# WIND ANALYSIS -- 120MPH Wind Velocity or as interpolated

### 2023 8th edition Florida Building Code

Calculations as per Section 1609ASCE 7-22

Prepared By
James Zaleski PE 51544

Prepared by (print legibly): <u>James Zaleski</u>
Design Professional FL Lic. #: 51544

Importance factor: \_\_\_1.0 \_\_\_ Building Category: \_\_ENCLOSED
Wind Exposure (s): B\_\_\_\_ Risk Category II
Internal Pressure Coefficient +/-.18

TJ PIZZAGALLI

245 SW COLONY GLEN
LAKE CITY, FL 32024

Mean Roof Height 16.47 End Zone Length 6.0 feet

MAX OVERHANG 1.5 FT MAX

MANUFACTURED TRUSSES TO BE USED

Roof Slope = -4/12 - 7/12

TRUSS SPAN/LOCATION HURRICANE CLIPS

HC MODEL-1 Simpson H-10A IN ALL AREAS

ROOF SHEATHING MATERIAL -7/16" OSB

NAILING - 8D RING SHANK

NAILING PATTERN

EDGES-

6" O.C FIELD – 6" O.C

4" O.C FIRST ROW AT ALL EAVES

Plan May Be Mirrored at Contractors Option

# James A Zaleski

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Job Address:

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Wall Exterior Panel – Sheath with 7/16" OSB

– 2 X 4 STUDS AT 16" O.C. UP TO 10 FEET

- 2 X 4 STUDS AT 12" O.C. UP TO 12 FEET

- 2 X 6 STUDS AT 16" O.C. UP TO 16 FEET

ALL WALLS OVER 10 FEET TO HAVE 2 ROWS OF BLOCKING

## **SEE ATTACHED DETAILS**

POSTS USE SIMPSON ABU BASE WITH 2-LSTA24 STRAPS AT TOP AND 2 SIMPSON SDWC 15600 SCREWS FROM POST TO BEAM

MIN NAIL PENETRATION – 1-1/2"

Nail Type 8D

#### Edge Nail Spacing 4" o.c

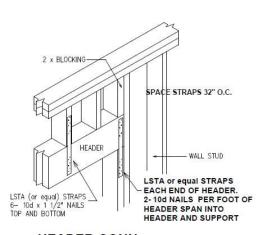
#### **Intermediate Nail Spacing 8" o.c**

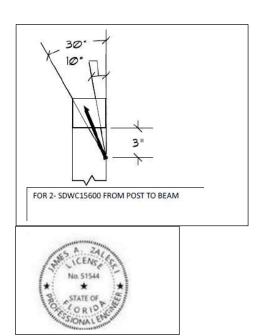
SIMPSON SDWC15600 SCREWS AT THE TOP OF STUDS AND SIMPSON SDWC15450 SCREWS AT THE BOTTOM OF STUDS AT ALL CORNERS AND 48" O.C

SIMPSON SPH STRAPS MAY BE USED IN LIEU OF SCREWS

BEAM TO WALL/CORNER CONNECTION - POCKET AND NAIL INTO WAIL W/ (10 ) 16 PENNY NAILS, STRAP W/ SIMPSON H7Z.

10" 'J' BOLT MINIMUM 48" O.C. w/ 3 GA. x 3" x 3" BEARING PLATE





#### HEADER CONN.

James Zaleski PE #51544 2305 Haverhill Rd Tall Fl 32312 ph 850-766-7778

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USE (3) 2x HEADERS WITH 2x6 WALLS AND (2) 2x HEADERS WITH 2x4 WALLS. VERIFY HEADER SIZE W/ OPENING FRAMING & HEADER SCHEDULE ON THIS SHEET. ASSEMBLE ALL HEADERS WITH 16D NAILS STAGGERED 6" O.C. W/ 2" EDGE DISTANCE ALL HEADERS SHALL BE 2x12 U.O.N.

ATTACH ALL LVL BEAMS W/ SIMPSON SDWS 0.220 SCREWS (OR EQUAL) STAGGERED W/ 1-1/2" MIN. EDGE DISTANCE.

- (2) ROWS @ 24" O.C. < 10" LVL
- (3) ROWS @ 24" O.C. > 10" LVL
- 2 & 3 PLY 3-1/2" LONG STAGGER INSTALLED FROM BOTH OUTER PLIES
- 4 PLY 6" LONG STAGGER INSTALLED FROM BOTH OUTER PLIES FOR WINDOWS PLACED WITHIN 3'-0" OF EXTERIOR CORNERS, WALL STUDS SHALL BE SPACED @ 8" O.C.

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2025.04.28
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COMPONENTS AND CLADDING PRESSURES: (WORST CASE LOADS MAY BE USED)

COMPONENTS AND CLADDING

ZONE per

# **SEE ATTACHED**

MAIN WIND FORCE RESISTING SYSTEMS (MWFRS) (WORST CASE LOADS MAY BE USED)

# **SEE ATTACHED**

All Load Bearing and Shear Walls To be Framed as per FBC
Alternative Hurricane Clips are acceptable as long as they meet the requirements shown

See Attached header schedule

PROVIDE GABLE END BRACING DETAIL, all vaulted or high ceilings shall be balloon framed to the ceiling diaphram.

#### NOTES: PLEASE READ & complete all blanks!!!!

- 1. See floor plan for wall bracing locations or circle 100% if structural sheathing is required on <u>all</u> exterior walls, with the nailing pattern indicated above.
- **2.** There are  $\underline{X}$  interior shear walls, locate interior shear walls on plan.
- 3. Gable ends required to be sheathed with same material as shear wall? Yes or No circle one)
- **4.** Wall sheathing used in lieu of vertical straps: Nailing @ <u>N/A</u> o.c. along top & bottom plates
- 5. Provide detail for 2 story bldgs showing continuous load path between 2<sup>nd</sup> floor stud & 1<sup>st</sup> floor studs.
  6. Provide additional information for column base & column/beam connection if required for porches.
- 7. Provide calculations or documentation to substantiate method used as an attachment to this form(SEE PLANS)

#### **Instructions:**

- 1. The form should be completed & signed, sealed & dated by a Fla. licensed engineer or architect.
- 2. Since more than one methodology for determination of wind forces is permitted under Section 1609ASCE7-22, to comply with State Building Codes a space has been provided to indicate method used.
  - 3. Wind Analysis Forms submitted & permitted to be used as Master Plans will be for identical plans only, minor deviations such as door swings. Any deviation from the exterior form, opening sizes or locations will not be permitted unless noted by the design professional.

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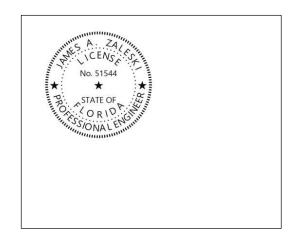
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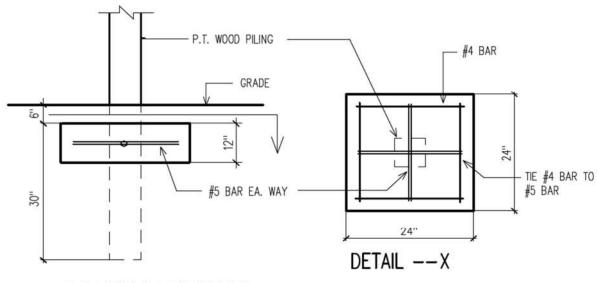
Job Address:

ALL JOIST HANGERS SHALL BE SIMPSON LU26 HANGER OR EQUAL.

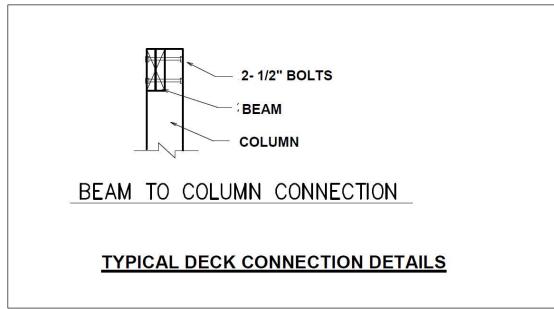
DECKING TO BE 5/4 P.T. WOOD OR BETTER USE 2- 1/4"x 2" DECK SCREWS PER JOIST OR (2- 10d x 3" RING SHANK NAILS)

ABOVE IS MINIMUM REQUIREMENTS FOR THE RESISTANCE OF WIND PRESSURES





COLUMN BASE DETAIL

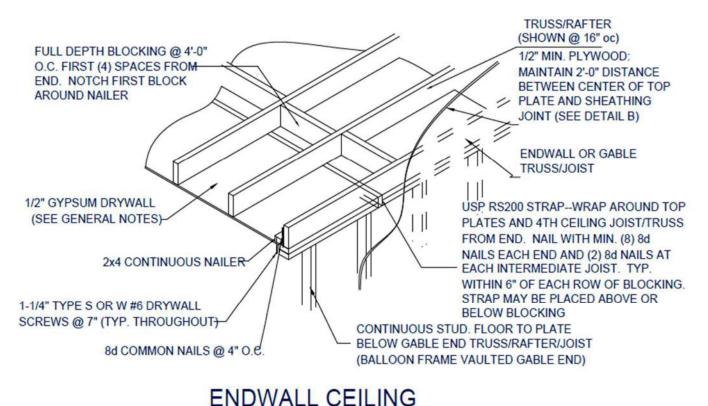


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CONNECTION

Header Table										
Span (FT.)	Header Size	(2 x) cripples per end								
0' - 4'-0"	2-2x10 w/7/16" OSB Flitch Plate	1								
4'-0" - 9'-4"	2-2x10 w/7/16" OSB Flitch Plate	2								
9'-4" - 12'-0"	2-2x10 w/7/16" OSB Flitch Plate	3								
12'-0" - 15'-4"	3 1/2" X 11 7/8" LVL (or equal)	3								

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#### MecaWind v2502

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#### Calculations Prepared by:

JAMES ZALESKI P.E 51544 2305 HAVERHILL RD TALLAHASSEE, FL, 32312 Date: Apr 28, 2025

File Location: Current Project Not Saved

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Reference Abbreviations: T: Table, F: Figure, E: Equation, §: Section
Wind Load Standard = ASCE 7-22
                                                 Basic Wind Speed
                                                                                    = 120.0 \text{ mph}
                                  = B
Exposure Classification
                                                 Risk Category
                                                                                    = II
                                  = Building
                                                                                    = ASD
Structure Type
                                                  Design Basis for Wind Pressures
Structure Type
MWFRS Analysis Method
                                 = Ch 27
                                                  C&C Analysis Method
                                                                                   = Ch 30 Pt 1
Dynamic Type of Structure
                                 = Rigid
                                                 Show Advanced Options
                                                                                   = False
Building:
Roof = Roof Type
                                  = Gabled
                                                 | Encl = Enclosure Classification = Enclosed
R_{\text{Ht}} = Ridge Height = 23.933 ft W = Building Width = 51.200 ft
                                                 Par = Parapet = None HT_{over} = Override Mean Roof Height = False RA_{over} = Override Roof Area
RA<sub>over</sub> = Override Roof Area = False
IsElev = Building is Elevated = False
```

#### Exposure Constants [T:26.11-1]:

$\alpha$ = 3-s Gust-speed exponent	=	7.500	$Z_g = Nominal Ht of Boundary Layer$	=	3280.000 ft
$\hat{a}$ = Reciprocal of $\alpha$	=	0.133	b = 3 sec gust speed factor	=	0.840
$\alpha_m$ = Mean hourly Wind-Speed Exponent	=	0.222	bm = Mean hourly Windspeed Exponent	=	0.470
<pre>c = Turbulence Intensity Factor</pre>	=	0.300	ε = Integral Length Scale Exponent	=	0.3333

#### Overhang Inputs:

Std	= Overhangs on all sides are the same	= True
OHType	= Type of Roof Wall Intersections	= Soffit
OH	= Overhang of Roof Beyond Wall	= 1.500 ft

Main Wind Force Resisting System (MWFRS) Wind Calculations per Ch 27

REVIEWED BY JAMES ZALESKI P.E.

2305 HAVEFRHILL RD

TALLAHASSEE, FL 323132

PH 850-766-7778



James A by James A Zaleski Date: 2025.04.28

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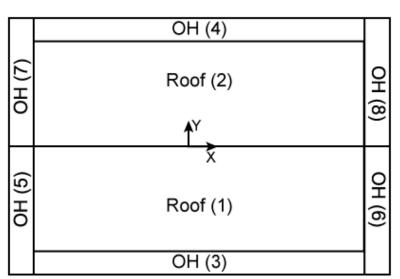
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Wind Parallel to Ridge

REVIEWED BY JAMES ZALESKI P.E. 2305 HAVEERHILL RD TALLAHASSEE, FL 323132



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# Wind Normal to Ridge

= 16.467 fth = Mean structure height  $K_{zt}$  = No Topographic Feature = 1.000  $GC_{pi}$  =  $\pm$  Internal Press Coef  $_{\text{T:26.13-1}}$  $= \pm 0.18$  $K_e = Ground Elev Factor_{T:26.10-1}$ = 1.000  $q_{in}$  = Negative Internal Pressure:  $q_h$  = 12.99 psf  $= 3,295.34 \text{ ft}^2$  $A_{roof} = Roof Area$ 

 $K_h = 2.41 \cdot (Z/Z_g)^{2/\alpha}_{T:26.10-1}$ = 0.587  $K_d$  = Directionality Factor  $_{\text{T:}26.6-1}$ = 0.85 LF = ASD Load Factor = 0.60  $q_h = .00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF_{E:26.10-1}$ = 12.99 psf = 12.99 psf  $q_{ip}$  = For +GC<sub>pi</sub> use  $q_h$ 

#### MWFRS Wind Loads [Normal to Ridge]

h = Mean Roof Height of Building = 16.4667 ft B = Building Width Normal To Wind = 50.2500 ftL/B = Ratio: L/B= 1.019 = 28.86 °  $\theta$  = Slope of Roof Cpww = Windward Wall Coefficient = 0.800 Cp<sub>SW</sub> = Side Wall Coefficient = -0.700

 $R_{Ht}$  = Ridge Height Of Roof = 23.9333 ftL = Building Width Parallel To Wind = 51.2000 ft h/L = Ratio: h/L= 0.322  $G = Gust Factor: Min(G_1, G_2)$ = 0.850  $Cp_{LW}$  = Leeward Wall Coefficient = -0.496

#### Wall Wind Pressures [Normal to Ridge]

All wind pressures include a Load Factor (LF) of 0.6

Elev	GC <sub>pi</sub>	$\mathbf{q}_{\mathrm{i}}$	Kz	Kzt	$\mathbf{q}_{\mathbf{z}}$	Windward	Leeward	Side	Total	Minimum
	-					Press	Press	Press	Press	Pressure*
ft		psf			psf	psf	psf	psf	psf	psf
9.000	+0.18	12.99	0.573	1.000	12.67	5.34	-6.64	-8.56	11.98	9.60
9.000	-0.18	12.99	0.573	1.000	12.67	9.31	-2.67	-4.58	11.98	9.60

=  $2.41 \cdot (Z/Z_g)^{2/\alpha}$ = +Internal Coef T:26.13-1  $GC_{pi}$ 

=  $For +GC_{pi}$  use  $q_h$ =  $q_h \cdot K_d \cdot G \cdot Cp_{SW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$  E:27.3-1 Side

Windward =  $q_z \cdot K_d \cdot G \cdot Cp_{WW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$  E:27.3-1 = Pressure Acting Toward Surface +Press §27.1.5 = MWFRS Min Wall Pressure = 9.60 psf

= No Topographic Feature = .00256 •  $K_z$  •  $K_{zt}$  •  $K_e$  •  $V^2$  •  $LF_{E:26.10-1}$  $q_z$ = Negative Internal Pressure: q<sub>b</sub>  $q_{in}$ Leeward =  $q_h \cdot K_d \cdot G \cdot Cp_{LW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$  E:27.3-1

Total = Windward - Leeward

-Press = Pressure Acting Away from Surface

#### Roof Wind Pressures [Normal to Ridge]

All wind pressures include a Load Factor (LF) of 0.6

All wind pressures include a hoad ractor (hr) or 0.0												
Component	Description	Location	Start	End	Θ	Basis	GCpi	$C_{pMin}$	C <sub>pMax</sub>	Pmin	$P_{\text{max}}$	Pmin
			ft	ft	۰					psf	psf	psf
Overhang	Leeward	7,8	All	All	28.86	N	0	-0.6	-0.6	-5.63	-5.63	4.80
Overhang	Windward	5,6	All	All	28.86	N	0	0.271	-0.207	2.55	-1.94	4.80
Overhang	Leeward	4	All	All	28.86	N	+0.18	-0.6	-0.6	-7.62	-7.62	4.80
Overhang	Windward	3	All	All	28.86	N	+0.18	0.271	-0.207	0.56	-3.93	4.80
Roof	Leeward	2	All	All	28.86	N	+0.18	-0.6	-0.6	-7.62	-7.62	4.80
Roof	Windward	1	All	All	28.86	N	+0.18	0.271	-0.207	0.56	-3.93	4.80
Soffit	Bottom	3	All	All	0.0	N/A	+0.18	0.8	0.8	5.52	5.52	4.80
Overhang	Leeward	4	All	All	28.86	N	-0.18	-0.6	-0.6	-3.64	-3.64	4.80

Overhang	Windward	3	All	All	28.86	N	-0.18	0.271	-0.207	4.53	0.05	4.80
Roof	Leeward	2	All	All	28.86	N	-0.18	-0.6	-0.6	-3.64	-3.64	4.80
Roof	Windward	1	All	All	28.86	N	-0.18	0.271	-0.207	4.53	0.05	4.80
Soffit	Bottom	3	All	All	0.0	N/A	-0.18	0.8	0.8	9.50	9.50	4.80

Roof Pressures based upon Ch 27:

Component = The building component for pressures = Start Dist from Windward Edge Start = Smallest Coefficient Magnitude  $C_{pMin}$ 

 $\dot{P_{min}}$  $= q_h \bullet K_d \bullet G \bullet C_{pMin} - q_{ip} \bullet K_d \bullet GC_{piE:27.3-1}$ = +Internal Coef T:26.13-1

 $GC_{pi}$ 

 $P_{min}$ = Min Press projected on vertical plane §27.1.5 §27.1.5 = MWFRS Min Wall Pressure = 9.60 psf

-Press = Pressure Acting Away from Surface Location = Reference Graphic in Output for Values

End = End Dist from Windward Edge = Largest Coefficient Magnitude  $C_{pMax}$  $P_{\max}$  $= q_h \bullet K_d \bullet G \bullet C_{pMax} - q_{in} \bullet K_d \bullet GC_{piE:27.3-1}$ 

= P=Parallel to Ridge: N=Normal to Ridge Basis

θ = Roof Slope Relative to Wind +Press = Pressure Acting Toward Surface

ullet The smaller uplift pressures due to  $C_{p \text{Min}}$  can become critical when wind is combined with roof live load or snow load; load combinations are given in ASCE 7

#### MWFRS Wind Loads [Parallel to Ridge]

h = Mean Roof Height of Building = 16.4667 ftB = Building Width Normal To Wind = 51.2000 ft L/B = Ratio: L/B0.981 = 28.86 °  $\theta$  = Slope of Roof Cpww = Windward Wall Coefficient = 0.800Cpsw = Side Wall Coefficient = -0.700

R<sub>Ht</sub> = Ridge Height Of Roof = 23.9333 ftL = Building Width Parallel To Wind = 50.2500 fth/L = Ratio: h/L= 0.328 $G = Gust Factor: Min(G_1, G_2)$ = 0.850

Cp<sub>LW</sub> = Leeward Wall Coefficient = -0.500

Wall Wind Pressures [Parallel to Ridge]

All wind pressures include a Load Factor (LF) of 0.6

#### Elev GC<sub>ni</sub> $q_z$ Windward Leeward Side Total Minimum Фi Pressure\* Press Press Press Press ft psf psf psf psf psf psf psf 1.000 9.60 23.933 +0.18 12.99 0.649 14.35 6.31 -6.68 -8.56 12.99 16.467 +0.18 12.99 0.587 1.000 12.99 5.52 -6.68 -8.56 12.20 9.60 0.573 5.34 -6.68 -8.56 9.60 9.000 +0.18 12.99 1.000 12.67 12.02 23.933 -0.18 12.99 0.649 1.000 14.35 10.28 -2.71 -4.58 12.99 9.60 9.60 -0.18 12.99 0.587 1.000 12.99 9.50 -2.71 -4.58 12.20 16.467 9.000 -0.18 12.99 0.573 9.31 -2.71 -4.58 9.60 1.000

# James Α Zaleski

DLA-945555, 7L333132 PLINSO-255-7778

ROVENED BY LAMES ZALESKI RE

= 2.41 •  $(Z/Z_g)^{2/\alpha}$  $GC_{pi}$ = +Internal Coef T:26.13-1 = For  $+GC_{pi}$  use  $q_h$ 

=  $q_h \cdot K_d \cdot G \cdot Cp_{SW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$  E:27.3-1 Side  $= q_z \cdot K_d \cdot G \cdot Cp_{WW} - q_{ip} \cdot K_d \cdot (GC_{pi+}) \quad E:27.3-1$ Windward +Press = Pressure Acting Toward Surface \$27.1.5 = MWFRS Min Wall Pressure = 9.60 psf  $K_{zt}$ = No Topographic Feature =  $.00256 \cdot K_z \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF_{E:26.10-1}$  $q_z$ = Negative Internal Pressure: qh ain.  $= q_h \cdot K_d \cdot G \cdot Cp_{LW} - q_{ip} \cdot K_d \cdot (GC_{pi+}) \quad E:27.3-1$ Leeward Total

= Windward - Leeward -Press = Pressure Acting Away from Surface

Date: 2025.04.28 09:05:52 -04'00'

by James A

Zaleski

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#### Roof Wind Pressures [Parallel to Ridge] All wind pressures include a Load Factor (LF) of 0.6

Component	Description	Location	Start	End	θ	Basis	GC <sub>pi</sub>	$C_{pMin}$	C <sub>pMax</sub>	P <sub>min</sub>	P <sub>max</sub>	P <sub>min</sub>
			ft	ft	0 0	_		2 2	0.40	psf	psf	psf
Overhang	Overhang 0 to h/2	5,7	0.000	1.500	0.0	P	0	-0.9	-0.18	-8.45	-1.69	4.80
Overhang	Overhang ≥ 2•h	6,8	51.750	53.250	0.0	P	0	-0.3	-0.18	-2.82	-1.69	4.80
Overhang Bottom	Bottom	5,7	All	All	0.0	N/A	0	0.8	0.8	7.51	7.51	4.80
Overhang	Overhang 0 to h	3,4	1.500	16.467	0.0	P	+0.18	-0.9	-0.18	-10.43	-3.68	4.80
Overhang	Overhang h to 2•h	3,4	16.467	32.933	0.0	P	+0.18	-0.5	-0.18	-6.68	-3.68	4.80
Overhang	Overhang ≥ 2•h	3,4	32.933	51.750	0.0	P	+0.18	-0.3	-0.18	-4.80	-3.68	4.80
Roof	Roof 0 to h	1,2	1.500	16.467	0.0	P	+0.18	-0.9	-0.18	-10.43	-3.68	4.80
Roof	Roof h to 2•h	1,2	16.467	32.933	0.0	P	+0.18	-0.5	-0.18	-6.68	-3.68	4.80
Roof	Roof ≥ 2•h	1,2	32.933	51.750	0.0	P	+0.18	-0.3	-0.18	-4.80	-3.68	4.80
Overhang	Overhang 0 to h	3,4	1.500	16.467	0.0	P	-0.18	-0.9	-0.18	-6.46	0.30	4.80
Overhang	Overhang h to 2•h	3,4	16.467	32.933	0.0	P	-0.18	-0.5	-0.18	-2.71	0.30	4.80
Overhang	Overhang ≥ 2•h	3,4	32.933	51.750	0.0	P	-0.18	-0.3	-0.18	-0.83	0.30	4.80
Roof	Roof 0 to h	1,2	1.500	16.467	0.0	P	-0.18	-0.9	-0.18	-6.46	0.30	4.80
Roof	Roof h to 2•h	1,2	16.467	32.933	0.0	P	-0.18	-0.5	-0.18	-2.71	0.30	4.80
Roof	Roof ≥ 2•h	1,2	32.933	51.750	0.0	P	-0.18	-0.3	-0.18	-0.83	0.30	4.80

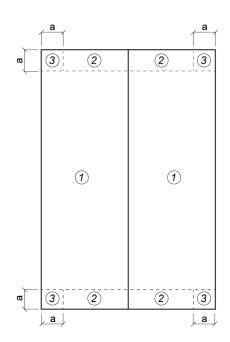
Roof Pressures based upon Ch 27:

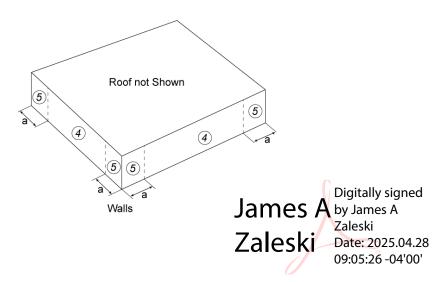
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= Reference Graphic in Output for Values Component = The building component for pressures Location = Start Dist from Windward Edge Start End = End Dist from Windward Edge = Smallest Coefficient Magnitude = Largest Coefficient Magnitude  $C_{pMin}$  $C_{pMax}$  $=q_h \cdot K_d \cdot G \cdot C_{pMax} - q_{in} \cdot K_d \cdot GC_{piE:27.3-1} \\ = P = Parallel to Ridge: N = Normal to Ridge$  $P_{min}$  $= q_h \bullet K_d \bullet G \bullet C_{pMin} - q_{ip} \bullet K_d \bullet GC_{piE:27.3-1}$  $P_{max}$ = +Internal Coef T:26.13-1  $GC_{pi}$ Basis = Min Press projected on vertical plane §27.1.5  $P_{\min}$ = Roof Slope Relative to Wind Α \$27.1.5 = MWFRS Min Wall Pressure = 9.60 psf +Press = Pressure Acting Toward Surface -Press = Pressure Acting Away from Surface

ullet The smaller uplift pressures due to  $C_{p \text{Min}}$  can become critical when wind is combined with roof live load or snow load; load combinations are given in ASCE 7

#### Components and Cladding (C&C) Wind Loads per Ch 30 Pt 1 Roof & Wall





# C&C Wind Roof & Wall Detailed per Ch 30 Pt 1 All wind pressures include a Load Factor (LF) of 0.6

Description	Zone	Width	Span	Area	1/3 Rule	Reference	GCpi	GC <sub>pd</sub>	GC <sub>pu</sub>	P <sub>down</sub>	Puplift
		ft	ft	ft²						psf	psf
Zone 1	1	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-1.80	11.93	-21.86
Zone 2	2	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-2.00	11.93	-24.07
Zone 3	3	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-2.50	11.93	-29.59
Zone 4	4	1.0000	1.0000	1.00	No	F:30.3-1	±0.18	1.00	-1.10	13.03	-14.13
Zone 5	5	1.0000	1.0000	1.00	No	F:30.3-1	±0.18	1.00	-1.40	13.03	-17.45

= Down (+) External Coefficient = Uplift (-) External Coefficient  $GC_{pd}$  $GC_{pu}$  $= q_h \cdot K_d \cdot [GC_{pd} - GC_{pi}] \quad [E:30.3-1]$  $P_{uplift}$  $= q_h \cdot K_d \cdot [GC_{pu} - GC_{pi}] \quad [E:30.3-1]$  $P_{down}$ = Pressure Acting Away from Surface +Press = Pressure Acting Toward Surface -Press = C&C Min Pressure = 9.60 psf \$30.2.2 Zone = Applicable Zone per Figure = Width of Component = Span of Component Width Span Area = Span • Width 1/3 Rule = Width limited to Span/3 = Internal Coef T:26.13-1  $GC_{pi}$ Reference = Applicable Reference from Standard

# C&C Wind Roof & Wall Overhangs Detailed per Ch 30 Pt 4 All wind pressures include a Load Factor (LF) of 0.6

Description	Zone	Width ft	Span ft	Area ft <sup>2</sup>	1/3 Rule	Reference	GC <sub>pi</sub>	GC <sub>pd</sub>	$GC_{pu}$	P <sub>down</sub> psf	P <sub>uplift</sub> psf
Zone 1_OHS	1_OHS	1.0000	1.0000	1.00	No	F:30.3-2D/F:30.3-1	±0.18	0.00	-2.80	9.60	-32.91
Zone 2_OHS	2_OHS	1.0000	1.0000	1.00	No	F:30.3-2D/F:30.3-1	±0.18	0.00	-3.00	9.60	-35.11

Zone 3 OHS 3 OHS	1.0000 1.000	1.00	No	F:30.3-2D/F:30.3-1	±0.18	0.00	-3.50	9.60	-40.63

 $GC_{pd}$ = Down (+) External Coefficient  $GC_{pu}$ =  $q_h \cdot K_d \cdot [GC_{pd} - GC_{pi}]$  E:30.7-1  $P_{uplift}$  $P_{down}$ 

= Pressure Acting Toward Surface +Press = C&C Min Pressure = 9.60 psf \$30.2.2

= Width of Component Width Area = Span • Width = Internal Coef T:26.13-1  $GC_{pi}$ 

#\_OHS = Roof Zone # on Overhang Soffit = Uplift (-) External Coefficient

 $= q_h \cdot K_d \cdot [GC_{pu} - GC_{pi}]_{E:30.7-1}$  = Pressure Acting Away from Surface-Press

Zone = Applicable Zone per Figure

Span = Span of Component 1/3 Rule = Width limited to Span/3

Reference = Applicable Reference from Standard = Soffit present so use building GCpi

#### Warnings & Notes:

Overhang GCp determined from adding applicable roof GCp on top to applicable Wall GCp on bottom

#### C&C Wind Roof & Wall Summary per Ch 30 Pt 1

Soffit

	$A = 50 \text{ ft}^2$	$A = 50 \text{ ft}^2$
psf	psf	psf
-18.54	9.60	-14.15
-21.52	9.60	-18.14
-25.76	9.60	-20.69
-13.55	11.67	-12.77
-16.27	11.67	-14.72
-28.99	9.60	-23.82
-31.97	9.60	-27.82
		-30.37
	-16.27 -28.99 -31.97	-16.27 11.67 -28.99 9.60

Zone	Reference	$\begin{array}{c} P_{max} \\ A = 100 \text{ ft}^2 \end{array}$	P <sub>min</sub> A = 100 ft <sup>2</sup>	$\begin{array}{c} P_{max} \\ A = 200 \text{ ft}^2 \end{array}$	$\begin{array}{c} P_{\min} \\ A = 200 \text{ ft}^2 \end{array}$	P <sub>max</sub> A > 500 ft <sup>2</sup>	P <sub>min</sub> A > 500 ft <sup>2</sup>
		psf	psf	psf	psf	psf	psf
1	F:30.3-2D	9.60	-10.82	9.60	-10.82	9.60	-10.82
2	F:30.3-2D	9.60	-15.58	9.60	-13.03	9.60	-13.03
3	F:30.3-2D	9.60	-16.86	9.60	-13.03	9.60	-13.03
4	F:30.3-1	11.08	-12.18	10.49	-11.60	9.72	-10.82
5	F:30.3-1	11.08	-13.55	10.49	-12.37	9.72	-10.82
1_OHS	F:30.3-2D/F:30.3-1	9.60	-19.91	9.60	-19.33	9.60	-18.55
2_OHS	F:30.3-2D/F:30.3-1	9.60	-24.68	9.60	-21.54	9.60	-20.76
3_OHS	F:30.3-2D/F:30.3-1	9.60	-25.95	9.60	-21.54	9.60	-20.76

= Maximum Pressure Area = Span • Width = Span of Component Span

\$30.2.2 = C&C Min Pressure = 9.60 psf

= Minimum Pressure Width = Width of Component

= Applicable Reference from Standard Reference = Interpolate for Areas between columns Interpolate

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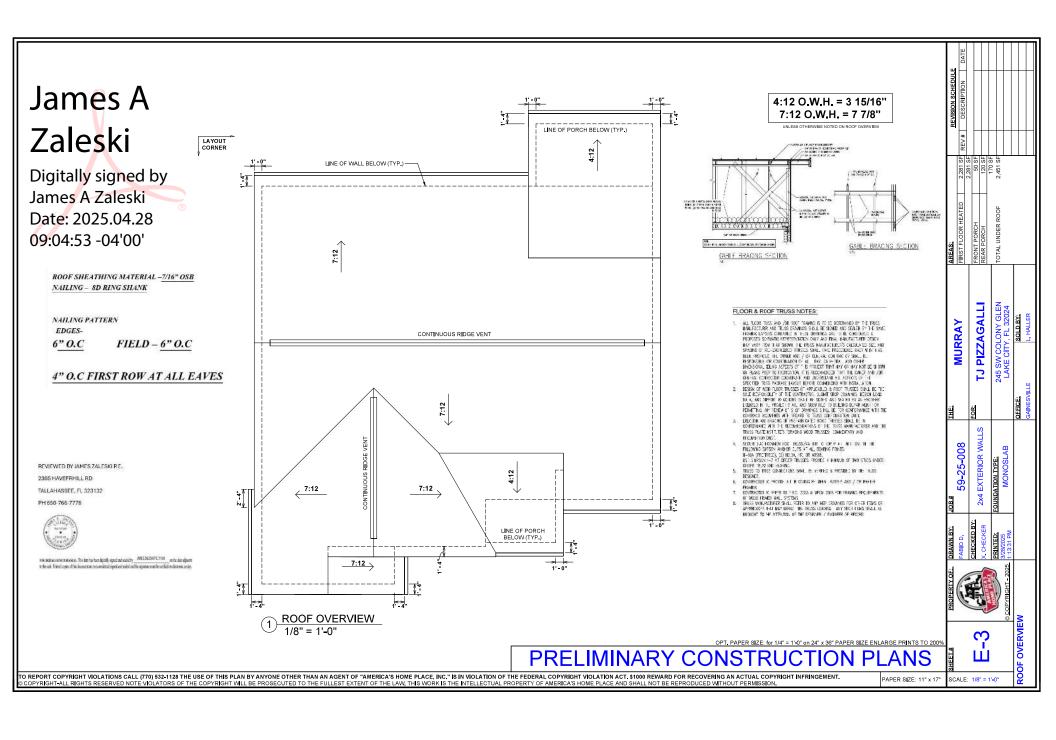
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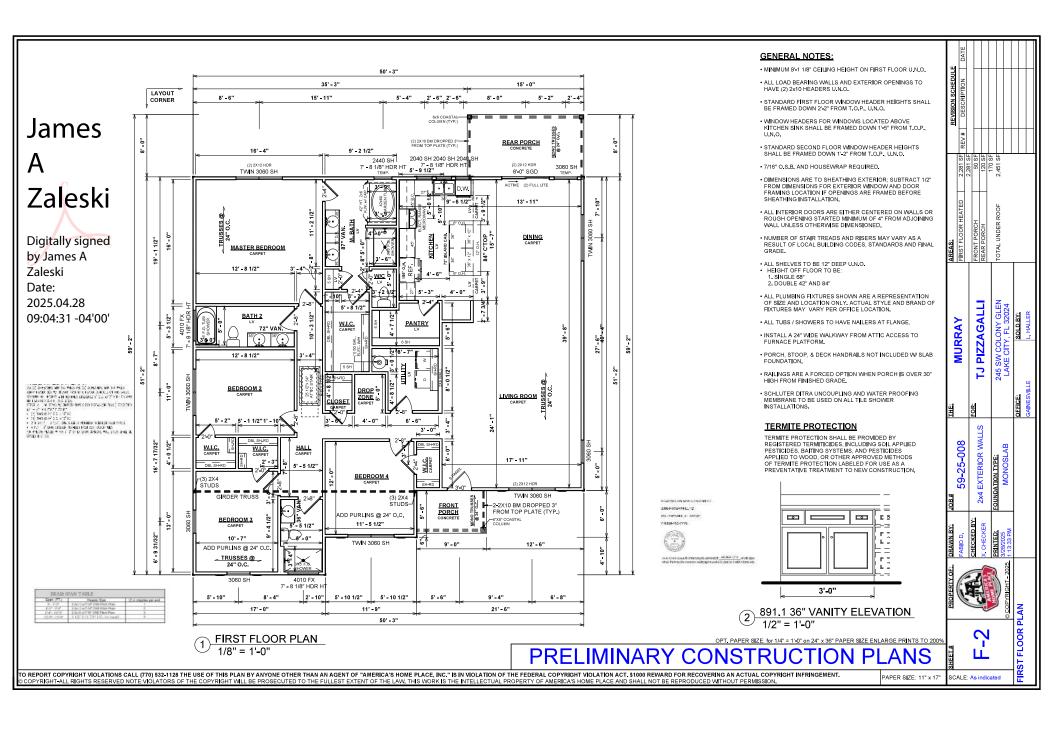


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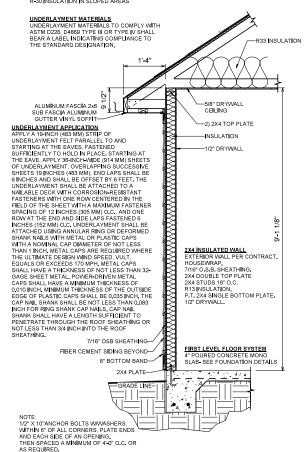




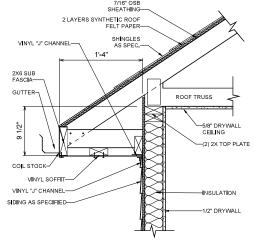


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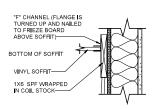
ROOF SYSTEM
ROOF COVERING AS SPECIFIED DOUBLE LAYER OF SYNTHETIC
UNDERLAYMENT WITH 7/16" OSB SHEATHING NAILED AND CLIPPED PRE ENGINEERED ROOF TRUSSES PER PRINT R-30 INSULATION IN SLOPED AREAS



1 STORY WALL CONC. SIDING ON SLAB - FL



400.1 RAFTER TAIL AT CONC. SIDING WALL - FL



FRIEZE DETAIL AT SIDING 1 1/2" = 1'-0"

Wall Esterior Panel - Sheath with 7716° OSN - 2 X 4 STUDS AT 17" O.C. UP TO 10 HET

-2 X 8 STODS AT 15" C.C. OF TO 12 ILLT

-2 X 6 STUDS AT 18" OLD UP TO 16 CET

ALL WALLS OVER 10 FEET TO HAVE 2 YOWS OF BLOCKING

#### SEE ATTACHED DETAILS

FOSTS USE SIMPSON ABULBASE WITH ZIESTAZA STRAPS AT FOR AND ZISIMISUN SUWE 15000SCREWS FROM POST TO DEAM

MININAL PENETRATION - 1-1/25

Intermediate Nail spacing 8" out SMPSON SCAW(15400 SCHOWS AT THE FOW OF STUDS AND SIMPSON SCAW(15400 SCHOWS AT THE FOW OF STUDS AND SIMPSON SDW(15400 SCREWS AT THE BOTTOM OF STUDS AT ALL

CORNERS AND 48° U.C.

COMPANY SHOULD DO BY MANY OF THE CASE CASE CASE CASES

REVIEWED BY JAMES ZALESKIP F.

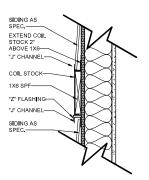
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one positive success research. This dear has been depictly agend and excluding \_\_MRES TREPSOPE SYMM \_\_marticular adjuster to the seal. Framed copies of this document are not considered signed and scaled and the signature must be serified as document copies



LINEAL BAND DETAIL CONC. SIDING 1 1/2" = 1'-0"

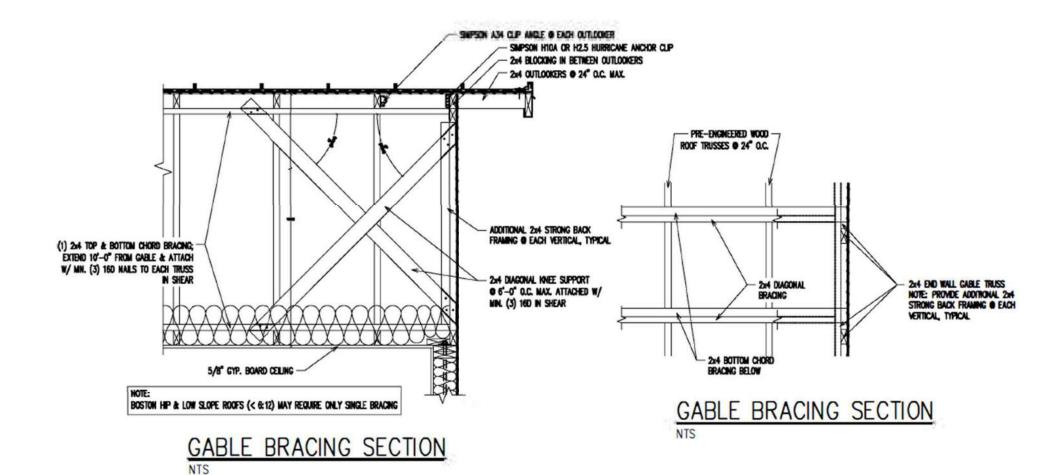
OPT, PAPER SIZE: for 1/4" = 1'-0" on 24" x 36" PAPER SIZE ENLARGE PRINTS TO 200%

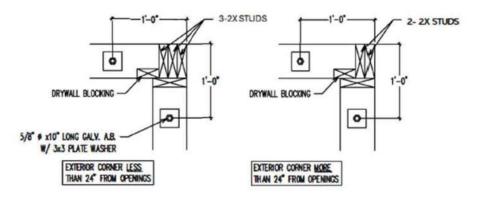
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SCALE: As indicated





# CORNER FRAMING PLAN SECTIONS

INSTALL 5/8" x10" J-BOLT ANCHORS W/ MIN. 7" EMBEDMENT @ 32" O.C. FOR ALL LOAD BEARING WALLS.

JAMES ZALESKI P.E. 51544 2305 HAVERHILL RD TALLAHASSEE, FL 32312 PH 850-766-7778



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ALL FLOOR TRUSS AND OR ROOFFRAMING S TO BE DETERMINED BY THE TRUSS MANUFACTURER AND TRUSS DRAWINGS SHALL BE SIGNED AND SEALED BY THE SAME FRAMING LAYOUTS CONTAINED IN 111ESE DRAWINGS ARE TO BE CONSIDERED A PROPOSED SCHEMATIC REPRESENTATION ONLY AND FINAL MANUFACTURER DESIGN MAY VARY FROM THAT SHOWN. THE TRUSS MANUFACTURER'S CALCULATED SIZE AND SPACING OF PRE- ENGINEERED TRUSSES SHALL TAKE PRECEDENCE OVER WHAT HAS BEEN PROPOSED. THE OWNERAND / OR GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL TRAY, CATHEDRAL, AND OTHER DIMENSIONAL CEILING ASPECTS OF THIS PROJECT THAT MAY OR MAY NOT BE SHOWN ON PLANS PRIOR TO FABRICATION. IT IS RECOMMENDED THAT THE OWNER AND / OR GENERAL CONTRACTOR COORDINATE AND UNDERSTAND ALL ASPECTS OF THE SPECIFIED TRUSS PACKAGE LAYOUT BEFORE COMMENCING WITH INSTALLATION. DESIGN OF WOOD FLDOR TRUSSES (IF APPLICABLE) & ROOF TRUSSES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, AND SUPPORT REACTIONS SHALL BE SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE PROJECTSTATE AND SUBMITTED TO BUILDING DEPARTMENT FOR PERMITTING. ANY REVIEW OF SHOP DRAWINGS SHALL BEFOR CONFORMANCE WITH TH CONTRACT DOCUMENTS WITH REGARD TO TRUSS CONFIGURATION ONLY ERECTION AND BRACING OF PREFABRICATED WOOD TRUSSES SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE TRUSS MANUFACTURER AND TH TRUSS PLATE INSTITUTE'S "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS".

SECURE EACH COMMON ROOFTRUSS/RAFTER TO TOP PLATE WITH ONE OF THE FOLLOWING SIMPSON ANCHOR CLIPS AT ALL BEARING POINTS:

H- 10A (PREFERRED), (2) H2.5A, H7, OR MTS16.

USE SIMPSON H-7 AT GIRDER TRUSSES. PROVIDE A MINIMUM OF TWO STUDS UNDER GIRDER TRUSS END BEARING.

TRUSS TO TRUSS CONNECTIONS SHALL BE VERIFIED & PROVIDED BY THE TRUSS DESIGNER.

CONTRACTOR TO PROVIDE ALL BLOCKING BETWEEN TRUSSES AND / OR RAFTER

CONTRACTOR TO REFER TO F.B.C. 2023 & WFCM 2018 FOR FRAMINGREQUIREMENTS OF WOOD FRAMED WALL SYSTEMS.

TRUSS MANUFACTURER SHALL REFER TO ANY MEP DRAWINGS FOR OTHER ITEMS OR APPENDAGES THAT MAY EFFECT THETRUSS LOADING. ANY SUCH ITEMSSHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER / ENGINEER OF RECORD.

Span (FT.)	Header Size	(2 x) cripples per end	
0' - 4'-0"	2-2x10 w/7/16" OSB Flitch Plate	1	
4'-0" - 9'-4"	2-2x10 w/7/16" OSB Flitch Plate	2	
9'-4" - 12'-0"	2-2x10 w/7/16" OSB Flitch Plate	3	
12'-0" - 15'-4"	3 1/2" X 11 7/8" LVL (or equal)	3	

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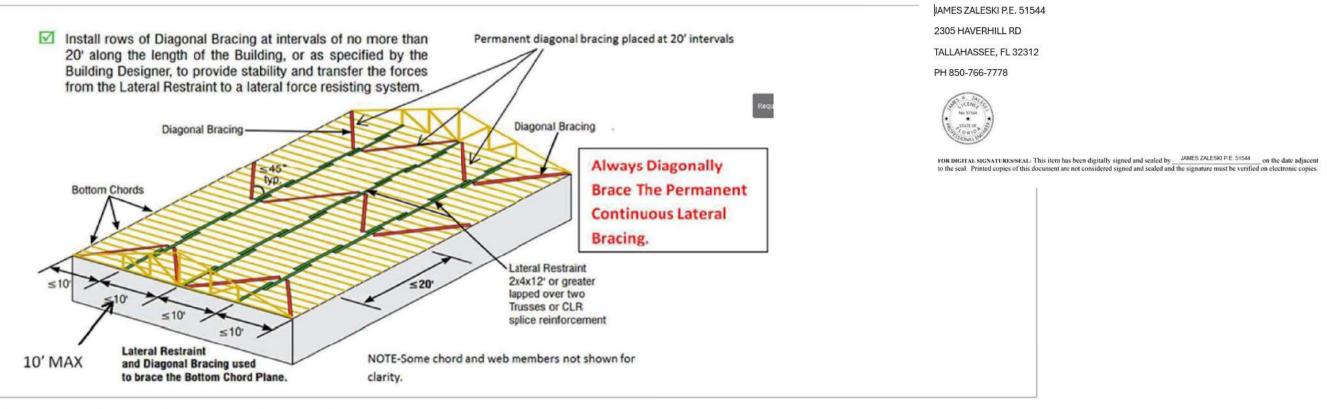


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Install Simpson sheathing clip PSCL @ 24" c.c. for roof sheathing.

Gable ends per attached details. For vaulted ceilings, balloon framing is required.

Provide continuous structural sheathing on gable ends and block all edges on sheathing.

James A Zaleski Digitally signed by

James A Zaleski

Date: 2025.04.28

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# HEADER SIZE AND STRAPPING CHART

SPAN	HEADER SIZE	QUANTITY OF JACK STUDS AT EACH END	QUANTITY OF KING STUDS AT EACH END	STRAPPING TO JACK STUDS AT EACH END TOP AND BOTTOM	STRAPPING TO KING STUDS AT EACH END TOP AND BOTTOM
0'-0" TO 7'-6"	2 - 2X10" WITH 1/3" PLATE	1	1	1 SIMPSON MSTA24	1 SIMPSON SPH4
7'-6" – 11'-3"	2 -2X12" WITH ½" PLATE OR 4-2 X 10" WITH ½" PLATE	3	2	2 SIMPSON MSTA24	2 SIMPSON SPH4
11'-3" – 14'-0"	2- 1 ½" X 9 ½" LVL	3	2	2 SIMPSON MSTA24	2 SIMPSON SPH4

IN LIEU OF STRAPPING LISE A SDWC15600 AT THE TOP OF EACH JACK AL NIKING STUD AND ONE SDWC15450 AT THE BASE OF EACH JACK AND KING STUD

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	Shear Wall Panel Type "B" Specifications				
	Stud Spacing	16" O.C.			
1 Face	Panel Grade	OSB Sheathing			
	Minimum Panel Thickness	7/16"			
	Minimum Nail Penetration in Framing	1 1/2"			
	Nail Type	8d Common			
	Edge Nail Spacing	4"			
	Intermediate Nail Spacing (field)	12"			
	Total Panel Shear Capacity	350 plf			