-Permeable Cladding. Design wind loads determined from Chapter 30 shall be used for air-permeable claddings, including modular vegetative roof assemblies, unless approved test data or recognized literature demonstrates lower loads for the type of air-permeable cladding being considered.

30.2 GENERAL REQUIREMENTS

30.2.1 Wind Load Parameters Specified in Chapter 26. The following wind load parameters are specified in Chapter 26:

- Basic wind speed, V (Section 26.5).
- Wind directionality factor, K_d (Section 26.6).
- Exposure category (Section 26.7).
- Topographic factor, K_{zt} (Section 26.8).
- Ground elevation factor, K_e (Section 26.9).
- Velocity pressure exposure coefficient, K_z or K_h (Section 26.10.1); Velocity pressure, q_z (Section 26.10.2)
- Gust-effect factor (Section 26.11).
- Enclosure classification (Section 26.12).
- Internal pressure coefficient, (GC_{pi}) (Section 26.13).

30.2.2 Minimum Design Wind Pressures. The design wind pressure for C&C of buildings shall not be less than a net pressure of 16 lb/ft^2 (0.77 kN/m^2) acting in either direction normal to the surface.

30.2.3 Tributary Areas Greater than 700 ft^2 (65 m^2). C&C elements with tributary areas greater than 700 ft^2 (65 m^2) shall be permitted to be designed using the provisions for main wind force resisting systems (MWFRS).

30.2.4 External Pressure Coefficients. Combined gust-effect factor and external pressure coefficients for C&C, (GC_p) , are given in the figures associated with this chapter. The pressure coefficient values and gust-effect factor shall not be separated.

Net Design Wind Pressure, p_{net30} , in lb/ft^2 , for Exposure B at $h = 30$ ft, $V = 95\text{--}130$ mph

	Zone	Effective Wind Area (ft²)	Basic Wind Speed (mph)													
			95		100		105		110		115				120	
Walls	4	10	16.2	-17.6	18.0	-19.5	19.8	-21.5	21.8	-23.6	23.8	-25.8	25.9	-28.1	30.4	-32.4
	4	20	15.5	-16.9	17.2	-18.7	18.9	-20.6	20.8	-22.6	22.7	-24.7	24.7	-26.9	29.0	-31.0
	4	50	14.5	-15.9	16.1	-17.6	17.8	-19.4	19.5	-21.3	21.3	-23.3	23.2	-25.4	27.2	-29.2
	4	100	13.8	-15.2	15.3	-16.8	16.9	-18.5	18.5	-20.4	20.2	-22.2	22.0	-24.2	25.9	-27.9
	5	10	16.2	-21.7	18.0	-24.1	19.8	-26.6	21.8	-29.1	23.8	-31.9	25.9	-34.7	30.4	-40.1
	5	20	15.5	-20.3	17.2	-22.5	18.9	-24.8	20.8	-27.2	22.7	-29.7	24.7	-32.4	29.0	-37.7
	5	50	14.5	-18.3	16.1	-20.3	17.8	-22.4	19.5	-24.6	21.3	-26.9	23.2	-29.3	27.2	-34.1
	5	100	13.8	-16.9	15.3	-18.7	16.9	-20.6	18.5	-22.6	20.2	-24.7	22.0	-26.9	25.9	-31.0
Flat/Hip/Gable Roof 0 to 7 Degrees	1	10	6.6	-25.9	7.3	-28.7	8.1	-31.6	8.9	-34.7	9.7	-37.9	10.5	-41.3	12.4	-48.1
	1	20	6.2	-24.2	6.9	-26.8	7.6	-29.5	8.3	-32.4	9.1	-35.4	9.9	-38.5	11.6	-45.1
	1	50	5.6	-21.9	6.3	-24.3	6.9	-26.8	7.6	-29.4	8.3	-32.1	9.0	-34.9	10.6	-41.0
	1	100	5.2	-20.2	5.8	-22.4	6.4	-24.7	7.0	-27.1	7.7	-29.6	8.3	-32.2	9.8	-37.8
	1'	10	6.6	-14.9	7.3	-16.5	8.1	-18.2	8.9	-19.9	9.7	-21.8	10.5	-23.7	12.4	-27.8
	1'	20	6.2	-14.9	6.9	-16.5	7.6	-18.2	8.3	-19.9	9.1	-21.8	9.9	-23.7	11.6	-27.8
	1'	50	5.6	-14.9	6.3	-16.5	6.9	-18.2	7.6	-19.9	8.3	-21.8	9.0	-23.7	10.6	-27.8
	1'	100	5.2	-14.9	5.8	-16.5	6.4	-18.2	7.0	-19.9	7.7	-21.8	8.3	-23.7	9.8	-27.8
	2	10	6.6	-34.1	7.3	-37.8	8.1	-41.7	8.9	-45.7	9.7	-50.0	10.5	-54.4	12.4	-63.9
	2	20	6.2	-31.9	6.9	-35.4	7.6	-39.0	8.3	-42.8	9.1	-46.8	9.9	-50.9	11.6	-59.8
	2	50	5.6	-29.0	6.3	-32.2	6.9	-35.5	7.6	-38.9	8.3	-42.5	9.0	-46.3	10.6	-54.4
	2	100	5.2	-26.8	5.8	-29.7	6.4	-32.8	7.0	-36.0	7.7	-39.3	8.3	-42.8	9.8	-50.2
	3	10	6.6	-46.5	7.3	-51.5	8.1	-56.8	8.9	-62.3	9.7	-68.1	10.5	-74.2	12.4	-87.1
	3	20	6.2	-42.1	6.9	-46.7	7.6	-51.4	8.3	-56.5	9.1	-61.7	9.9	-67.2	11.6	-78.9
	3	50	5.6	-36.3	6.3	-40.2	6.9	-44.4	7.6	-48.7	8.3	-53.2	9.0	-57.9	10.6	-68.0
	3	100	5.2	-31.9	5.8	-35.4	6.4	-39.0	7.0	-42.8	7.7	-46.8	8.3	-50.9	9.8	-59.8
Gable Roof > 7 to 20 Degrees	1	10	9.8	-30.0	10.9	-33.2	12.0	-36.6	13.2	-40.2	14.4	-44.0	15.7	-47.9	18.4	-56.2
	1	20	8.9	-30.0	9.8	-33.2	10.8	-36.6	11.9	-40.2	13.0	-44.0	14.1	-47.9	16.6	-56.2
	1	50	7.6	-18.2	8.4	-20.2	9.3	-22.3	10.2	-24.5	11.1	-26.7	12.1	-29.1	14.2	-34.2
	1	100	6.6	-9.4	7.3	-10.4	8.1	-11.4	8.9	-12.5	9.7	-13.7	10.5	-14.9	12.4	-17.5
	2e	10	9.8	-30.0	10.9	-33.2	12.0	-36.6	13.2	-40.2	14.4	-44.0	15.7	-47.9	18.4	-56.2
	2e	20	8.9	-30.0	9.8	-33.2	10.8	-36.6	11.9	-40.2	13.0	-44.0	14.1	-47.9	16.6	-56.2
	2e	50	7.6	-18.2	8.4	-20.2	9.3	-22.3	10.2	-24.5	11.1	-26.7	12.1	-29.1	14.2	-34.2
	2e	100	6.6	-9.4	7.3	-10.4	8.1	-11.4	8.9	-12.5	9.7	-13.7	10.5	-14.9	12.4	-17.5
	2n	10	9.8	-43.8	10.9	-48.5	12.0	-53.4	13.2	-58.7	14.4	-64.1	15.7	-69.8	18.4	-81.9
	2n	20	8.9	-37.8	9.8	-41.9	10.8	-46.2	11.9	-50.7	13.0	-55.4	14.1	-60.4	16.6	-70.8
	2n	50	7.6	-30.0	8.4	-33.2	9.3	-36.6	10.2	-40.2	11.1	-44.0	12.1	-47.9	14.2	-56.2
	2n	100	6.6	-24.1	7.3	-26.7	8.1	-29.4	8.9	-32.3	9.7	-35.3	10.5	-38.4	12.4	-45.1
	2r	10	9.8	-43.8	10.9	-48.5	12.0	-53.4	13.2	-58.7	14.4	-64.1	15.7	-69.8	18.4	-81.9
	2r	20	8.9	-37.8	9.8	-41.9	10.8	-46.2	11.9	-50.7	13.0	-55.4	14.1	-60.4	16.6	-70.8
	2r	50	7.6	-30.0	8.4	-33.2	9.3	-36.6	10.2	-40.2	11.1	-44.0	12.1	-47.9	14.2	-56.2
	2r	100	6.6	-24.1	7.3	-26.7	8.1	-29.4	8.9	-32.3	9.7	-35.3	10.5	-38.4	12.4	-45.1
	3e	10	9.8	-43.8	10.9	-48.5	12.0	-53.4	13.2	-58.7	14.4	-64.1	15.7	-69.8	18.4	-81.9
	3e	20	8.9	-37.8	9.8	-41.9	10.8	-46.2	11.9	-50.7	13.0	-55.4	14.1	-60.4	16.6	-70.8
	3e	50	7.6	-30.0	8.4	-33.2	9.3	-36.6	10.2	-40.2	11.1	-44.0	12.1	-47.9	14.2	-56.2
	3e	100	6.6	-24.1	7.3	-26.7	8.1	-29.4	8.9	-32.3	9.7	-35.3	10.5	-38.4	12.4	-45.1
3r	10	9.8	-52.0	10.9	-57.6	12.0	-63.5	13.2	-69.7	14.4	-76.2	15.7	-83.0	18.4	-97.4	
3r	20	8.9	-44.6	9.8	-49.4	10.8	-54.4	11.9	-59.7	13.0	-65.3	14.1	-71.1	16.6	-83.4	
3r	50	7.6	-34.7	8.4	-38.4	9.3	-42.4	10.2	-46.5	11.1	-50.8	12.1	-55.4	14.2	-65.0	
3r	100	6.6	-27.2	7.3	-30.2	8.1	-33.3	8.9	-36.5	9.7	-39.9	10.5	-43.5	12.4	-51.0	

Notes: Plus and minus signs signify pressures acting toward and away from the surfaces, respectively. For effective wind areas between those given above, the load may be interpolated; otherwise, use the load associated with the lower effective area. Gray shading indicates that the final value, including all permitted reductions, used in the design shall not be less than that required by Section 30.2.2.

Metric conversions: 1.0 ft = 0.3048 m; 1.0 ft^2 = 0.0929 m^2 ; 1.0 lb/ft^2 = 0.0479 kN/m^2 .

FIGURE 30.4-1 (Continued). Components and Cladding, Part 2 [$h \leq 60$ ft ($h \leq 18.3$ m)]: Design Wind Pressures for Enclosed Buildings—Walls and Roofs

continues

Net Design Wind Pressure, p_{net30} , in lb/ft^2 , for Exposure B at $h = 30$ ft, $V = 140\text{--}200$ mph

			Basic Wind Speed (mph)													
Zone	Effective Wind Area (ft ²)	140		150		160		170		180		190		200		
Walls	4	10	35.3	-38.2	40.5	-38.2	46.1	-50.0	52.0	-56.4	58.3	-63.2	64.9	-70.4	72.0	-78.1
	4	20	33.7	-36.7	38.7	-36.7	44.0	-47.9	49.6	-54.1	55.7	-60.6	62.0	-67.5	68.7	-74.8
	4	50	31.6	-34.6	36.2	-34.6	41.2	-45.1	46.6	-51.0	52.2	-57.1	58.1	-63.7	64.4	-70.5
	4	100	30.0	-33.0	34.4	-33.0	39.2	-43.1	44.2	-48.6	49.6	-54.5	55.2	-60.7	61.2	-67.3
	5	10	35.3	-47.2	40.5	-47.2	46.1	-61.7	52.0	-69.6	58.3	-78.0	64.9	-87.0	72.0	-96.3
	5	20	33.7	-44.0	38.7	-44.0	44.0	-57.5	49.6	-64.9	55.7	-72.8	62.0	-81.1	68.7	-89.9
	5	50	31.6	-39.8	36.2	-39.8	41.2	-52.0	46.6	-58.7	52.2	-65.8	58.1	-73.4	64.4	-81.3
	5	100	30.0	-36.7	34.4	-36.7	39.2	-47.9	44.2	-54.1	49.6	-60.6	55.2	-67.5	61.2	-74.8
Flat/Hip/Gable Roof 0 to 7 Degrees	1	10	14.3	-56.2	16.5	-56.2	18.7	-73.4	21.1	-82.8	23.7	-92.9	26.4	-103.5	29.3	-114.6
	1	20	13.4	-52.5	15.4	-52.5	17.6	-68.5	19.8	-77.4	22.2	-86.7	24.8	-96.6	27.4	-107.1
	1	50	12.3	-47.6	14.1	-47.6	16.0	-62.1	18.1	-70.1	20.3	-78.6	22.6	-87.6	25.0	-97.1
	1	100	11.4	-43.9	13.0	-43.9	14.8	-57.3	16.7	-64.7	18.8	-72.5	20.9	-80.8	23.2	-89.5
	1'	10	14.3	-32.3	16.5	-32.3	18.7	-42.1	21.1	-47.6	23.7	-53.3	26.4	-59.4	29.3	-65.9
	1'	20	13.4	-32.3	15.4	-32.3	17.6	-42.1	19.8	-47.6	22.2	-53.3	24.8	-59.4	27.4	-65.9
	1'	50	12.3	-32.3	14.1	-32.3	16.0	-42.1	18.1	-47.6	20.3	-53.3	22.6	-59.4	25.0	-65.9
	1'	100	11.4	-32.3	13.0	-32.3	14.8	-42.1	16.7	-47.6	18.8	-53.3	20.9	-59.4	23.2	-65.9
	2	10	14.3	-74.1	16.5	-74.1	18.7	-96.8	21.1	-109.3	23.7	-122.5	26.4	-136.5	29.3	-151.2
	2	20	13.4	-69.3	15.4	-69.3	17.6	-90.6	19.8	-102.2	22.2	-114.6	24.8	-127.7	27.4	-141.5
	2	50	12.3	-63.0	14.1	-63.0	16.0	-82.3	18.1	-92.9	20.3	-104.2	22.6	-116.1	25.0	-128.7
	2	100	11.4	-58.3	13.0	-58.3	14.8	-76.1	16.7	-85.9	18.8	-96.3	20.9	-107.3	23.2	-118.9
	3	10	14.3	-101.0	16.5	-101.0	18.7	-131.9	21.1	-148.9	23.7	-166.9	26.4	-186.0	29.3	-206.1
	3	20	13.4	-91.5	15.4	-91.5	17.6	-119.5	19.8	-134.9	22.2	-151.2	24.8	-168.5	27.4	-186.7
	3	50	12.3	-78.9	14.1	-78.9	16.0	-103.0	18.1	-116.3	20.3	-130.4	22.6	-145.3	25.0	-161.0
	3	100	11.4	-69.3	13.0	-69.3	14.8	-90.6	16.7	-102.2	18.8	-114.6	20.9	-127.7	23.2	-141.5
Gable Roof > 7 to 20 Degrees	1	10	21.4	-65.1	24.5	-65.1	27.9	-85.1	31.5	-96.0	35.3	-107.7	39.4	-120.0	43.6	-132.9
	1	20	19.3	-65.1	22.1	-65.1	25.2	-85.1	28.4	-96.0	31.8	-107.7	35.5	-120.0	39.3	-132.9
	1	50	16.5	-39.6	18.9	-39.6	21.5	-51.8	24.3	-58.4	27.2	-65.5	30.3	-73.0	33.6	-80.9
	1	100	14.3	-20.3	16.5	-20.3	18.7	-26.5	21.1	-30.0	23.7	-33.6	26.4	-37.4	29.3	-41.5
	2e	10	21.4	-65.1	24.5	-65.1	27.9	-85.1	31.5	-96.0	35.3	-107.7	39.4	-120.0	43.6	-132.9
	2e	20	19.3	-65.1	22.1	-65.1	25.2	-85.1	28.4	-96.0	31.8	-107.7	35.5	-120.0	39.3	-132.9
	2e	50	16.5	-39.6	18.9	-39.6	21.5	-51.8	24.3	-58.4	27.2	-65.5	30.3	-73.0	33.6	-80.9
	2e	100	14.3	-20.3	16.5	-20.3	18.7	-26.5	21.1	-30.0	23.7	-33.6	26.4	-37.4	29.3	-41.5
	2n	10	21.4	-95.0	24.5	-95.0	27.9	-124.1	31.5	-140.1	35.3	-157.1	39.4	-175.0	43.6	-193.9
	2n	20	19.3	-82.1	22.1	-82.1	25.2	-107.3	28.4	-121.1	31.8	-135.8	35.5	-151.3	39.3	-167.7
	2n	50	16.5	-65.1	18.9	-65.1	21.5	-85.1	24.3	-96.0	27.2	-107.7	30.3	-120.0	33.6	-132.9
	2n	100	14.3	-52.3	16.5	-52.3	18.7	-68.3	21.1	-77.1	23.7	-86.4	26.4	-96.3	29.3	-106.7
	2r	10	21.4	-95.0	24.5	-95.0	27.9	-124.1	31.5	-140.1	35.3	-157.1	39.4	-175.0	43.6	-193.9
	2r	20	19.3	-82.1	22.1	-82.1	25.2	-107.3	28.4	-121.1	31.8	-135.8	35.5	-151.3	39.3	-167.7
	2r	50	16.5	-65.1	18.9	-65.1	21.5	-85.1	24.3	-96.0	27.2	-107.7	30.3	-120.0	33.6	-132.9
	2r	100	14.3	-52.3	16.5	-52.3	18.7	-68.3	21.1	-77.1	23.7	-86.4	26.4	-96.3	29.3	-106.7
	3e	10	21.4	-95.0	24.5	-95.0	27.9	-124.1	31.5	-140.1	35.3	-157.1	39.4	-175.0	43.6	-193.9
	3e	20	19.3	-82.1	22.1	-82.1	25.2	-107.3	28.4	-121.1	31.8	-135.8	35.5	-151.3	39.3	-167.7
	3e	50	16.5	-65.1	18.9	-65.1	21.5	-85.1	24.3	-96.0	27.2	-107.7	30.3	-120.0	33.6	-132.9
	3e	100	14.3	-52.3	16.5	-52.3	18.7	-68.3	21.1	-77.1	23.7	-86.4	26.4	-96.3	29.3	-106.7
	3r	10	21.4	-112.9	24.5	-112.9	27.9	-147.5	31.5	-166.5	35.3	-186.7	39.4	-208.0	43.6	-230.5
	3r	20	19.3	-96.8	22.1	-96.8	25.2	-126.4	28.4	-142.7	31.8	-159.9	35.5	-178.2	39.3	-197.5
	3r	50	16.5	-75.4	18.9	-75.4	21.5	-98.4	24.3	-111.1	27.2	-124.6	30.3	-138.8	33.6	-153.8
	3r	100	14.3	-59.2	16.5	-59.2	18.7	-77.3	21.1	-87.2	23.7	-97.8	26.4	-109.0	29.3	-120.7

Notes: Plus and minus signs signify pressures acting toward and away from the surfaces, respectively. For effective wind areas between those given above, the load may be interpolated; otherwise, use the load associated with the lower effective area. Gray shading indicates that the final value, including all permitted reductions, used in the design shall not be less than that required by Section 30.2.2.
Metric conversions: 1.0 ft = 0.3048 m; 1.0 $\text{ft}^2 = 0.0929 \text{ m}^2$; 1.0 $\text{lb/ft}^2 = 0.0479 \text{ kN/m}^2$.

FIGURE 30.4-1 (Continued). Components and Cladding, Part 2 [$h \leq 60$ ft ($h \leq 18.3$ m)]: Design Wind Pressures for Enclosed Buildings—Walls and Roofs

continues

Net Design Wind Pressure for Roof Overhang, p_{net30} , in lb/ft^2 , for Exposure B at $h = 30 \text{ ft}$, $V = 95\text{--}200 \text{ mph}$

Zone	Effective Wind Area (ft^2)	Wind Speed (mph)												
		95	100	105	110	115	120	130	140	150	160	170	180	190
Hip Roof > 27 to 45 Degrees	1	10	-31.6	-35.1	-38.7	-42.4	-46.4	-50.5	-59.3	-68.7	-78.9	-89.8	-101.3	-113.6
	1	20	-29.1	-32.2	-35.5	-39.0	-42.6	-46.4	-54.5	-63.2	-72.5	-82.5	-93.2	-104.5
	1	50	-25.7	-28.5	-31.4	-34.5	-37.7	-41.1	-48.2	-55.9	-64.1	-73.0	-82.4	-92.4
	1	100	-23.2	-25.7	-28.3	-31.1	-34.0	-37.0	-43.4	-50.4	-57.8	-65.8	-74.2	-83.2
	2e	10	-38.1	-42.3	-46.6	-51.1	-55.9	-60.9	-71.4	-82.8	-95.1	-108.2	-122.1	-136.9
	2e	20	-31.6	-35.0	-38.6	-42.3	-46.3	-50.4	-59.1	-68.6	-78.7	-89.6	-101.1	-113.4
	2e	50	-22.9	-25.4	-28.0	-30.7	-33.6	-36.6	-42.9	-49.8	-57.1	-65.0	-73.4	-82.3
	2e	100	-22.0	-24.4	-26.9	-29.5	-32.3	-35.1	-41.2	-47.8	-54.9	-62.4	-70.5	-79.0
	2r	10	-46.1	-51.1	-56.3	-61.8	-67.5	-73.5	-86.3	-100.1	-114.9	-130.7	-147.6	-165.5
	2r	20	-39.7	-44.0	-48.5	-53.2	-58.1	-63.3	-74.3	-86.2	-98.9	-112.5	-127.0	-142.4
	2r	50	-31.2	-34.6	-38.1	-41.8	-45.7	-49.8	-58.4	-67.7	-77.7	-88.5	-99.9	-112.0
	2r	100	-24.8	-27.4	-30.3	-33.2	-36.3	-39.5	-46.4	-53.8	-61.7	-70.2	-79.3	-88.9
	3	10	-45.2	-50.1	-55.3	-60.6	-66.3	-72.2	-84.7	-98.2	-112.8	-128.3	-144.8	-162.4
	3	20	-36.4	-40.3	-44.5	-48.8	-53.4	-58.1	-68.2	-79.1	-90.8	-103.3	-116.6	-130.7
	3	50	-24.8	-27.4	-30.3	-33.2	-36.3	-39.5	-46.4	-53.8	-61.7	-70.2	-79.3	-88.9
	3	100	-24.8	-27.4	-30.3	-33.2	-36.3	-39.5	-46.4	-53.8	-61.7	-70.2	-79.3	-88.9

Note: Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.

Metric conversions: $1.0 \text{ ft} = 0.3048 \text{ m}$; $1.0 \text{ ft}^2 = 0.0929 \text{ m}^2$; $1.0 \text{ lb}/\text{ft}^2 = 0.0479 \text{ kN}/\text{m}^2$.

Adjustment Factor for Building Height and Exposure, λ

Mean Roof Height (ft)	Exposure		
	B	C	D
15	0.82	1.21	1.47
20	0.89	1.29	1.55
30	1.00	1.40	1.66
35	1.05	1.45	1.70
40	1.09	1.49	1.74
45	1.12	1.53	1.78
50	1.16	1.56	1.81
55	1.19	1.59	1.84
60	1.22	1.62	1.87

Note: Metric conversions: $1.0 \text{ ft} = 0.3048 \text{ m}$; $1.0 \text{ ft}^2 = 0.0929 \text{ m}^2$; $1.0 \text{ lb}/\text{ft}^2 = 0.0479 \text{ kN}/\text{m}^2$.

FIGURE 30.4-1 (Continued). Components and Cladding, Part 2 [$h \leq 60 \text{ ft}$ ($h \leq 18.3 \text{ m}$): Design Wind Pressures for Enclosed Buildings—Walls and Roofs]

Table 30.5-1 Steps to Determine C&C Wind Loads for Enclosed or Partially Enclosed Building with $h > 60 \text{ ft}$ ($h > 18.3 \text{ m}$)

- Step 1:** Determine risk category; see Table 1.5-1.
- Step 2:** Determine the basic wind speed, V , for applicable risk category; see Figs. 26.5-1 and 26.5-2.
- Step 3:** Determine wind load parameters:
- Wind directionality factor, K_d ; see Section 26.6 and Table 26.6-1.
 - Exposure category B, C, or D; see Section 26.7.
 - Topographic factor, K_{zt} ; see Section 26.8 and Fig. 26.8-1.
 - Ground elevation factor, K_e ; see Section 26.9 and Table 26.9-1.
 - Enclosure classification; see Section 26.12.
 - Internal pressure coefficient, (GC_{pi}) ; see Section 26.13 and Table 26.13-1.
- Step 4:** Determine velocity pressure exposure coefficient, K_z or K_h ; see Table 26.10-1.
- Step 5:** Determine velocity pressure, q , Eq. (26.10-1).
- Step 6:** Determine external pressure coefficient, (GC_{pe}) :
- Walls and flat roofs ($\theta < 10^\circ$), see Fig. 30.5-1
 - Gable and hip roofs, see Fig. 30.3-2 per Note 6 of Fig. 30.5-1
 - Arched roofs, see Fig. 27.3-3, Note 4
 - Domed roofs, see Fig. 30.3-7
- Step 7:** Calculate wind pressure, p , Eq. (30.5-1).



American Test Lab, Inc
1122 Calvert Road Brevard, NC 28712
828-884-3700
atli@comporium.net atlnc.com

ATLNC 0514.01-18

Report Date: 06/12/18

Dade Certification # 18-0213.12
FBC Organizational # TST 1555
IAS Certification # TL-423

Test Dates: 05/14/18 – 05/15/18

Test Requested By: Steel Building and Structures Inc.
820 Reeves Drive
Mount Airy, NC 27030
Phone 877-272-8276, Fax 336-551-3449

Test Standard: TAS 202, ASTM E 330-02

Test Conditions: 65 - 75 degrees F

Description of product tested:

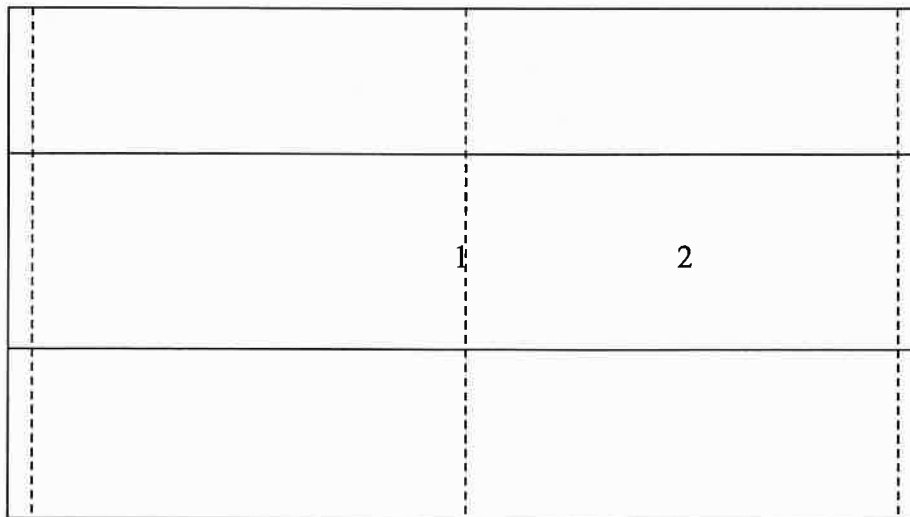
Specimens A, B: 29 gauge Galvalume Dutch Lap Metal Wall Panels as shown in Steel Building and Structures drawings SK-1, and SK-8. Panels attached to 2-1/2" x 2-1/2" x 14 ga. post with 12-14 x 3/4" self drilling screws at 6" oc.

Design Pressures: Specimen A: 32.2 psf, -31.2 psf
Specimen B: +37.4 psf, -35.9 psf

Configuration: Specimen A: (2) 5' post spans, 3 panels high
Specimen B: (2) 4' post spans, 3 panels high

Overall Size: Specimens A, B: 137" x 108"

Test Specimens: Indicator Locations



----- Tube Posts

Specimen A

STATIC AIR PRESSURE TAS 202, ASTM E 330-02

Design Loads +32.2 psf, -31.2 psf

Range of tests

Positive loads

½ Test

Design

Test

Time Seconds	Load psf	Center Tube		Panel Center	
		Max.	Perm.	Max.	Perm.
30	24.3				
30	32.2	1.01"		1.83"	
30	48.6		.20"		.29"

Range of tests

Negative loads

½ Test

Design

Test

Time Seconds	Load psf	Center Tube		Panel Center	
		Max.	Perm.	Max.	Perm.
30	23.4				
30	31.2	1.06"		2.01"	
30	46.8		.25"		.29"

Specimen B**STATIC AIR PRESSURE**
TAS 202, ASTM E 330-02**Design Loads** +37.4 psf, -35.9 psf

Range of tests

Positive loads

½ Test

Design

Test

Time Seconds	Load psf	Center Tube		Panel Center	
		Max.	Perm.	Max.	Perm.
30	28.1				
30	37.4	.84		1.02"	
30	56.1		.08"		.06"

Range of tests

Negative loads

½ Test

Design

Test

Time Seconds	Load psf	Center Tube		Panel Center	
		Max.	Perm.	Max.	Perm.
30	27.0				
30	35.9	.87"		.99"	
30	53.9		.27"		.17"

Note: 2 mil polyethylene film was used for the Static Air Pressure Test. It is the opinion of the undersigned that it had no influence on the results of the test.

Technician: Keith Owen

Observers-

Keith Owen / ATL
Sam Poplin, Keith Owen Jr. / ATL
Ashley Poplin / ATL
David Johnson P.E.

Keith Owen, Lab Director

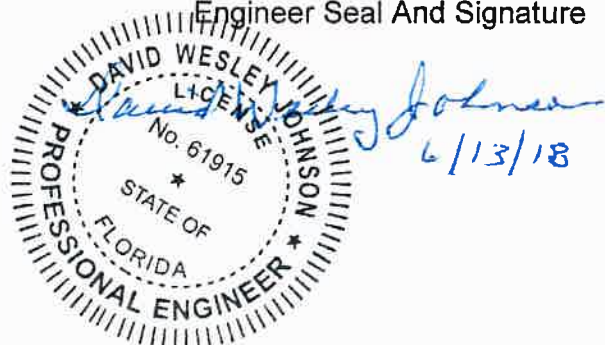
American Test Lab, Inc.

Keith Owen
6/13/18

All Tests Witnessed and Certified by:

David Johnson P.E.
1122 Calvert Rd.
Brevard, NC
FL P.E. # 61915

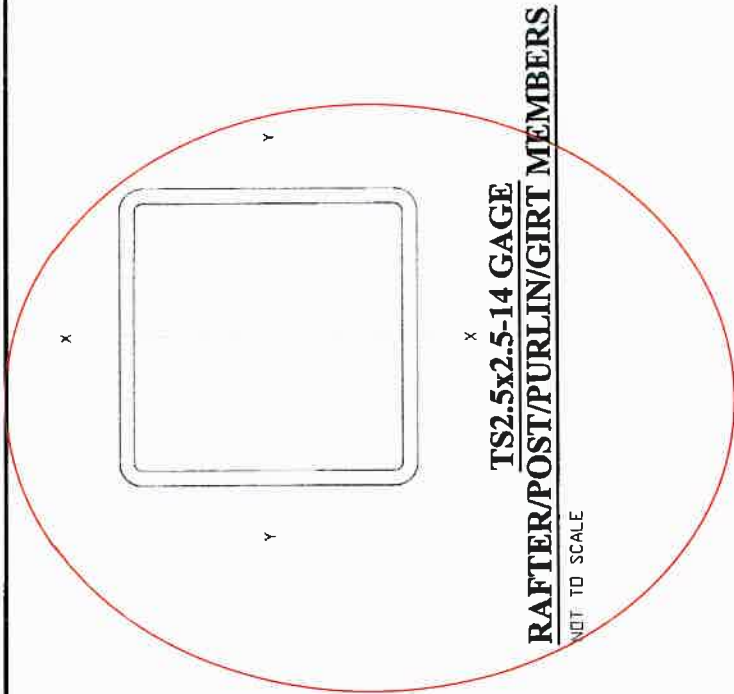
Engineer Seal And Signature



Certificate of Independence: The witnessing engineer has no equity/ownership interest in American Test Lab of North Carolina, Carolina Carports, Inc. or their parts vendors. Witnessing engineer is in complete compliance of Florida Statue 9B-72, Section 72.110.

Disclaimer

ATL and its staff have no equity/ownership interest in any product tested or installed. This test report was prepared by American Test Lab, North (ATL) for the exclusive use of the above named client; it does not constitute certification of this product. The results are for that particular specimen tested and does not imply the quality of similar or identical products manufactured or installed from specifications identical to the tested product. ATL is a testing lab and assumes that all information provided by the client is accurate and does not guarantee or warranty any product tested or installed. This report may not be reproduced except in full, and only under expressed permission from American Test Lab or Steel Building and Structures Inc. Reproduced reports in hard copy must be labeled "Copy".



**TS2.5x2.5-14 GAGE
RAFTER/POST/PURLIN/GIRT MEMBERS**

NOT TO SCALE

AMERICAN TEST LAB NORTH
DATE 06/12/18
REPORT NO. ATLNC 0514.01-18

Heith Owen
ATL INSPECTOR

PROPERTIES

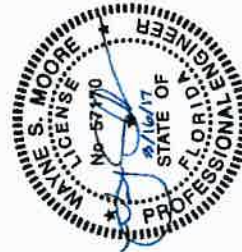
AREA = 0.727 IN.²
S_x = 0.570 IN.³
S_y = 0.570 IN.³
I_x = 0.713 IN.⁴
I_y = 0.713 IN.⁴
r_x = 0.990 IN.
r_y = 0.990 IN.

APPLICATION:

ALL 30'-0", 40'-0", 50'-0" AND
60'-0" WIDE STRUCTURES

CALCULATED COIL WIDTH: 381" @ t = 0.052"
CUSTOMER SPECIFIED WIDTH 4.00' @ t = 0.052"
METAL THICKNESS: 0.052"
MATERIAL GRADE: 50-80 KSI

TOLERANCE STANDARDS FOR THICKEST METAL:
*ACCUMULATION --- (+) DR -> 1/16 IN
DEPTH --- (+) DR -> 1/16 IN
RADIUS --- (+) DR -> 1/32 IN
ANGLES --- (+) DR -> 2 DEGREES
CAMBER --- (+) DR -> 1/8 IN IN 10 FT
SKI --- (+) DR -> 1/8 IN IN 10 FT
DIVE --- (+) DR -> 1/8 IN IN 10 FT
*NET VARIATION FOR COMBINED DIMENSIONS



DATE: 3-14-17	DRAWN BY: JRS	CHECKED BY: PDM	This document is the property of Moore and Associates, Inc. The unauthorized reproduction, copying, or otherwise use of this document is strictly prohibited and any infringement thereupon may be subject to legal action.
	REV. 0	SCALE: AS NOTED	
SHEET NO. SK-1	MOORE AND ASSOCIATES ENGINEERING AND CONSULTING 1009 Coal Avenue North Augusta, South Carolina 29841 (803) 279-7799 / FAX (803) 279-3648 www.moore-inc.com		
REV. 0	BY: CK	APVD:	NO. DATE 0 3/16/17 ISSUED FOR PRODUCT TESTING/APPROVAL JRS PDM VSM

GENERAL NOTES

- 1 DESIGN WAS DONE IN ACCORDANCE WITH THE 2014 FLORIDA BUILDING CODE, 5TH EDITION
- 2 DESIGN LOADS ARE AS FOLLOWS
 - a) DEAD LOAD = 15 PSF
 - b) LIVE LOAD = 12 PSF
- 3 HIGH ULTIMATE WIND SPEED 141 TO 170 MPH (MINIMAL WIND SPEED 109 TO 132 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 40 FEET.
- 4 WIND PRESSURES ARE BASED ON ALLOWABLE STRENGTH DESIGN (ASD)
- 5 RISK CATEGORY I
- 6 WIND EXPOSURE CATEGORY B
7. AVERAGE FASTENER SPACING ON CENTERS ALONG PLISTS AND GIRTS (INTERIOR OR END) = 6 INCHES
- B FASTENERS CONSIST OF 1/4"-14x3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS. AND ROOF SLOPES OF 12° OR LESS. PITCH SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY

AMERICAN TEST LAB NORTH
DATE 06/12/18
REPORT NO. ATLNC 0514.01-18

Heath Owen
ATL INSPECTOR

36.00' CLEARANCE

1500 (TYP.)
3000 (TYP.)
6000 (TYP.)

0.630

0.630

DUTCH LAP PANEL PROFILE WALL - HIGH WIND SPEED

NOT TO SCALE



NOTE:
1. ALL INSIDE BEND RADII ARE 0.062"

POSITIVE WALL PRESSURE: 27.3 PSF
NEGATIVE WALL PRESSURE: -35.5 PSF

29 GAGE MATERIAL
EMBOSS DEPTH
DESIGN THICKNESS
APPROX. COIL WIDTH
GRADE OF MATERIAL

0.014"
0.008"
0.0135"
40-7/8" @ t = .014"
80 KSI MIN

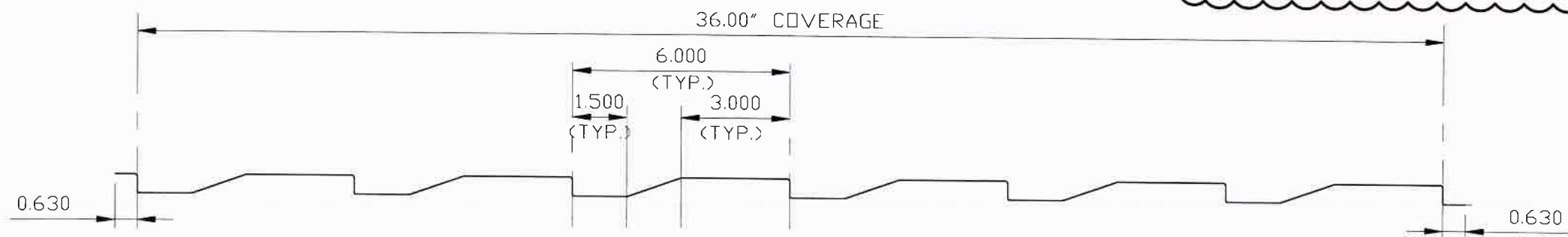
TOLERANCE STANDARDS FOR THICKEST METAL:

*ACCUMULATION	+	OR	-	1/16 IN
DEPTH	+	OR	-	1/32 IN
RADIUS	+	OR	-	1/32 IN
ANGLES	+	OR	-	2 DEGREES
CAMBER	+	OR	-	1/8 IN IN 10 FT
SKI	+	OR	-	1/8 IN IN 10 FT
DIVE	+	OR	-	1/8 IN IN 10 FT
*NET VARIATION FOR COMBINED DIMENSIONS				

STEEL BUILDINGS AND STRUCTURES, INC. DUTCH LAP PANEL WALL HIGH WIND SPEED		REV. 0 DATE: 3-14-17
SCALE: AS NOTED		DRAWN BY: JRS
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING  This document is the property of Moore and Associates, Inc. The unauthorized reproduction, copying, or otherwise use of this document is strictly prohibited and any infringement thereon may be subject to legal action.		CHECKED BY: PMH
MOORE AND ASSOCIATES 1009 East Avenue North Augusta, South Carolina 29841 (803) 279-7799 / FAX (803) 279-3848 www.Moore-Inc.com		
NO. 0 DATE 3/16/17 ISSUED FOR PRODUCT TESTING/APPROVAL	REVISION BY CK APVD. WSH	

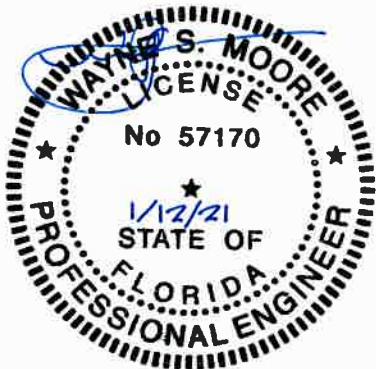
GENERAL NOTES

1. DESIGN WAS DONE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE, 7TH EDITION.
2. DESIGN LOADS ARE AS FOLLOWS:
- A) DEAD LOAD = 1.5 PSF
 - B) LIVE LOAD = 12 PSF
3. LOW ULTIMATE WIND SPEED 105 TO 140 MPH (NOMINAL WIND SPEED 81 TO 108 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 5.0 FEET.
4. WIND PRESSURES ARE BASED ON ALLOWABLE STRENGTH DESIGN (ASD).
5. RISK CATEGORY I.
6. WIND EXPOSURE CATEGORY B.
7. AVERAGE FASTENER SPACING ON-CENTERS ALONG POSTS AND GIRTS (INTERIOR OR END) = 6 INCHES.
8. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.



DUTCH LAP PANEL PROFILE
WALL - LOW WIND SPEED

NOT TO SCALE



29 GAGE
MATERIAL: 0.014"
EMBOSS DEPTH: 0.008"
DESIGN THICKNESS: 0.0135"
APPROX. COIL WIDTH: 40-7/8" @ t = .014"
GRADE OF MATERIAL: 80 KSI MIN.

TOLERANCE STANDARDS FOR THICKEST METAL:

*ACCUMULATION	---	(+ OR -)	1/16 IN
DEPTH	-----	(+ OR -)	1/32 IN
RADII	-----	(+ OR -)	1/32 IN
ANGLES	-----	(+ OR -)	2 DEGREES
CAMBER	-----	(+ OR -)	1/8 IN IN 10 FT
SKI	-----	(+ OR -)	1/8 IN IN 10 FT
DIVE	-----	(+ OR -)	1/8 IN IN 10 FT
*NET VARIATION FOR COMBINED DIMENSIONS			

NOTE:

1. ALL INSIDE BEND RADII ARE 0.062".

POSITIVE WALL PRESSURE: 17.8 PSF
NEGATIVE WALL PRESSURE: -23.4 PSF

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

1009 East Avenue
North Augusta, South Carolina 29841
(803) 279-7799 / FAX (803) 279-3848
www.MooreA-Inc.com



MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING

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STEEL BUILDINGS AND
STRUCTURES, INC.

DUTCH LAP PANEL
WALL
LOW WIND SPEED

SHEET NO.
SK-7

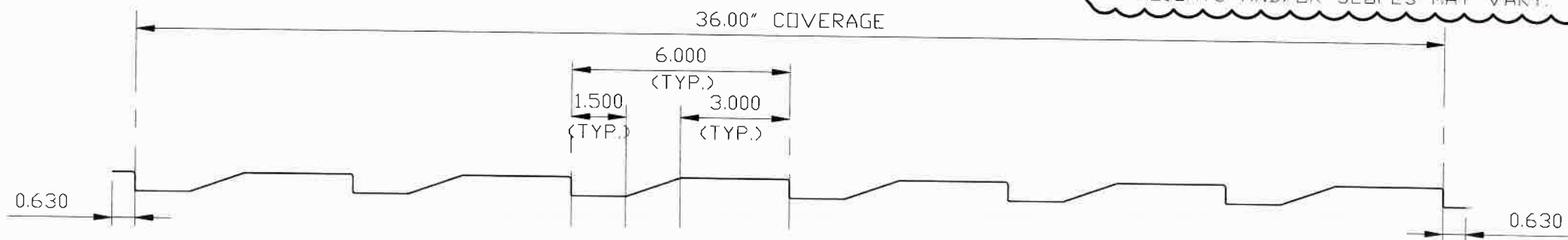
REV.	SCALE/AS NOTED	M&A JOB NO. 16192S	CHECKED BY: PDH
0			
1			

GENERAL NOTES

1. DESIGN WAS DONE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE, 7TH EDITION.
2. DESIGN LOADS ARE AS FOLLOWS:

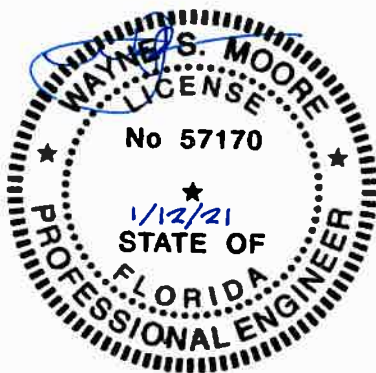
A) DEAD LOAD = 1.5 PSF

B) LIVE LOAD = 12 PSF
3. HIGH ULTIMATE WIND SPEED 141 TO 170 MPH (NOMINAL WIND SPEED 109 TO 132 MPH); MAXIMUM RAFTER/POST AND END POST SPACING = 4.0 FEET.
4. WIND PRESSURES ARE BASED ON ALLOWABLE STRENGTH DESIGN (ASD).
5. RISK CATEGORY I.
6. WIND EXPOSURE CATEGORY B.
7. AVERAGE FASTENER SPACING ON-CENTERS ALONG POSTS AND GIRTS (INTERIOR OR END) = 6 INCHES.
8. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.



DUTCH LAP PANEL PROFILE WALL - HIGH WIND SPEED

NOT TO SCALE



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MATERIAL: 0.014"
EMBOSS DEPTH: 0.008"
DESIGN THICKNESS: 0.0135"
APPROX. COIL WIDTH: 40-7/8" @ t = .014"
GRADE OF MATERIAL: 80 KSI MIN.

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CAMBER --- (+ OR -) 1/8 IN IN 10 FT
SKI --- (+ OR -) 1/8 IN IN 10 FT
DIVE --- (+ OR -) 1/8 IN IN 10 FT
*NET VARIATION FOR COMBINED DIMENSIONS

NOTE:

1. ALL INSIDE BEND RADII ARE 0.062".

POSITIVE WALL PRESSURE:
NEGATIVE WALL PRESSURE:

26.6 PSF
-34.9 PSF

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STEEL BUILDINGS AND STRUCTURES, INC.

DUTCH LAP PANEL
WALL
HIGH WIND SPEED

SHEET NO.
SK-8

REV.	DATE	DRAWN BY: JRS	CHECKED BY: PDH	M&A JOB NO. 16192S
0	3-14-17			

NO.	DATE	REVISION	BY	CK.	APVD.
0	3/16/17	ISSUED FOR PRODUCT TESTING/APPROVAL	JRS	PDH	VSM
1	1/12/21	REVISED FOR 2020 FBC, 7TH EDITION	JS	JB	VSM