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WIND ANALYSIS – 120 MPH 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): James Zaleski
Design Professional FL Lic. #: 51544

Importance factor: 1.0 Building Category: ENCLOSED
Wind Exposure (s): B Risk Category II
Internal Pressure Coefficient +/-.18

Mean Roof Height 17.8 **End Zone Length 8 feet**

_ **MAX OVERHANG 2.0 FT**

MANUFACTURED TRUSSES TO BE USED
Roof Slope =–6/12
Two SIMPSON SDWC 15600 6" SCREW PER TRUSS BEARING MAY BE USED IN LIEU OF H10A
1 SIMPSON SDWC 15600 6" SCREW PER TRUSS BEARING MAY BE USED IN LIEU OF H2.5A

TRUSS SPAN/LOCATION HURRICANE CLIPS
HC MODEL–1 Simpson H-10A IN ALL

ROOF SHEATHING MATERIAL –1/2" OSB
NAILING – 8D RING SHANK

NAILING PATTERN
EDGES-
4" O.C FIELD – 6" O.C

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JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME
Albritton Residence
Columbia County, Florida

James A Zaleski

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Date: 2024.11.24 14:10:30 -05'00'

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Plan May Be Mirrored at Contractors Option

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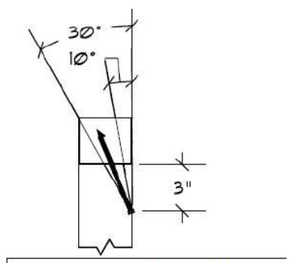
Wall Exterior Panel – Sheath with 1/2" PLYWOOD OR OSB
– 2 X 4 STUDS AT 16" O.C. UP TO 10 FEET
– 2 X 4 STUDS AT 12" O.C. UP TO 12 FEET

2 X 6 STUDS AT 16" O.C. UP TO 16 FEET
ALL WALLS OVER 10 FEET TO HAVE 2 ROWS OF BLOCKING
POSTS USE SIMPSON ABU BASE WITH 2-LSTA24 STRAPS AT TOP AND 1 SIMPSON SDWC 15600 SCREW FROM POST TO BEAM
SEE ADDITIONAL DETAILS ATTACHED

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 SIMPSON SCREWS

5/8x10" J-BOLT @ 32" O.C. ALSO LOCATED @ 6" MAX. EA. SIDE OF ALL WINDOW AND DOOR OPENINGS @ ALL SOLE PLATE SPLICES. AND @ ALL CORNERS.



FOR 2- SDWC15600 FROM POST TO BEAM

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ALL EXTERIOR WALLS TO BE SHEATHED 100%

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 all exterior walls, with the nailing pattern indicated above.***
2. ***There are _ _, there are not 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 @ N/A o.c. along top & bottom plates***
5. ***Provide detail for 2 story bldgs showing continuous load path between 2nd floor stud & 1st 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)***

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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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MecaWind v2479

Calculations Prepared by:
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TALLAHASSEE, FL, 32312
Date: Nov 23, 2024
File Location: Current Project Not Saved

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General:

Wind Load Standard	=	ASCE 7-22	Basic Wind Speed	=	120.0 mph
Exposure Classification	=	B	Risk Category	=	II
Structure Type	=	Building	Design Basis for Wind Pressures	=	ASD
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
Help	=	Help on Building Roof Type	= Help	Pitch	=	Pitch of Roof	= 6.0 :12
θ	=	Slope of Roof	= 26.57 Deg	R_{Ht}	=	Ridge Height	= 26.518 ft
E_{Ht}	=	Eave Height	= 9.100 ft	W	=	Building Width	= 65.670 ft
L	=	Building Length	= 71.670 ft	OH	=	Type of Overhang	= All Soffit
Par	=	Parapet	= None	HT_{over}	=	Override Mean Roof Height	= False
Ht_{man}	=	Mean Roof Height	= 17.809 ft	RA_{over}	=	Override Roof Area	= False
GC_{pi_o}	=	Override GC_{pi} value	= False	IsElev	=	Building is Elevated	= False

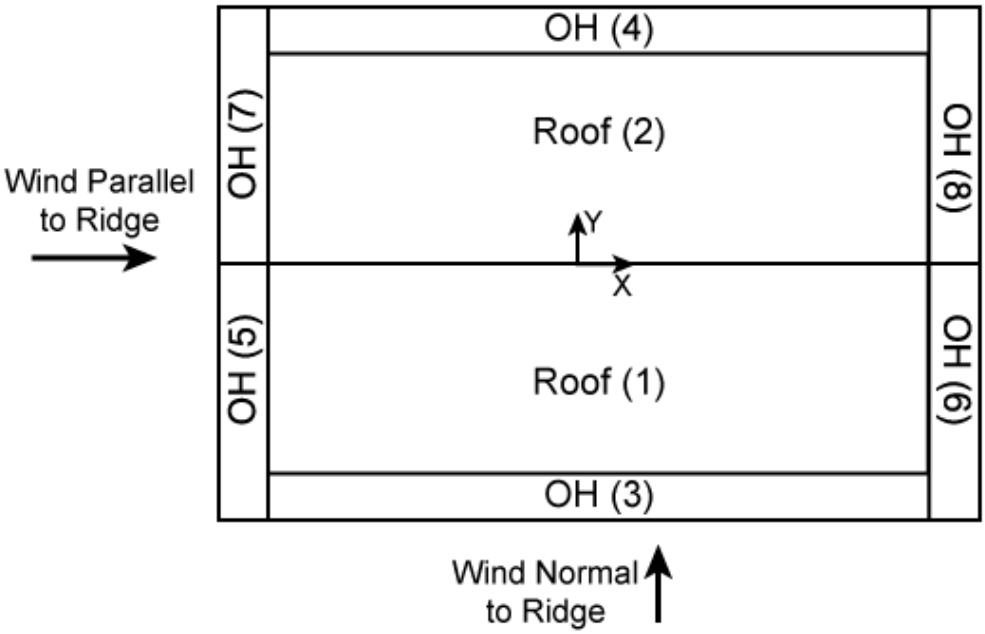
Exposure Constants [Tbl 26.11-1]:

α = 3-s Gust-speed exponent	=	7.500	Z_g = Nominal Ht of Boundary Layer	=	3280.000 ft
â = Reciprocal of α	=	0.133	b = 3 sec gust speed factor	=	0.840
α_m = Mean hourly Wind-Speed Exponent	=	0.222	b_m = Mean hourly Windspeed Exponent	=	0.470
c = Turbulence Intensity Factor	=	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	=	2.000 ft

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



h	=	Mean structure height	=	17.809 ft
K_h	=	$2.41•(Z/Z_g)^{2/\alpha}$ [Tbl 26.10-1]	=	0.600
K_{zt}	=	No Topographic feature specified	=	1.000
K_d	=	Wind Directionality Factor per Tbl 26.6-1	=	0.85
$+GC_{pi}$	=	Enclosed Positive Internal Pressure Tbl 26.13-1	=	+0.18
$-GC_{pi}$	=	Enclosed Negative Internal Pressure Tbl 26.13-1	=	-0.18
LF	=	Load Factor based upon ASD Design	=	0.60
K_e	=	Ground Elev Factor [Tbl 26.10-1]	=	1.000
q_h	=	$0.00256•K_h•K_{zt}•K_e•V^2*LF$ [Eq 26.10-1]	=	13.26 psf
RA	=	Roof Area	=	5894.20 ft^2
q_h	=	$0.00256•K_h•K_{zt}•K_e•V^2*LF$ [Eq 26.10-1]	=	13.26 psf
q_{in}	=	Negative Internal Pressure: $q_h•LF$	=	13.26 psf
q_{ip}	=	Positive Internal Pressure: $q_h•LF$	=	13.26 psf

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MWFRS Wind Loads [Normal to Ridge]

h	=	Mean Roof Height Of Building	=	17.809 ft
RHt	=	Ridge Height Of Roof	=	26.518 ft
B	=	Horizontal Dimension Of Building Normal To Wind Direction	=	71.670 ft
L	=	Horizontal Dimension Of building Parallel To Wind Direction	=	65.670 ft
L/B	=	Ratio Of L/B used For Cp determination	=	0.916
h/L	=	Ratio Of h/L used For Cp determination	=	0.271
Slope	=	Slope Of Roof	=	26.57 Deg

Gust Factor Calculation for Wind: [Normal to Ridge]

Gust Factor Category I Rigid Structures - Simplified Method

G_1	=	Simplified: For Rigid Structures can use 0.85	=	0.85

Gust Factor Category II Rigid Structures - Complete Analysis

Z_m	=	Equiv Struc Height: Max(0.6•h, Z_{min})	=	30.000 ft
I_{zm}	=	Turbulence Intensity: $c•(33/Z_m)^{1/6}$ [Eq 26.11-7]	=	0.305
L_{zm}	=	Turbulence Integral Length Scale: $\ell•(Z_m/33)^{\varepsilon}$ [Eq 26.11-9]	=	309.993 ft
B	=	Building Width Width Normal to Wind Direction	=	71.670 ft
Q	=	$[1/(1+0.63•[(B+h)/L_{zm}]^{0.63})]^{0.5}$ [Eq 26.11-8]	=	0.881
G_2	=	Detailed: $0.925•[(1+1.7•g_q•I_{zm}•Q)/(1+1.7•g_v•I_{zm})]$ [Eq 26.11-6]	=	0.855

Gust Factor Used in Analysis

G	=	Gust Factor: Min(G_1, G_2)	=	0.850

Cp_{WW}	=	Windward Wall Coefficient (All L/B Values)	=	0.800
Cp_{LW}	=	Leeward Wall Coefficient using L/B	=	-0.500
Cp_{SW}	=	Side Wall Coefficient (All L/B values)	=	-0.700

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

Elev ft	GC_{pi}	q_i psf	K_z	K_{zt}	q_z psf	Windward Press psf	Leeward Press psf	Side Press psf	Total Press psf	Minimum Pressure* psf
9.100	+0.18	13.26	0.573	1.000	12.67	5.29	-6.82	-8.74	12.12	9.60
9.100	-0.18	13.26	0.573	1.000	12.67	9.35	-2.76	-4.68	12.12	9.60

K_z = $2.41•(Z/Z_g)^{2/\alpha}$
GC_{pi} = Enclosed Internal Pressure Tbl 26.13-1
q_{ip} = Positive Internal Pressure: $q_h•LF$
Side = $q_h•K_d•G•Cp_{SW}-q_{ip}•K_d•(+GC_{pi})$ Eq 27.3-1
Windward = $q_z•K_d•G•Cp_{WW}-q_{ip}•K_d•(+GC_{pi})$ Eq 27.3-1
K_{zt} = No Topographic feature specified
q_z = $0.00256•K_z•K_{zt}•K_e•V^2*LF$ [Eq 26.10-1]
q_{in} = Negative Internal Pressure: $q_h•LF$
Leeward = $q_h•K_d•G•Cp_{LW}-q_{ip}•K_d•(+GC_{pi})$ Eq 27.3-1
Total = Windward - Leeward

- *Minimum Pressure: § 27.1.5 no less than 9.60 psf (Incl LF) applied to Walls*
- *Positive Pressures Act TOWARD Surface and Negative Pressures Act AWAY from Surface*

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

Component	Description	Location	Start ft	End ft	GC_{pi}	C_{pMin}	C_{pMax}	$P_{C_{pMin}}$ psf	$P_{C_{pMax}}$ psf	P_{min} psf
OH	Overhang Top	3,5,6	All	All	0	0.292	-0.206	2.79	-1.97	4.80
OH	Overhang Leeward	2,7,8	All	All	0	-0.600	-0.600	-5.75	-5.75	4.80
OH_Bot	Overhang Bottom	3	All	All	0	0.800	0.800	7.67	7.67	4.80
Roof	Roof Windward	1	All	All	+0.18	0.292	-0.206	0.76	-4.00	4.80
Roof	Roof Leeward	2	All	All	+0.18	-0.600	-0.600	-7.78	-7.78	4.80
OH	Overhang Top	3,5,6	All	All	0	0.292	-0.206	2.79	-1.97	4.80
OH	Overhang Leeward	2,7,8	All	All	0	-0.600	-0.600	-5.75	-5.75	4.80
OH_Bot	Overhang Bottom	3	All	All	0	0.800	0.800	7.67	7.67	4.80
Roof	Roof Windward	1	All	All	-0.18	0.292	-0.206	4.82	0.06	4.80
Roof	Roof Leeward	2	All	All	-0.18	-0.600	-0.600	-3.72	-3.72	4.80

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Roof Pressures based upon Ch 27:

Component = The building component for pressures
Start = Start Dist from Windward Edge
C_{pMin} = Smallest Coefficient Magnitude
$P_{C_{pMin}}$ = $q_h \cdot K_d \cdot G \cdot C_{pMin} - q_{ip} \cdot K_d \cdot GC_{pi}$ [Eq 27.3-1]

Location = Reference Graphic in Output for Values
End = End Dist from Windward Edge
C_{pMax} = Largest Coefficient Magnitude
$P_{C_{pMax}}$ = $q_h \cdot K_d \cdot G \cdot C_{pMax} - q_{in} \cdot K_d \cdot GC_{pi}$ [Eq 27.3-1]

P_{min} = Min Press projected on vertical plane [§ 27.1.5]

- *No reduction factor was applicable*
- *The smaller uplift pressures due to C_{pMin} can become critical when wind is combined with roof live load or snow load; load combinations are given in ASCE 7*
- *Positive Pressures Act TOWARD Surface and Negative Pressures Act AWAY from Surface*

MWFRS Wind Loads [Parallel to Ridge]

h	=	Mean Roof Height Of Building	= 17.809 ft
RHt	=	Ridge Height Of Roof	= 26.518 ft
B	=	Horizontal Dimension Of Building Normal To Wind Direction	= 65.670 ft
L	=	Horizontal Dimension Of building Parallel To Wind Direction	= 71.670 ft
L/B	=	Ratio Of L/B used For Cp determination	= 1.091
h/L	=	Ratio Of h/L used For Cp determination	= 0.248
Slope	=	Slope Of Roof	= 26.57 Deg

Gust Factor Calculation for Wind: [Parallel to Ridge]

Gust Factor Category I Rigid Structures - Simplified Method

G_1	=	Simplified: For Rigid Structures can use 0.85	= 0.85

Gust Factor Category II Rigid Structures - Complete Analysis

Z_m	=	Equiv Struc Height: Max(0.6•h, Z_{min})	= 30.000 ft
I_{zm}	=	Turbulence Intensity: $c \cdot (33/Z_m)^{1/6}$ [Eq 26.11-7]	= 0.305
L_{zm}	=	Turbulence Integral Length Scale: $\ell \cdot (Z_m/33)^{\varepsilon}$ [Eq 26.11-9]	= 309.993 ft
B	=	Building Width Width Normal to Wind Direction	= 65.670 ft
Q	=	$[1/(1+0.63 \cdot [(B+h)/L_{zm}]^{0.63})]^{0.5}$ [Eq 26.11-8]	= 0.885
G_2	=	Detailed: $0.925 \cdot [(1+1.7 \cdot g_q \cdot I_{zm} \cdot Q)/(1+1.7 \cdot g_v \cdot I_{zm})]$ [Eq 26.11-6]	= 0.857

Gust Factor Used in Analysis

G	=	Gust Factor: Min(G_1, G_2)	= 0.850

Cp_{WW}	=	Windward Wall Coefficient (All L/B Values)	= 0.800
Cp_{LW}	=	Leeward Wall Coefficient using L/B	= -0.482
Cp_{SW}	=	Side Wall Coefficient (All L/B values)	= -0.700

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

Elev ft	GC_{pi}	q_i psf	K_z	K_{zt}	q_z psf	Windward Press psf	Leeward Press psf	Side Press psf	Total Press psf	Minimum Pressure* psf
26.518	+0.18	13.26	0.667	1.000	14.75	6.50	-6.65	-8.74	13.14	9.60
17.809	+0.18	13.26	0.600	1.000	13.26	5.64	-6.65	-8.74	12.28	9.60
9.100	+0.18	13.26	0.573	1.000	12.67	5.29	-6.65	-8.74	11.94	9.60
26.518	-0.18	13.26	0.667	1.000	14.75	10.56	-2.59	-4.68	13.14	9.60
17.809	-0.18	13.26	0.600	1.000	13.26	9.70	-2.59	-4.68	12.28	9.60
9.100	-0.18	13.26	0.573	1.000	12.67	9.35	-2.59	-4.68	11.94	9.60

K_z = $2.41 \cdot (Z/Z_g)^{2/\alpha}$
GC_{pi} = Enclosed Internal Pressure Tbl 26.13-1
q_{ip} = Positive Internal Pressure: $q_h \cdot LF$
Side = $q_h \cdot K_d \cdot G \cdot Cp_{SW} - q_{ip} \cdot K_d \cdot (+GC_{pi})$ Eq 27.3-1
Windward = $q_z \cdot K_d \cdot G \cdot Cp_{WW} - q_{ip} \cdot K_d \cdot (+GC_{pi})$ Eq 27.3-1

K_{zt} = No Topographic feature specified
q_z = $0.00256 \cdot K_z \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF$ [Eq 26.10-1]
q_{in} = Negative Internal Pressure: $q_h \cdot LF$
Leeward = $q_h \cdot K_d \cdot G \cdot Cp_{LW} - q_{ip} \cdot K_d \cdot (+GC_{pi})$ Eq 27.3-1
Total = Windward - Leeward

- *Minimum Pressure: § 27.1.5 no less than 9.60 psf (Incl LF) applied to Walls*
- *Positive Pressures Act TOWARD Surface and Negative Pressures Act AWAY from Surface*

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

Component	Description	Location	Start ft	End ft	GC_{pi}	C_{pMin}	C_{pMax}	$P_{C_{pMin}}$ psf	$P_{C_{pMax}}$ psf	P_{min} psf
OH_Bot	Overhang Bottom	5,7	All	All	0	0.800	0.800	7.67	7.67	4.80
OH_Top	Overhang Top (0 to h)	3,4,5,7	0.000	17.809	0	-0.900	-0.180	-8.63	-1.73	4.80
OH_Top	Overhang Top (h to 2*h)	3,4	17.809	35.618	+0.18	-0.500	-0.180	-6.82	-3.75	4.80
OH_Top	Overhang Top (>= 2*h)	3,4,6,8	35.618	75.670	+0.18	-0.300	-0.180	-4.90	-3.75	4.80
Roof	Roof (0 to h)	1,2	2.000	17.809	+0.18	-0.900	-0.180	-10.66	-3.75	4.80
Roof	Roof (h to 2*h)	1,2	17.809	35.618	+0.18	-0.500	-0.180	-6.82	-3.75	4.80
Roof	Roof (>= 2*h)	1,2	35.618	73.670	+0.18	-0.300	-0.180	-4.90	-3.75	4.80

OH_Bot	Overhang Bottom	5,7	All	All	0	0.800	0.800	7.67	7.67	4.80
OH_Top	Overhang Top (0 to h)	3,4,5,7	0.000	17.809	0	-0.900	-0.180	-8.63	-1.73	4.80
OH_Top	Overhang Top (h to 2*h)	3,4	17.809	35.618	-0.18	-0.500	-0.180	-2.76	0.30	4.80
OH_Top	Overhang Top (>= 2*h)	3,4,6,8	35.618	75.670	-0.18	-0.300	-0.180	-0.85	0.30	4.80
Roof	Roof (0 to h)	1,2	2.000	17.809	-0.18	-0.900	-0.180	-6.60	0.30	4.80
Roof	Roof (h to 2*h)	1,2	17.809	35.618	-0.18	-0.500	-0.180	-2.76	0.30	4.80
Roof	Roof (>= 2*h)	1,2	35.618	73.670	-0.18	-0.300	-0.180	-0.85	0.30	4.80

Roof Pressures based upon Ch 27:

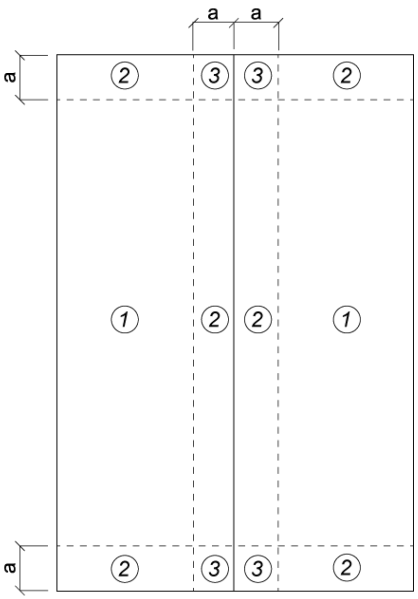
Component = The building component for pressures
Start = Start Dist from Windward Edge
C_{pMin} = Smallest Coefficient Magnitude
P_{CpMin} = $q_h \cdot K_d \cdot G \cdot C_{pMin} - q_{ip} \cdot K_d \cdot GC_{pi}$ [Eq 27.3-1]

Location = Reference Graphic in Output for Values
End = End Dist from Windward Edge
C_{pMax} = Largest Coefficient Magnitude
P_{CpMax} = $q_h \cdot K_d \cdot G \cdot C_{pMax} - q_{in} \cdot K_d \cdot GC_{pi}$ [Eq 27.3-1]

P_{min} = Min Press projected on vertical plane [§ 27.1.5]

- *No reduction factor was applicable*
- *The smaller uplift pressures due to C_{pMin} can become critical when wind is combined with roof live load or snow load; load combinations are given in ASCE 7*
- *Positive Pressures Act TOWARD Surface and Negative Pressures Act AWAY from Surface*

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



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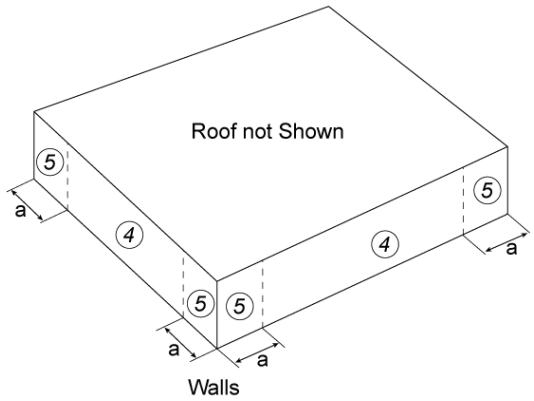

h/W	=	Ratio of mean roof height to building width	= 0.271
h/L	=	Ratio of mean roof height to building length	= 0.248
h	=	Mean structure height	= 17.809 ft
K_h	=	$2.41 \cdot (Z/Z_g)^{2/\alpha}$	= 0.600
K_{zt}	=	No Topographic feature specified	= 1.000
K_d	=	Wind Directionality Factor per Tbl 26.6-1	= 0.85
$+GC_{pi}$	=	Enclosed Positive Internal Pressure Tbl 26.13-1	= +0.18
$-GC_{pi}$	=	Enclosed Negative Internal Pressure Tbl 26.13-1	= -0.18
LF	=	Load Factor based upon ASD Design	= 0.60
K_e	=	Ground Elev Factor [Tbl 26.10-1]	= 1.000
q_h	=	$0.00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 * LF$ [Eq 26.10-1]	= 13.26 psf
LHD	=	Least Horizontal Dimension: Min(B, L)	= 65.670 ft
a_1	=	Min(0.1•LHD, 0.4•h)	= 6.567 ft
a	=	Max(a_1, 0.04•LHD, 3 ft [0.9 m])	= 6.567 ft
h/B	=	Ratio of mean roof height to least horizontal dim: h/B	= 0.271

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

Description	Zone	Width ft	Span ft	Area ft²	1/3 Rule	Figure	GCp Max	GCp Min	p Max psf	p Min psf
Zone 1	1	1.000	1.000	1.00	No	30.3-2C	0.600	-1.500	9.60	-18.94
Zone 2	2	1.000	1.000	1.00	No	30.3-2C	0.600	-2.500	9.60	-30.22
Zone 3	3	1.000	1.000	1.00	No	30.3-2C	0.600	-3.000	9.60	-35.86
Zone 4	4	1.000	1.000	1.00	No	30.3-1	1.000	-1.100	13.30	-14.43

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Zone 5	5	1.000	1.000	1.00	No	30.3-1	1.000	-1.400	13.30	-17.81

Area = Span Length x Effective Width
1/3 Rule = Effective width need not be less than 1/3 of the span length
GCp = External Pressure Coefficients taken from Figures 30.3-1 through 30.3-7
p = Wind Pressure: $q_h \cdot K_d \cdot [GC_p - GC_{pi}]$ [Eq 30.3-1]
* Per § 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] {Includes LF}

Components and Cladding (C&C) Wind Overhang Calculations per Ch 30 Pt 4: [Roof & Wall]

h	=	Mean structure height	= 17.809 ft
K_h	=	$2.41 \cdot (Z/Z_g)^{2/\alpha}$	= 0.600
K_{zt}	=	No Topographic feature specified	= 1.000
K_d	=	Wind Directionality Factor per Tbl 26.6-1	= 0.85
$+GC_{pi}$	=	Enclosed Positive Internal Pressure Tbl 26.13-1	= +0.18
$-GC_{pi}$	=	Enclosed Negative Internal Pressure Tbl 26.13-1	= -0.18
LF	=	Load Factor based upon ASD Design	= 0.60
K_e	=	Ground Elev Factor [Tbl 26.10-1]	= 1.000
q_h	=	$0.00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 * LF$ [Eq 26.10-1]	= 13.26 psf

Wind Pressures for Overhangs per Section Ch 30 Pt 4 [Roof & Wall]
All wind pressures include a Load Factor (LF) of 0.6

Description	Zone	Width ft	Span ft	Area ft^2	1/3 Rule	Figure	GCpi ±	GCp Max	GCp Min	p Max psf	p Min psf
Zone 1_OHS	1_OHS	1.000	1.000	1.00	No	30.3-2C/30.3-1	0.18	0.000	-2.500	9.60	-30.22
Zone 2_OHS	2_OHS	1.000	1.000	1.00	No	30.3-2C/30.3-1	0.18	0.000	-3.500	9.60	-41.49
Zone 3_OHS	3_OHS	1.000	1.000	1.00	No	30.3-2C/30.3-1	0.18	0.000	-4.000	9.60	-47.13

#_OHS = Zone # on Overhang w/ Soffit w/ Buildings Internal Pressure (GCPi = $+/-+GC_{pi}$)
Area = Span Length x Effective Width
1/3 Rule = Effective width need not be less than 1/3 of the span length
p = Wind Pressure: $q_h \cdot K_d \cdot [GC_p - GC_{pi}]$ [Eq 30.7-1]
* Per § 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] {Includes LF}
Values of GCp for overhangs include contributions from both upper and lower surfaces.

Warnings & Notes:
Overhang GCp determined from adding applicable roof GCp on top to applicable Wall GCp on bottom

Components and Cladding (C&C) Wind Roof & Wall Summary per Ch 30 Pt 1:

h/W	=	Ratio of mean roof height to building width	= 0.271
h/L	=	Ratio of mean roof height to building length	= 0.248
h	=	Mean structure height	= 17.809 ft
K_h	=	$2.41 \cdot (Z/Z_g)^{2/\alpha}$	= 0.600
K_{zt}	=	No Topographic feature specified	= 1.000
K_d	=	Wind Directionality Factor per Tbl 26.6-1	= 0.85
$+GC_{pi}$	=	Enclosed Positive Internal Pressure Tbl 26.13-1	= +0.18
$-GC_{pi}$	=	Enclosed Negative Internal Pressure Tbl 26.13-1	= -0.18
LF	=	Load Factor based upon ASD Design	= 0.60
K_e	=	Ground Elev Factor [Tbl 26.10-1]	= 1.000
q_h	=	$0.00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 * LF$ [Eq 26.10-1]	= 13.26 psf
LHD	=	Least Horizontal Dimension: Min(B, L)	= 65.670 ft
a_1	=	Min(0.1•LHD, 0.4•h)	= 6.567 ft
a	=	Max(a_1, 0.04•LHD, 3 ft [0.9 m])	= 6.567 ft
h/B	=	Ratio of mean roof height to least horizontal dim: h/B	= 0.271

James A Zaleski

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Date: 2024.11.24 14:13:57 -05'00'

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

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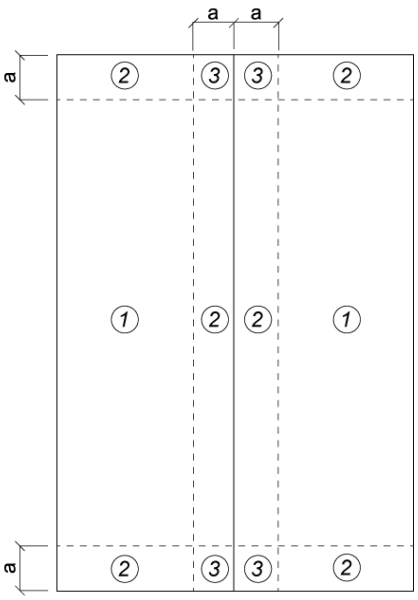
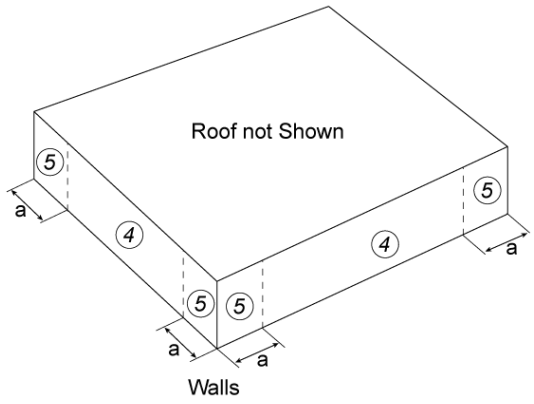
James Zaleski PE #51544 2305 Haverhill Rd Tall Fl 32312 ph 850-766-7778





Wind Pressure Summary for C&C Roof & Wall based Upon Areas Ch 30 Pt 1 (Table 1 of 2)
All wind pressures include a Load Factor (LF) of 0.6

Zone	Figure	Pos A ≤ 10 ft² psf	Neg A ≤ 10 ft² psf	Pos A = 20 ft² psf	Neg A = 20 ft² psf	Pos A = 50 ft² psf	Neg A = 50 ft² psf
1	30.3-2C	9.60	-18.94	9.60	-17.12	9.60	-14.70
2	30.3-2C	9.60	-30.22	9.60	-25.81	9.60	-19.97
3	30.3-2C	9.60	-35.86	9.60	-30.42	9.60	-23.25
4	30.3-1	13.30	-14.43	12.71	-13.83	11.91	-13.04
5	30.3-1	13.30	-17.81	12.71	-16.62	11.91	-15.03
1_OHS	30.3-2C/30.3-1	9.60	-30.22	9.60	-27.79	9.60	-24.59
2_OHS	30.3-2C/30.3-1	9.60	-41.49	9.60	-36.48	9.60	-29.86
3_OHS	30.3-2C/30.3-1	9.60	-47.13	9.60	-41.10	9.60	-33.13

Wind Pressure Summary for C&C Roof & Wall based Upon Areas Ch 30 Pt 1 (Table 2 of 2)
All wind pressures include a Load Factor (LF) of 0.6

Zone	Figure	Pos A = 100 ft² psf	Neg A = 100 ft² psf	Pos A = 200 ft² psf	Neg A = 200 ft² psf	Pos A > 500 ft² psf	Neg A > 500 ft² psf
1	30.3-2C	9.60	-12.88	9.60	-11.05	9.60	-11.05
2	30.3-2C	9.60	-15.56	9.60	-15.56	9.60	-15.56
3	30.3-2C	9.60	-17.81	9.60	-17.81	9.60	-17.81
4	30.3-1	11.31	-12.44	10.71	-11.84	9.92	-11.05
5	30.3-1	11.31	-13.83	10.71	-12.63	9.92	-11.05
1_OHS	30.3-2C/30.3-1	9.60	-22.16	9.60	-19.73	9.60	-18.94
2_OHS	30.3-2C/30.3-1	9.60	-24.84	9.60	-24.24	9.60	-23.45
3_OHS	30.3-2C/30.3-1	9.60	-27.10	9.60	-26.50	9.60	-25.71

** A is effective wind area for C&C: Span Length * Effective Width*
** Effective width need not be less than 1/3 of the span length*
** Maximum and minimum values of pressure shown.*
** + Pressures acting toward surface, - Pressures acting away from surface*
** Per § 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] {Includes LF}*
** Interpolation can be used for values of A that are between those values shown.*

James A Zaleski

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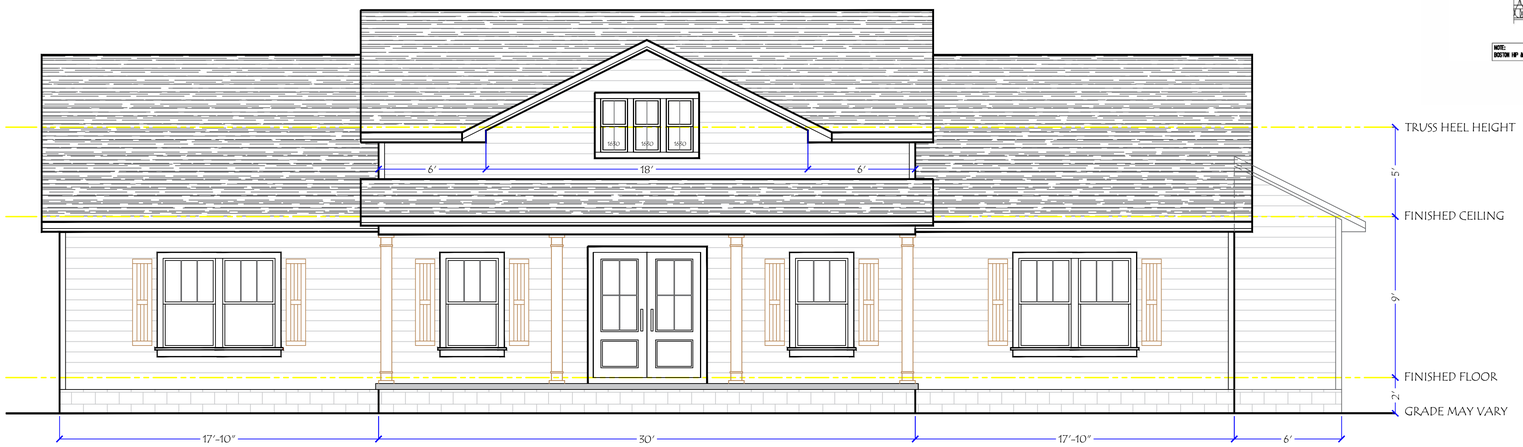
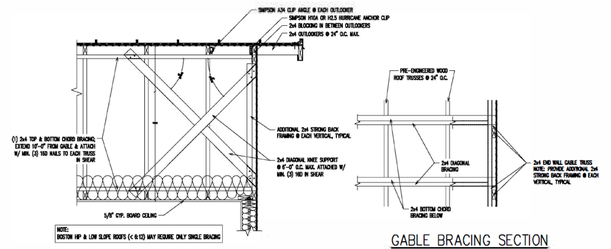


FRONT ELEVATION

SCALE 1/4"=1'-0"



GABLE BRACING SECTION
NTS

GABLE BRACING SECTION
NTS

TRUSS NOTE:

THE DESIGN AND FABRICATION CRITERIA OF ALL WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR STRESS GRADE LUMBER AND ITS FASTENINGS BY THE NATIONAL FOREST PRODUCTS ASSOCIATIONS LATEST REVISION: TIMBER CONSTRUCTION STANDARDS BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST REVISION; AND DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES BY THE TRUSS PLATE INSTITUTE, LATEST REVISION. HANDLING, ERECTION, AND BRACING OF FABRICATED TRUSSES SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE TRUSS PLATE INSTITUTE.

James A Zaleski

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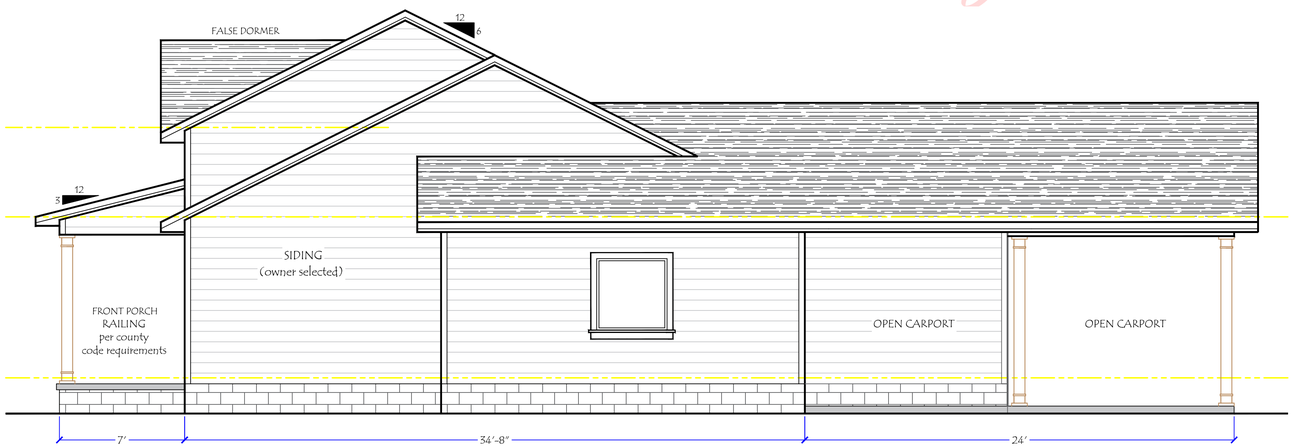

NOTE:

ALL EXTERIOR WINDOWS AND GLASS DOORS SHALL BEAR AAMA OR WDMA OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE, CHARACTERISTICS AND APPROVED PRODUCT EVALUATION TO INDICATE COMPLIANCE WITH CURRENT WINDLOADING ± 40 PSF

SCALE 1/4"=1'-0"

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Reviewed for Compliance
James Zaleski PE 51544 2305 Haverhill Rd
Tallahassee, Fl 32312 PH 850-766-7778 See Wind Load Details

NOTES

1. ACTUAL SLOPE AND/OR VARIATIONS IN GRADE CONDITIONS TO BE DETERMINED ON SITE PRIOR TO CONSTRUCTION.

2. CHECK ALL DIMENSIONS FOR ACCURACY PRIOR TO CONSTRUCTION.

3. ALL CONSTRUCTION MUST CONFORM TO CURRENT STATE AND LOCAL CODES WHERE APPLICABLE:

-FLORIDA BUILDING CODE 2023, 8th EDITION
-FLORIDA FIRE CODE
-NATIONAL ELECTRIC CODE (NEC)2020
-FLORIDA PLUMBING CODE (FBC)

WIND DESIGN BASIS

Basic Wind Speed - 120 mph

Exposure Category - B

Wind Importance Factor - 1.0

Building Category - Enclosed

Internal Pressure Coef. - 0.18

Components & Cladding
Window & Door Pressure ± 40 psf

DRAFTING & DESIGN

Designer Services
LAURI B. KETRING
833 NW BANTA ACRES RD
MAYO, FLORIDA 32066
(850) 672-0485
designgirllauri@yahoo.com

CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

ELEVATIONS

DWG. BY
Lauri B. Ketring

SCALE
1/4"=1'-0"

DATE
November 2024

PROJECT No.

PAGE No.
A-1

REAR ELEVATION

SCALE 1/4"=1'-0"

TRUSS NOTE:

THE DESIGN AND FABRICATION CRITERIA OF ALL WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENINGS BY THE NATIONAL FOREST PRODUCTS ASSOCIATIONS LATEST REVISION; TIMBER CONSTRUCTION STANDARDS BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST REVISION, AND DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES BY THE TRUSS PLATE INSTITUTE, LATEST REVISION. HANDLING, ERECTION, AND BRACING OF FABRICATED TRUSSES SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE TRUSS PLATE INSTITUTE.

James A Zaleski

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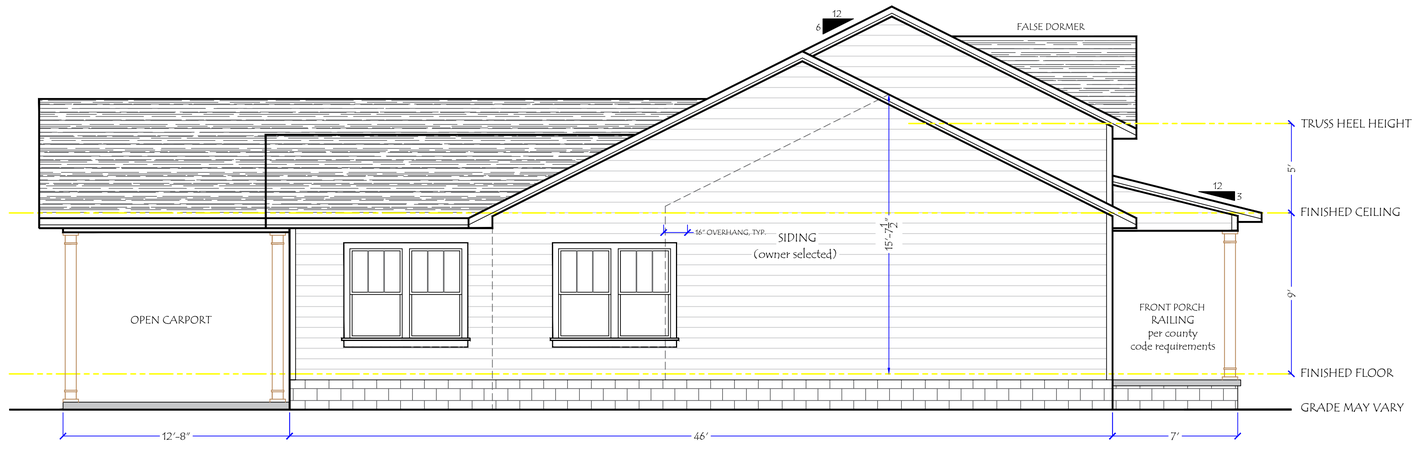
Date: 2024.11.24 14:15:26 -05'00'

Pre- Engineered Wood Trusses

1. All pre-engineered, pre-fabricated wood trusses shall be fastened to their supports with approved hurricane clips or straps.
2. All connection hardware shall be galvanized and supplied by Simpson StrongTie Co. or equivalent manufacturer.
3. Truss erector shall be fully responsible for all temporary bridging of truss system during construction in accordance to published industry guidelines.
4. Manufacture must provide truss installation schedule.
5. Trusses shall be designed in accordance with the TPI Design Specification for Metal Plate Connected Wood Trusses.

NOTE:

ALL EXTERIOR WINDOWS AND GLASS DOORS SHALL BEAR AAMA OR WDMA OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE, CHARACTERISTICS AND APPROVED PRODUCT EVALUATION TO INDICATE COMPLIANCE WITH CURRENT WINDLOADING ± 40 PSF



LEFT SIDE ELEVATION

SCALE 1/4"=1'-0"

Reviewed for Compliance
James Zaleski PE 51544 2305 Haverhill Rd
Tallahassee, Fl 32312 PH 850-766-7778 See Wind Load Details

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NOTES

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2. CHECK ALL DIMENSIONS FOR ACCURACY PRIOR TO CONSTRUCTION.

3. ALL CONSTRUCTION MUST CONFORM TO CURRENT STATE AND LOCAL CODES WHERE APPLICABLE:

-FLORIDA BUILDING CODE 2023, 8th EDITION
-FLORIDA FIRE CODE
-NATIONAL ELECTRIC CODE (NEC)2020
-FLORIDA PLUMBING CODE (FBC)

WIND DESIGN BASIS

Basic Wind Speed - 120 mph

Exposure Category - B

Wind Importance Factor - 1.0

Building Category - Enclosed

Internal Pressure Coef. - 0.18

Components & Cladding
Window & Door Pressure ± 40 psf

DRAFTING & DESIGN

Designer Services
LAURI B. KETRING
833 NW BANTA ACRES RD
MAYO, FLORIDA 32066
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designgirllauri@yahoo.com

CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

ELEVATIONS

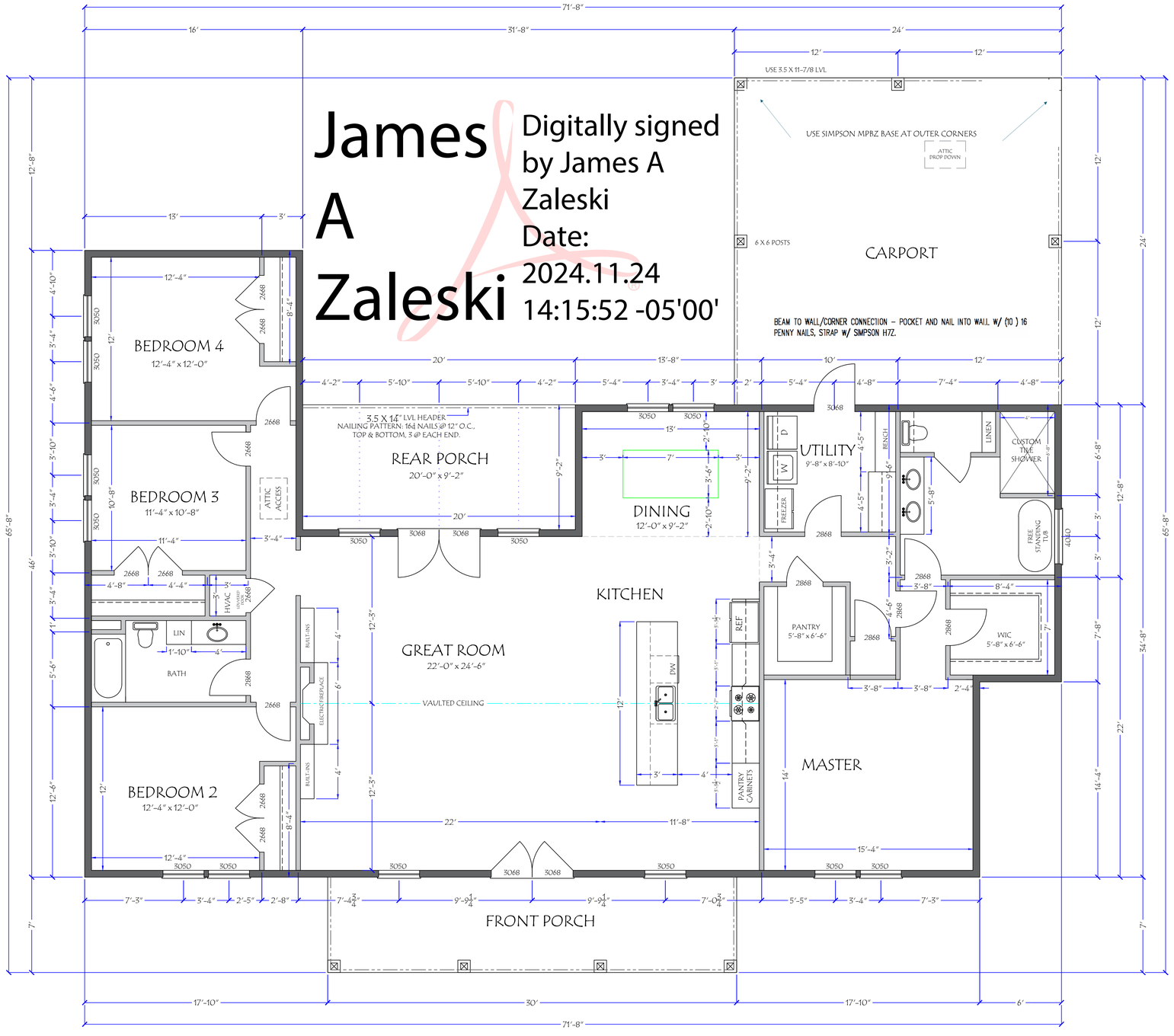
DWG. BY
Lauri B. Ketring

SCALE
1/4"=1'-0"

DATE
November 2024

PROJECT No.

PAGE No.
A - 2



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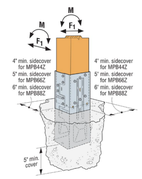

Typical MPB66Z Installation

WINDOW / DOOR NOTES:

ALL WINDOW & DOOR HEADERS TO BE INSTALLED IN ACCORDANCE W/ STATE AND LOCAL CODES

2x6 EXTERIOR AND/OR PLUMBING WALLS

2x4 INTERIOR WALLS

SQUARE FOOTAGE

HEATED SQ FT	2398
FRONT PORCH	210
REAR PORCH	184
CARPORT	576
TOTAL	3,368

PORCH NOTES:

DBL 2X12 HEADER w/ ½" PLYWOOD SPACER OR EQUIVALENT LVL BEAM

6x6 PT SUPPORT POST
ATTACH TO HEADER w/ SIMPSON BC6Z POST CAP.
ATTACH TO SLAB w/
ABU66Z POST BASE & TITAN HD SCREW ANCHOR

MAX STUD HEIGHTS

2X4 STUD @16" O.C 10 FT
2X4 STUD @12" O.C. 12 FT
2X6 STUD @16" O.C 16 FT
ALL WALLS OVER 10 FT TOHAVE 2 ROWS OF BLOCKING

NOTES

1. CHECK ALL DIMENSIONS FOR ACCURACY PRIOR TO CONSTRUCTION.

2. IN THE EVENT OF A CONFLICT BETWEEN THE PLANS AND THE CODES, THE CODES SHALL GOVERN.

3. ALL CONSTRUCTION MUST CONFORM TO CURRENT STATE AND LOCAL CODES WHERE APPLICABLE.

4. EXACT DESCRIPTION OR SPECIFICATIONS NOT PROVIDED ON PLANS (DOORS, WINDOWS, CABINETS, ELECTRICAL, HVAC, FINISHES ETC. TO BE PROVIDED BY CONTRACTOR OR OWNER.)

5. ALL ELECTRICAL, PLUMBING, AND HVAC TO BE INSTALLED BY CURRENTLY LICENSED CONTRACTORS IN ACCORDANCE W/ STATE & LOCAL CODES.

6.INSTALL TPL STUD PACKS IN WALL AND @ ALL GIRDER TRUSS BEARING POINTS.

7. ALL LOAD BEARING WALL'S TO BE SYP OR BETTER FRAMING

DRAFTING & DESIGN

Designer Services
LAURI B. KETRING
833 NW BANTA ACRES RD
MAYO, FLORIDA 32066
(850) 672-0485
designgirllauri@yahoo.com

CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

FLOOR PLAN

DWG. BY
Lauri B. Ketring

SCALE
1/4" =1'-0"

DATE
November 2024

PROJECT No.

PAGE No.
A - 3

FLOOR PLAN

SCALE 1/4"=1'-0"

Reviewed for Compliance
James Zaleski PE 51544 2305 Haverhill Rd
Tallahassee, Fl 32312 PH 850-766-7778 See Wind Load Details

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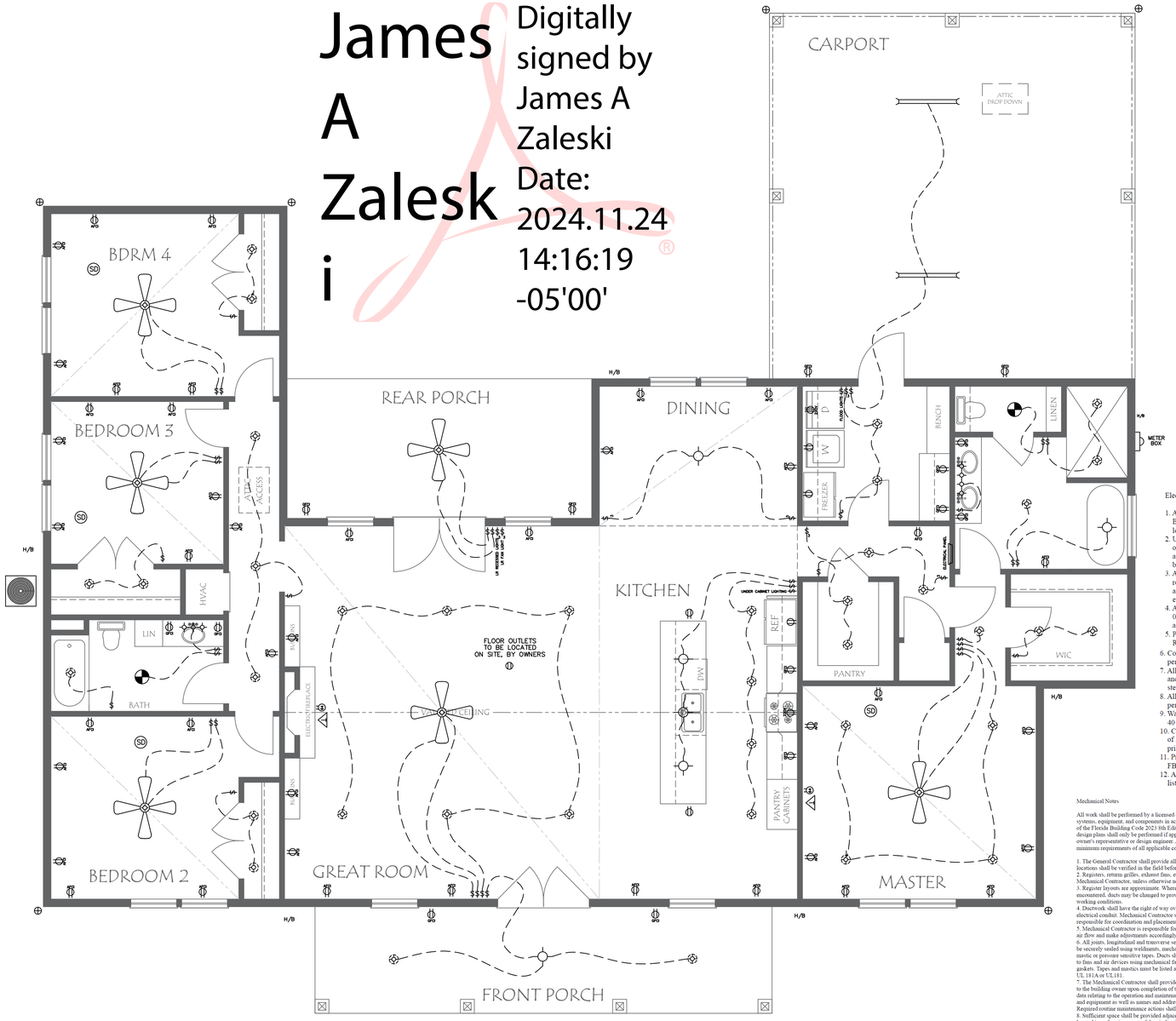

ELECTRICAL SYMBOLS

- PANEL BOX
- DISCONNECT
- SINGLE-POLE SWITCH
- THREE-WAY SWITCH
- FOUR-WAY SWITCH
- DUPLEX RECEPTACLE OUTLET
- DUPLEX RECEPTACLE FLOOR OUTLET
- DUPLEX RECEPTACLE OUTLET 64" AFF
- ARC FAULT CIRCUIT INTERRUPTER
- GROUND FAULT CIRCUIT INTERRUPTER
- 220 VOLT OUTLET
- CEILING OUTLET FIXTURE
- RECESSED CEILING OUTLET FIXTURE
- FLORESCENT LIGHT FIXTURE
- SD SMOKE DECTOR
- CARBON MONOXIDE DECTORS
- EXHAUST FAN/ LIGHT & OR HEAT COMBO
- CEILING OUTLET FIXTURE W/ PULL CORD
- HB HOSE B/B
- TELEVISION HOOK-UP
- TELEPHONE HOOK-UP
- COMPUTER HOOK-UP
- FLOOD LIGHT
- CEILING FAN W/ LIGHT

Electrical Notes

1. All electrical work shall comply with the Florida Building Code 2023 8th edition, NEC and local codes.
2. Unless otherwise noted in written specifications or on the drawings, all electrical work and electrical equipment are to be provided by the electrical contractor.
3. All light fixtures are to be checked before roughing in to insure that they can be mounted as directed by the drawing and that there is enough space to allow such.
4. All 120V homeruns for 20A/1P breakers from 0'-80' in lenght are to be #12. All runs over 80' are to be #10.
5. Provide separate ground wires for all conduits. Raceway shall not be used as ground.
6. Conductors shall not be spliced without written permission from the engineer.
7. All disconnects, J-Boxes, terminal cabinets, etc., and mounting hardware shall be NEMA 4x stainless steel.
8. All conduits shalll have a bond wire, minimum sized per NEC, unless noted otherwise.
9. Wall switches shall be set at a default height of 40 linear inches above finished floor, u.n.o.
10. Contractor is responsible for coordinating location of light fixtures with other trades and plan drawings prior to any installation.
11. Provide smoke detectors in accordance with FBC, section 905.2.
12. All taps, connectors, and mastic shall be UL-181 listed.

Mechanical Notes

All work shall be performed by a licensed contractor. Contractor shall install systems, equipment, and components in accordance with minimum standards of the Florida Building Code 2023 8th Edition Mechanical. Any deviation from the design plans shall only be performed if approved by the building owner, the owner's representative or design engineer. All work shall meet or exceed the minimum requirements of all applicable codes and standards.

1. The General Contractor shall provide all roof openings. Openings sizes and locations shall be verified in the field before roofing is installed.
2. Registers, return grilles, exhaust fans, etc...are to be provided by the Mechanical Contractor, unless otherwise noted on the plans.
3. Register layouts are approximate. Where structural obstructions are encountered, ducts may be changed to provide adequate spacing for future working conditions.
4. Ductwork shall have the right of way over all plumbing pipes and electrical conduit. Mechanical Contractor shall field measure all conditions and be responsible for coordination and placement.
5. Mechanical Contractor is responsible for balancing the building HVAC air flow and make adjustments accordingly.
6. All joints, longitudinal and transverse seams and connections in ductwork shall be securely sealed using weldments, mechanical fasteners with seals, gaskets, mastic or pressure sensitive tapes. Ducts shall be connected to fans and air devices using mechanical fasteners with seals, mastic or gaskets. Tapes and mastics must be listed and labled in accordance with UL 181A or UL181.
7. The Mechanical Contractor shall provide an operation and maintenance manual to the building owner upon completion of the job. The manual shall include basic data relating to the operation and maintenance of HVAC systems and equipment as well as names and addresses of qualified service agencies. Required routine maintenance actions shall be clearly identified.
8. Sufficient space shall be provided adjacent to all mechanical components located in or forming a part of the air distribution system to assure adequate access for construction and sealin, inspection, and cleaning and maintenance. A minimum of 4 inches is considered sufficient space around air handling units.

ELECTRICAL NOTES:

1. ALL ELECTRICAL IS BASIC IN NATURE AND EXACT DETAILS TO BE PROVIDED BY OWNER.
2. NOT LESS THAN 75 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR NOT LESS THAN 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS. (FBC-Energy Conservation R404)

Reviewed for Compliance
James Zaleski PE 51544 2305 Haverhill Rd
Tallahassee, Fl 32312 PH 850-766-7778 See Wind Load Details

ELECTRICAL PLAN

SCALE: 1/4" =1'-0"

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NOTES

1. ALL CONSTRUCTION MUST CONFORM TO CURRENT STATE AND LOCAL CODES WHERE APPLICABLE:

-FLORIDA BUILDING CODE 2025, 8th EDITION
-FLORIDA FIRE CODE
-NATIONAL ELECTRIC CODE (NEC)2020
-FLORIDA PLUMBING CODE (FPC)

2. PROVIDE PHONE & TV OUTLETS

3. RUN HVAC WIRES AS REQUIRED.
4. ALL BATH, EXTERIOR, & KITCHEN OUTLETS, WHERE NOTED TO HAVE GROUND FAULT CIRCUIT INTERRUPTERS.

4. SMOKE DETECTORS TO BE HARD WIRED TO MAIN HOUSE W/ BATTERY BACKUP.

5. MICROWAVE TO HAVE DEDICATED CIRCUIT.

6. PROVIDE LEGIBLE DIRECTORY AT PANEL INDICATING INDIVIDUAL CIRCUITS.

7. LIGHTS PLACED UNDER HOME , UNDER PORCHES, AND LANDSCAPE LOCATIONS DETERMINED BY HOME OWNER/CONTRACTOR.

8. EXACT DESCRIPTION OR SPECIFICATIONS NOT PROVIDED ON PLANS (DOORS, WINDOWS, CABINETS, ELECTRICAL, HVAC, FINISHES ETC. TO BE PROVIDED BY CONTRACTOR OR OWNER.)

9. ALL ELECTRICAL, PLUMBING, AND HVAC TO BE INSTALLED BY CURRENTLY LICENSED FL CONTRACTORS IN ACCORDANCE W/ STATE & LOCAL CODES.

DRAFTING & DESIGN

Designer Services
LAURI B. KETRING
833 NW BANTA ACRES RD
MAYO, FLORIDA 32066
(850) 672-0485
designgirllauri@yahoo.com

CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

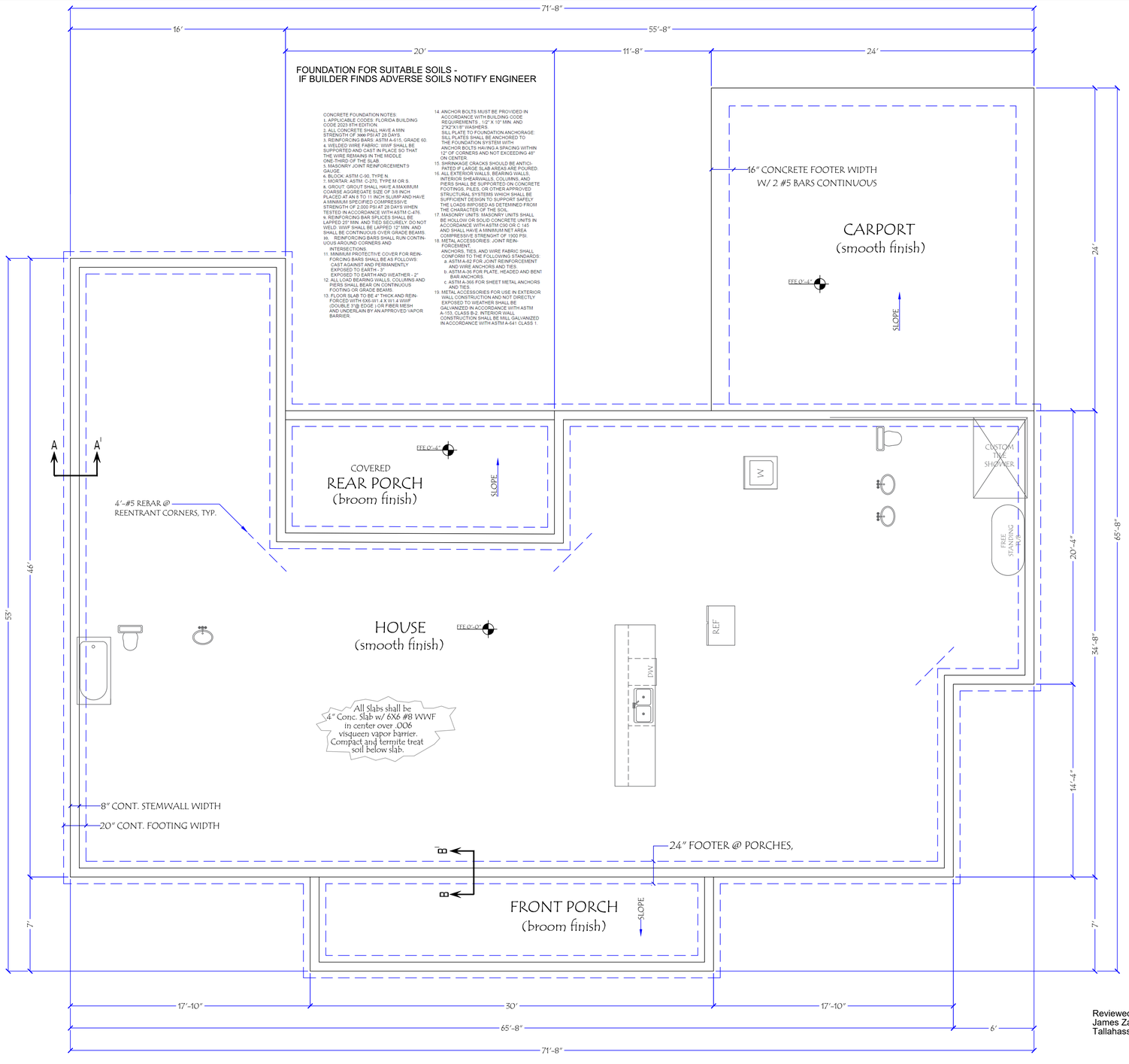
PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

ELECTRICAL PLAN

DWG. BY: Lauri B. Ketring
SCALE: 1/4" =1'-0"
DATE: November 2024
PROJECT No.
PAGE No.: E-1



FOUNDATION/PLUMBING PLAN

SCALE 1/4"=1'-0"

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.11.24 14:16:51 -05'00'

GARAGE NOTES:

R302.5.1 OPENING PROTECTION.
OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 13/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMBCORE STEEL DOORS NOT LESS THAN 13/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS.

R302.6 DWELLING-GARAGE FIRE SEPARATION

SEPARATION	MATERIAL
From the residence and attics	Not less than 5/8" gypsum board or equivalent applied to the garage side.
From habitable rooms above the garage	Not less than 5/8" Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section.	Not less than 5/8" gypsum board or equivalent
Garages located less than 3' from a dwelling unit on the same lot.	Not less than 5/8" gypsum board or equivalent applied to the interior side of the exterior walls that are within this area

309.1 FLOOR SURFACE.
GARAGE FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL.

THE AREA OF FLOOR USED FOR PARKING OF AUTOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY.

PLUMBING NOTES:

CONTRACTOR & HOMEOWNER SHOULD CONSIDER THE STYLE OF ALL FIXTURES THAT WILL BE PLACED BEFORE SETTING PLUMBING.

FLEX HOSE WHERE APPLICABLE.

CONCRETE NOTE:

CONCRETE CONTROL JOINTS SHALL BE LOCATED BY THE CONTRACTOR. CUT JOINTS ¼" OF SLAB THICKNESS OR USE METAL KEYWAY SCREED STRIPS. JOINTS SHALL BE LOCATED 15' TO 20' APART & MAY BE LOCATED NEAR A WALL.

Reviewed for Compliance
James Zaleski PE 51544 2305 Haverhill Rd
Tallahassee, Fl 32312 PH 850-766-7778 See Wind Load Details

NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE.
2. IN THE EVENT OF A CONFLICT BETWEEN THE PLANS AND THE CODES, THE CODES SHALL GOVERN.
3. CONCRETE: 3000 PSI,STEEL: GRADE 40
4. ALL FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY A MODIFIED PROCTOR.
5. ALL REBAR SPLICES SHALL BE 24" MINIMUM.
6. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT THE SITE PRIOR TO BEGINNING CONSTRUCTION.
7. ALL REINFORCEMENT SHALL BE LOCATED A MIN. 3" FROM CONCRETE SURFACE.
8. ANY ORGANIC MATERIAL UNDER FOUNDATION SHALL BE REMOVED PRIOR TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
9. FOR STEM WALLS 56" OR HIGHER, FORM WORK SHALL BE BRACED BEFORE BACKFILLING.
10. CONCRETE BLOCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI.
11. FOUNDATION DESIGN UNLESS NOTED IS BASED UPON A MIN. BEARING CAPACITY OF 1500 PSF.
12. OWNER SHALL CHECK WITH LOCAL BUILDING DEPARTMENT FOR APPLICABLE LOCATION AND SUITABILITY.

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CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

FOUNDATION PLAN

DWG. BY
Lauri B. Ketring

SCALE
1/4" = 1'-0"

DATE
November 2024

PROJECT No.

PAGE No.
S-2

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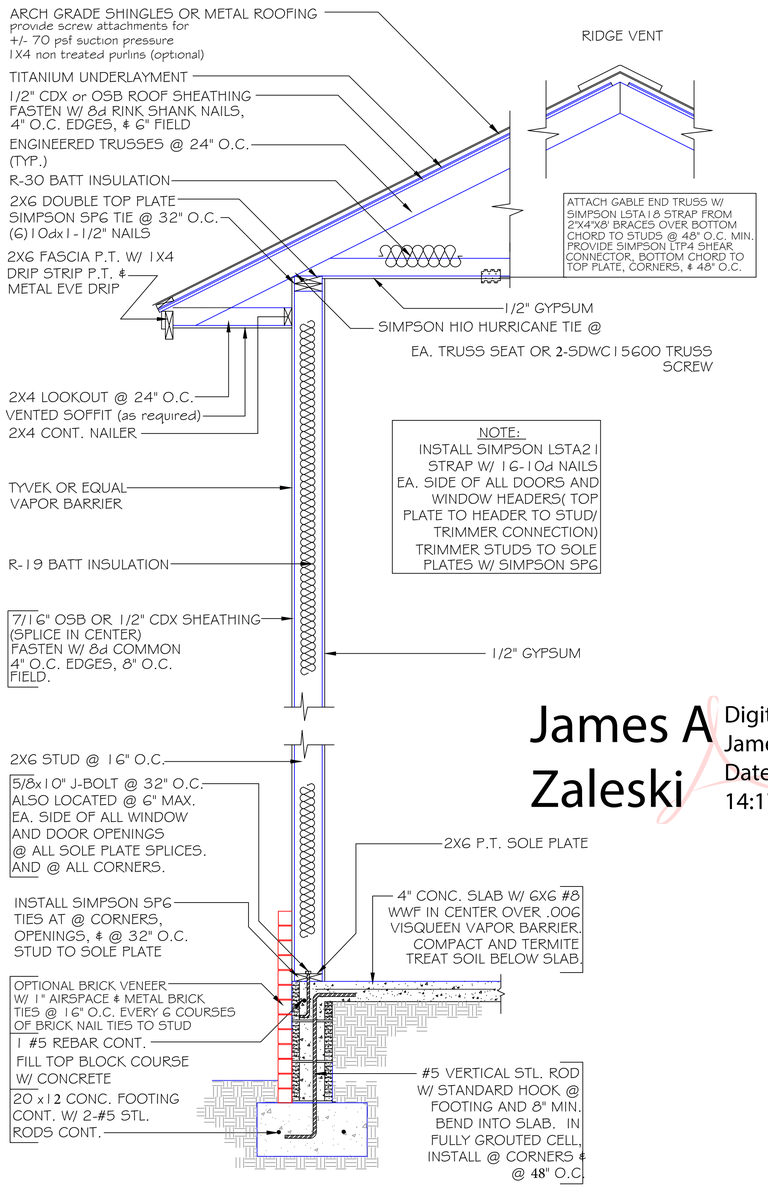
REINFORCING CLEARANCES/COVER (#5 - # 11 BARS)		
EXPOSURE CONDITION	MIN COVER (U.N.O.)	TOLERANCE
CAST AGAINST AND PERMANENETLY EXPOSURE TO EARTH	3"	-⅜" to +1"
EXPOSED TO EARTH OR WEATHER; #5 AND SMALLER BARS #6 AND LARGER BARS	1½" 2"	-½" to +¾" -½" to +¾"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND; SLABS, WALLS, JOISTS BEAMS, COLUMNS, PIERS (TO TIES & STIRRUPS)	1½" 2"	-½" to +¾" -½" to +½"



NOTE:
INSTALL SIMPSON LSTA21 STRAP W/ 16-10d NAILS EA. SIDE OF ALL DOORS AND WINDOW HEADERS(TOP PLATE TO HEADER TO STUD/ TRIMMER CONNECTION) TRIMMER STUDS TO SOLE PLATES W/ SIMPSON SP6

WALL SECTION A-A'

SCALE 3/4"=1'-0"

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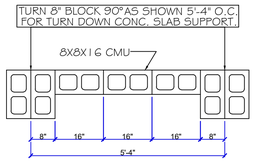
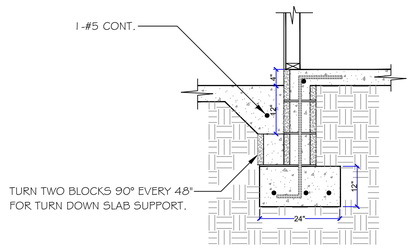


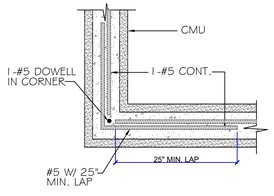
PLAN VIEW



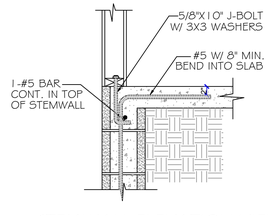
SECTION B-B'

TURNDOWN SLAB SUPPORT @ PORCHES

NOT TO SCALE



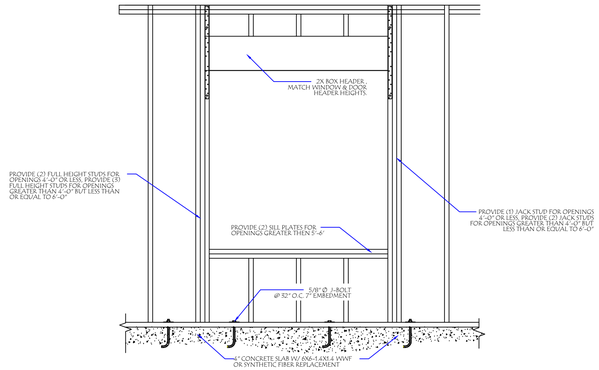
STEMWALL PLAN VIEW



STEMWALL ELEVATION VIEW

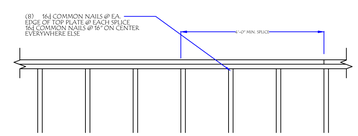
CONTINUITY REINFORCEMENT AT CORNERS

NOT TO SCALE



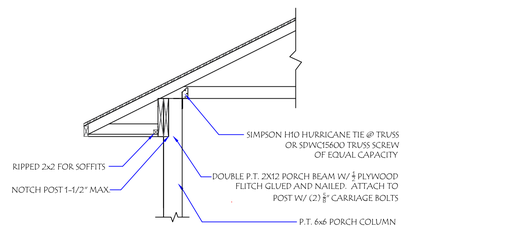
TYPICAL OPENING FRAMING

SCALE 1/2"=1'-0"



WALL TOP PLATE SPLICE DETAIL

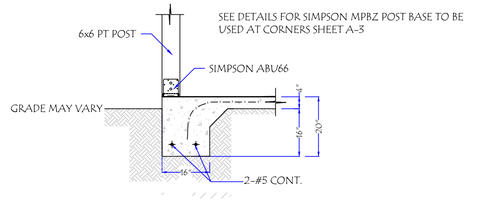
SCALE 1/2"=1'-0"



OPEN CARPORT

EXTERIOR PORCH FRAMING DETIAL

SCALE 1/2"=1'-0"



OPEN CARPORT

POST FOOTER DETAIL

SCALE 1/2"=1'-0"

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NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2023 8TH EDITION FLORIDA BUILDING CODE.
2. IN THE EVENT OF A CONFLICT BETWEEN THE PLANS AND THE CODES, THE CODES SHALL GOVERN.
3. CONCRETE: 3000 PSI,STEEL: GRADE 40
4. ALL FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY A MODIFIED PROCTOR.
5. ALL REBAR SPLICES SHALL BE 24" MINIMUM.
6. SOIL SHALL BE CHEMICALLY TREATED FOR TERMITES PER F.B.C
7. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT THE SITE PRIOR TO BEGINNING CONSTRUCTION.
8. ALL REINFORCEMENT SHALL BE LOCATED A MIN. 3" FROM CONCRETE SURFACE.
9. ANY ORGANIC MATERIAL UNDER FOUNDATION SHALL BE REMOVED PRIOR TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
10. FOR STEM WALLS 56" OR HIGHER, FORM WORK SHALL BE BRACED BEFORE BACKFILLING.
11. CONCRETE BLOCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI.
12. FOUNDATION DESIGN UNLESS NOTED IS BASED UPON A MIN. BEARING CAPACITY OF 1500 PSI.
13. OWNER SHALL CHECK WITH LOCAL BUILDING DEPARTMENT FOR APPLICABLE LOCATION AND SUITABILITY.

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CERTIFICATION

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NAME

Albritton Residence
Columbia County, Florida

TITLE

STRUCTURAL DETAILS

DWG. BY
Lauri B. Ketring

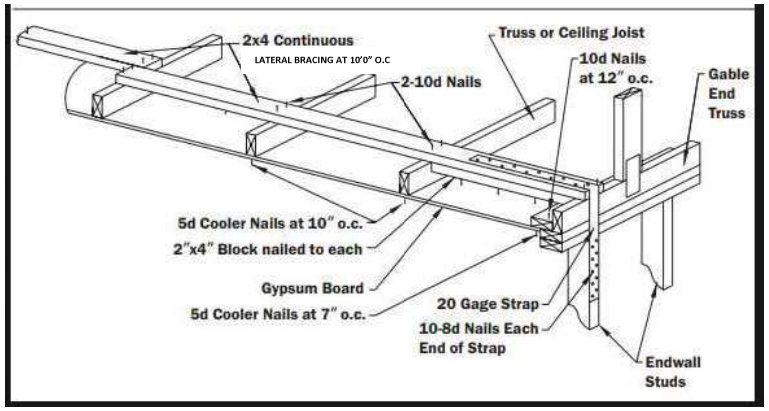
SCALE
varies

DATE
November 2024

PROJECT No.

PAGE No.
S-2

GABLE END BRACING



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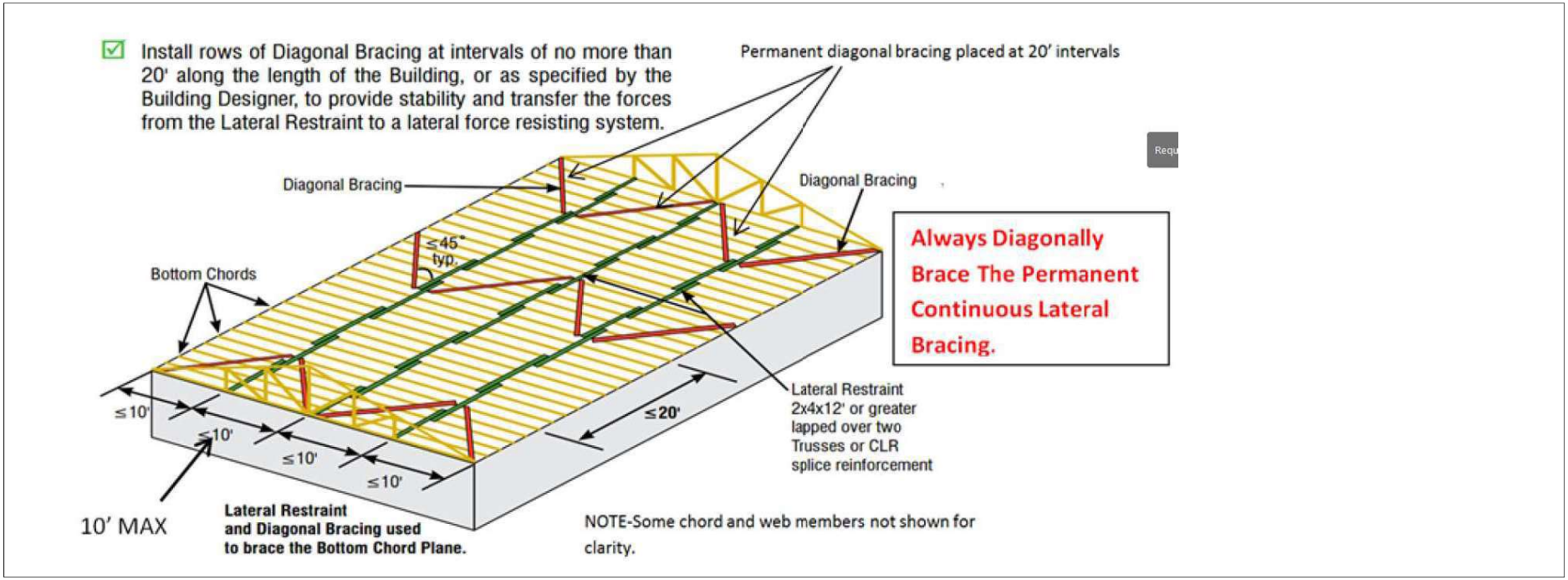

James A Zaleski

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1. CONCRETE REQUIREMENTS:

ALL CONCRETE SHALL BE OF AT LEAST 3000PSI 28-DAY COMPRESSIVE STRENGTH.
ALL CONCRETE GRADE BEAMS AND SLABS SHALL BE RUN CONTINUOUSLY AS TO BEHAVE IN A MONOLITHIC FASHION.
CONCRETE SLAB THICKNESS SHALL BE 4" ABOVE THE FOOTERS, AS SHOWN IN THE DETAILS.
STEP DOWNS AND LEDGES IN THE CONCRETE SHALL NOT REDUCE THE CONCRETE COVER REQUIREMENT FOR STEEL REINFORCEMENT.
A 6 MIL VAPOR BARRIER SHALL BE PLACED PRIOR TO CONCRETE POUR, AS SHOWN IN THE DETAILS.

2. REINFORCEMENT REQUIREMENTS:

ALL STEEL REINFORCEMENT SHALL BE GRADE 60 (60 KSI).
3" OF PROPER, MINIMUM COVER OVER REBAR SHALL BE MAINTAINED FROM ALL CONCRETE SURFACES , AS SHOWN IN THE DETAILS.
NO. 2 WIRE TIES SHALL BE PLACED 48" ON CENTER WITH A MINIMUM OF THREE TIES PER BAR, AS SHOWN IN THE DETAILS.
ALL LONGITUDINAL REBAR SHALL BE RUN CONTINUOUSLY SUCH THAT THE FOUNDATION SYSTEM ACTS IN A MONOLITHIC FASHION.
ALL REBAR OVERLAPS (LAP SPLICES) SHALL BE AT LEAST 40".

3. SOIL REQUIREMENTS:

SATISFACTORY FILL MATERIAL SHALL BE FREE OF VEGETATION AND ORGANIC MATTER, WITH NOT MORE THAN 20 PERCENT BY WEIGHT PASSING THE 200 SIEVE.
FILL LIFTS SHALL BE 12 INCHES MAXIMUM.
ALL TOP SOIL CONTAINING UNSUITABLE MATERIAL SHALL BE REMOVED PRIOR TO THE PLACEMENT OF CLEAN FILL MATERIAL.
ALL CLEAN FILL SHALL BE PLACED ON TOP OF UNDISTURBED SOIL, FREE OF DELETERIOUS AND ORGANIC MATERIALS, AS NOTED ABOVE.

MORTAR: MORTAR SHALL BE TYPE M OR TYPE S: (28 DAY STRENGTH OF 2000 PSI). MASONRY SHALL BE LAID IN A RUNNING BOND.

4. CONCRETE MASONRY UNITS:

A. CMU SHALL MEET THE REQUIREMENTS OF ASTM C 90.
B. THE MINIMUM COMPRESSIVE STRENGTH OF THE MASONRY SHALL BE F'M = 1500 PSI.
C. WHEN 12" CMU IS UTILIZED INSTEAD OF 8" CMU, THE OVERALL WIDTH OF THE FOOTER SHALL BE INCREASED BY 4" UNLESS OTHERWISE SPECIFIED ON THE DETAILS.
D. ALTERNATIVE REINFORCING BAR SIZES AND SPACINGS HAVING AN EQUIVALENT CROSS-SECTIONAL AREA OF REINFORCEMENT PER LINEAL FOOT OF WALL SHALL BE PERMITTED PROVIDED THE SPACING OF THE REINFORCEMENT DOES NOT EXCEED 72 INCHES.
E. VERTICAL REINFORCEMENT SHALL BE GRADE 60 MINIMUM. THE DISTANCE FROM THE FACE OF THE SOIL SIDE OF THE WALL TO THE CENTER OF VERTICAL REINFORCEMENT SHALL BE AT LEAST 5 INCHES FOR 8" CMU AND 8-3/4" INCHES FOR 12" CMU.

SOIL NOTES
SATISFACTORY FILL MATERIAL SHALL BE FREE OF VEGETATION AND ORGANIC MATTER, WITH NOT MORE THAN 20 PERCENT BY WEIGHT PASSING THE 200 SIEVE.

FILL LIFTS SHALL BE 12 INCHES MAXIMUM.

ALL TOP SOIL CONTAINING UNSUITABLE MATERIAL SHALL BE REMOVED PRIOR TO THE PLACEMENT OF CLEAN FILL MATERIAL.

COMPACTION TEST RESULTS SHALL BE PROVIDED TO THE CITY/COUNTY INSPECTOR AND THE ENGINEER FOR APPROVAL PRIOR TO THE PLACEMENT OF ANY CONCRETE, STRUCTURES, BUILDING FOUNDATIONS, PAVEMENTS, OR OTHER MATERIALS.. EACH LAYER OF CLEAN FILL SHALL BE ADEQUATELY COMPACTED TO AT LEAST 95% OF OPTIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.

ALL SOILS SHALL BE ADEQUATELY DRAINED/DRIED PRIOR TO CONCRETE POUR.

SOIL BENEATH SLAB SHALL BE CHEMICALLY TREATED FOR TERMITES.

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

GENERAL LUMBER NOTES

1. LUMBER AND WOOD FRAMING SHALL COMPLY WITH CHAPTER 23 OF THE 2023 BUILDING CODE
2. ALL STRUCTURAL LUMBER TO BE MIN SOUTHERN YELLOW PINE NUMBER 2
3. MICROLAM LVL BEAMS USED AS MULTIPLE ASSEMBLY BEAMS TO BE CONNECTED WITH 3 ROWS OF 16D NAILS AT 12" O.C.

STRUCTURAL GLUED LAMINATED TIMBER SHALL BE PRODUCED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC). MINIMUM ALLOWABLE BENDING STRESS SHALL BE 2,400 PSI (DRY CONDITIONS).

PROVIDE DRESSED SEASONED LUMBER, S4S, WITH A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF DRESSING AS LISTED BELOW.

INTERIOR AND EXTERIOR LOAD-BEARING WALLS:
SOUTERN PINE, NO. 2 GRADE.

LINTELS, FLOOR JOISTS AND BEAMS:
SOUTERN PINE, NO. 2 GRADE.

WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE PRESSURE-TREATED. USE GALVANIZED NAILS IN PRESSURE-TREATED WOOD. THE PROTECTIVE COATING ON LIGHT GAUGE STEEL CONNECTIONS IN CONTACT W/ PRESURE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURERS RECOMMENDATIONS.

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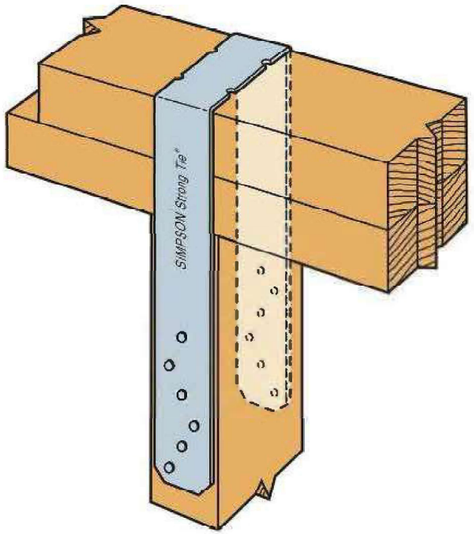
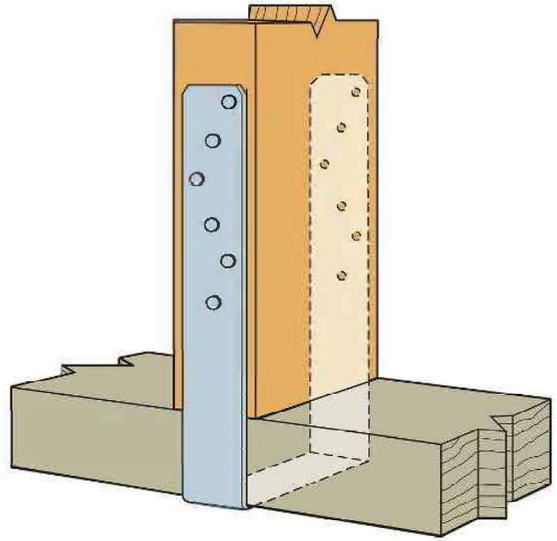
Model No.	Dimensions (in.)		Stud	Plate Width	Fasteners (in.)
	W	L			Stud
SPH4	3 9/16	8 3/4	2x	4x	(10) 0.148 x 1 1/2 OR (12) 0.148 x 1 1/2



Typical SPH4 Installation



Typical SPH4 Installation

James A Zaleski

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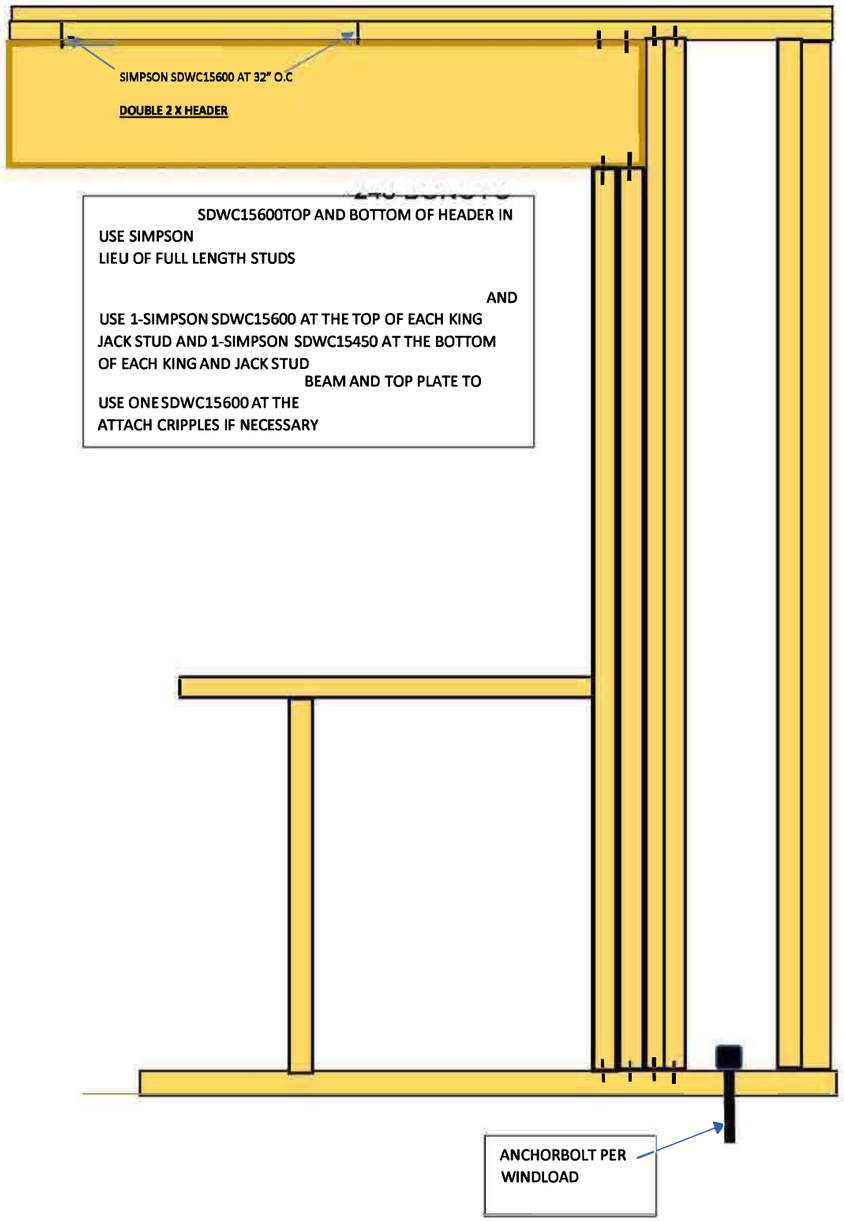

HEADER SIZE AND STRAPPING CHART

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 ½" 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 ¾" X 9 ¼" LVL	3	2	2 SIMPSON MSTA24	2 SIMPSON SPH4
IN LIEU OF STRAPPING USE A SDWC15600 AT THE TOP OF EACH JACK AND KING STUD AND ONE SDWC15450 AT THE BASE OF EACH JACK AND KING STUD					

AT ALL CORNERS USE 3- SIMPSON SDWC1540 SCREWS AT BASE AND 3- SIMPSON SDWC15600 AT TOP – IF NECESSARY, USE 2-SCREWS IN ONE STUD AND ADD ONE MORE STUD MIDSPAN

JAMES A. ZALESKI LICENSE No. 51544 STATE OF FLORIDA PROFESSIONAL ENGINEER

James A Zaleski

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