`

WIND ANALYSIS -- 130MPH Wind Velocity or as interpolated
2023 8th edition Florida Building Code
Calculations as per Section ***1609ASCE 7-22***

Prepared By
James Zaleski PE 51544

432 SE STARDUST PL. LAKE CITY FL

SAULS HOME

Contractor __ Americas Homeplace
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 ***14.79*** **End Zone Length 6.0 feet**

_ **MAX OVERHANG 2.0 FT**

MANUFACTURED TRUSSES TO BE USED
Roof Slope =–7/12
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 AREAS
2 – H2.5A CAN BE USED IN LIEU OF 1-H-10A

ROOF SHEATHING MATERIAL –7/16" OSB
NAILING – 8D RING SHANK

NAILING PATTERN
EDGES-
6" O.C FIELD – 6" O.C
EDGE SPACING TO BE 4" O.C ON THE FIRST PANEL AT ALL EAVES

J

James A Zaleski
Digitally signed by James A Zaleski
Date: 2024.12.14 21:33:40 -05'00'

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

Job Address: _____ FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies. _____

Plan May Be Mirrored at Contractors Option

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

Wall Exterior Panel – Sheath with 7/16" OSB
– 2 X 4 STUDS AT 16" O.C. UP TO 9 FEET
– 2 X 4 STUDS AT 12" O.C. UP TO 11 FEET
– 2 X 6 STUDS AT 16" O.C. UP TO 16 FEET

ALL WALLS OVER 10 FEET TO HAVE 2 ROWS OF BLOCKING

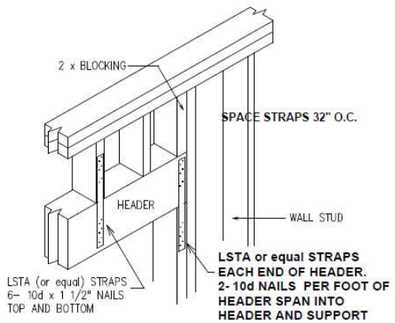
POSTS USE SIMPSON ABU BASE WITH 2-LSTA24 STRAPS AT TOP AND 2 SIMPSON SDWC 15600 SCREWS FROM POST TO BEAM

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

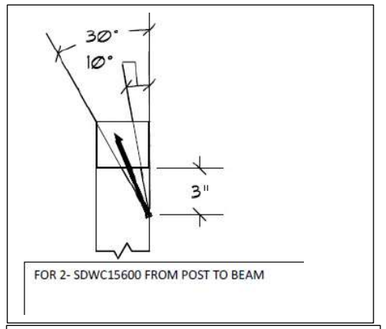
SIMPSON SPH STRAPS MAY BE USED IN LIEU OF SCREWS

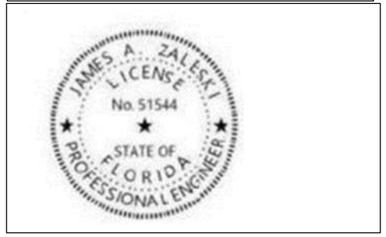
½ X 10 ANCHORBOLT 48" O.C AND 6 INCHES FROM EACH CORNER

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



HEADER CONN.





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

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:34:09 -05'00'

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

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

James A Zaleski Digitally signed by James A Zaleski Date: 2024.12.14 21:34:51 -05'00'

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)***

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.

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

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacen
o the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies

MecaWind v2502

Calculations Prepared by:
JAMES ZALESKI P.E 51544
2305 HAVERHILL RD
TALLAHASSEE, FL, 32312
Date: Dec 14, 2024
File Location: Current Project Not Saved

General:

Reference Abbreviations: T: Table, F: Figure, E: Equation, §: Section

Wind Load Standard	=	ASCE 7-22	Basic Wind Speed	=	130.0 mph
Exposure Classification	=	B	Risk Category	=	II
Structure Type	=	Building	Design Basis for Wind Pressures	=	ASD
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
Help	=	Help on Building Roof Type	=	Help	R_{Ht}	=	Ridge Height	=	20.522 ft
E_{Ht}	=	Eave Height	=	9.050 ft	W	=	Building Width	=	35.333 ft
L	=	Building Length	=	52.000 ft	Pitch	=	Pitch of Roof	=	7.0 :12
θ	=	Slope of Roof	=	30.256 °	OH	=	Overhang Configuration	=	All Soffit
Par	=	Parapet	=	None	z_i	=	Highest Opening Elevation	=	7.0000 ft
HT_{over}	=	Override Mean Roof Height	=	False	Ht_{man}	=	Mean Roof Height	=	14.786 ft
RA_{over}	=	Override Roof Area	=	False	GC_{pi_o}	=	Override GC_{pi} value	=	False
IsElev	=	Building is Elevated	=	False		=			

Exposure Constants [T: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

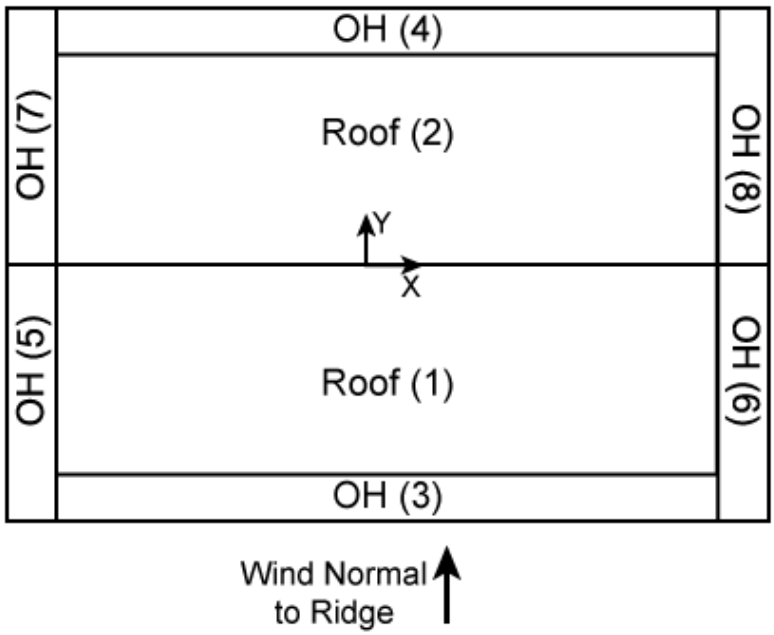
Main Wind Force Resisting System (MWFRS) Wind Calculations per Ch 27

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:35:31 -05'00'

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:36:09 -05'00'



h = Mean structure height	= 14.786 ft	$K_h = 2.41 \cdot (15/Z_g)^{2/\alpha}$ T:26.10-1	= 0.573
K_{zt} = No Topographic Feature	= 1.000	K_d = Directionality Factor T:26.6-1	= 0.85
GC_{pi} = ± Internal Press Coef T:26.13-1	= ±0.18	LF = ASD Load Factor	= 0.60
K_e = Ground Elev Factor T:26.10-1	= 1.000	$q_h = .00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF$ E:26.10-1	= 14.87 psf
q_{in} = Negative Internal Pressure: q_h	= 14.87 psf	q_{ip} = For +GC_{pi} use q_h	= 14.87 psf
A_{roof} = Roof Area	= 2,550.01 ft²		

MWFRS Wind Loads [Normal to Ridge]

h = Mean Roof Height of Building	= 14.7861 ft	R_{Ht} = Ridge Height Of Roof	= 20.5221 ft
B = Building Width Normal To Wind	= 52.0000 ft	L = Building Width Parallel To Wind	= 35.3330 ft
L/B = Ratio: L/B	= 0.679	h/L = Ratio: h/L	= 0.418
θ = Slope of Roof	= 30.26 °	G = Gust Factor: Min(G_1, G_2)	= 0.850
Cp_{WW} = Windward Wall Coefficient	= 0.800	Cp_{LW} = Leeward Wall Coefficient	= -0.500
Cp_{SW} = Side Wall Coefficient	= -0.700		

Wall 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
9.050	+0.18	14.87	0.573	1.000	14.87	6.32	-7.65	-9.80	13.97	9.60
9.050	-0.18	14.87	0.573	1.000	14.87	10.87	-3.10	-5.25	13.97	9.60

K_z	*= $2.41 \cdot (15/Z_g)^{2/\alpha}$*	*K_{zt}*	*= No Topographic Feature*
GC_{pi}	*= +Internal Coef T:26.13-1*	*q_z*	*= $.00256 \cdot K_z \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF$ E:26.10-1*
q_{ip}	*= For +GC_{pi} use q_h*	*q_{in}*	*= Negative Internal Pressure: q_h*
Side	*= $q_h \cdot K_d \cdot G \cdot Cp_{SW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$ E:27.3-1*	*Leeward*	*= $q_h \cdot K_d \cdot G \cdot Cp_{LW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$ E:27.3-1*
Windward	*= $q_z \cdot K_d \cdot G \cdot Cp_{WW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$ E:27.3-1*	*Total*	*= Windward - Leeward*
+Press	*= Pressure Acting Toward Surface*	*-Press*	*= Pressure Acting Away from Surface*
§27.1.5	*= MWFRS Min Wall Pressure = 9.60 psf*		

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

Component	Description	Location	Start ft	End ft	θ °	Basis	GC_{pi}	C_{pMin}	C_{pMax}	P_{min} psf	P_{max} psf	P_{min} psf
Overhang	Leeward	7,8	All	All	30.26	N	0	-0.6	-0.6	-6.45	-6.45	4.80
Overhang	Windward	5,6	All	All	30.26	N	0	0.238	-0.197	2.55	-2.11	4.80
Overhang	Leeward	4	All	All	30.26	N	+0.18	-0.6	-0.6	-8.72	-8.72	4.80
Overhang	Windward	3	All	All	30.26	N	+0.18	0.238	-0.197	0.28	-4.39	4.80
Roof	Leeward	2	All	All	30.26	N	+0.18	-0.6	-0.6	-8.72	-8.72	4.80
Roof	Windward	1	All	All	30.26	N	+0.18	0.238	-0.197	0.28	-4.39	4.80
Soffit	Bottom	3	All	All	0.0	N/A	+0.18	0.8	0.8	6.32	6.32	4.80
Overhang	Leeward	4	All	All	30.26	N	-0.18	-0.6	-0.6	-4.17	-4.17	4.80

Overhang	Windward	3	All	All	30.26	N	-0.18	0.238	-0.197	4.83	0.16	4.80
Roof	Leeward	2	All	All	30.26	N	-0.18	-0.6	-0.6	-4.17	-4.17	4.80
Roof	Windward	1	All	All	30.26	N	-0.18	0.238	-0.197	4.83	0.16	4.80
Soffit	Bottom	3	All	All	0.0	N/A	-0.18	0.8	0.8	10.87	10.87	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_{min} = $q_h \cdot K_d \cdot G \cdot C_{pMin} - q_{ip} \cdot K_d \cdot GC_{piE:27.3-1}$
GC_{pi} = +Internal Coef T:26.13-1
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
C_{pMax} = Largest Coefficient Magnitude
P_{max} = $q_h \cdot K_d \cdot G \cdot C_{pMax} - q_{in} \cdot K_d \cdot GC_{piE:27.3-1}$
Basis = P=Parallel to Ridge: N=Normal to Ridge
θ = Roof Slope Relative to Wind
+Press = Pressure Acting Toward Surface

• 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

MWFRS Wind Loads [Parallel to Ridge]

h = Mean Roof Height of Building = 14.7861 ft
B = Building Width Normal To Wind = 35.3330 ft
L/B = Ratio: L/B = 1.472
θ = Slope of Roof = 30.26 °
Cp_{WW} = Windward Wall Coefficient = 0.800
Cp_{SW} = Side Wall Coefficient = -0.700

R_{Ht} = Ridge Height Of Roof = 20.5221 ft
L = Building Width Parallel To Wind = 52.0000 ft
h/L = Ratio: h/L = 0.284
G = Gust Factor: Min(G_1, G_2) = 0.850
Cp_{LW} = Leeward Wall Coefficient = -0.406

Wall 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
20.522	+0.18	14.87	0.623	1.000	16.17	7.07	-6.63	-9.80	13.70	9.60
14.786	+0.18	14.87	0.573	1.000	14.87	6.32	-6.63	-9.80	12.95	9.60
9.050	+0.18	14.87	0.573	1.000	14.87	6.32	-6.63	-9.80	12.95	9.60
20.522	-0.18	14.87	0.623	1.000	16.17	11.62	-2.08	-5.25	13.70	9.60
14.786	-0.18	14.87	0.573	1.000	14.87	10.87	-2.08	-5.25	12.95	9.60
9.050	-0.18	14.87	0.573	1.000	14.87	10.87	-2.08	-5.25	12.95	9.60

James A Zaleski
Digitally signed by James A Zaleski
Date: 2024.12.14 21:39:04 -05'00'

K_z = $2.41 \cdot (15/Z_g)^{2/\alpha}$
GC_{pi} = +Internal Coef T:26.13-1
q_{ip} = For +GC_{pi} use q_h
Side = $q_h \cdot K_d \cdot G \cdot Cp_{SW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$ E:27.3-1
Windward = $q_z \cdot K_d \cdot G \cdot Cp_{WW} - q_{ip} \cdot K_d \cdot (GC_{pi+})$ E:27.3-1
+Press = Pressure Acting Toward Surface
§27.1.5 = MWFRS Min Wall Pressure = 9.60 psf

K_{zt} = No Topographic Feature
q_z = $.00256 \cdot K_z \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF_{E:26.10-1}$
q_{in} = Negative Internal Pressure: q_h
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

James A Zaleski
Digitally signed by James A Zaleski
Date: 2024.12.14 21:36:37 -05'00'

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

Component	Description	Location	Start ft	End ft	θ °	Basis	GC_{pi}	C_{pMin}	C_{pMax}	P_{min} psf	P_{max} psf	P_{min} psf
Overhang	Overhang 0 to h/2	5,7	0.000	2.000	0.0	P	0	-0.9	-0.18	-9.67	-1.93	4.80
Overhang	Overhang ≥ 2•h	6,8	54.000	56.000	0.0	P	0	-0.3	-0.18	-3.22	-1.93	4.80
Overhang Bottom	Bottom	5,7	All	All	0.0	N/A	0	0.8	0.8	8.60	8.60	4.80
Overhang	Overhang 0 to h	3,4	2.000	14.786	0.0	P	+0.18	-0.9	-0.18	-11.95	-4.21	4.80
Overhang	Overhang h to 2•h	3,4	14.786	29.572	0.0	P	+0.18	-0.5	-0.18	-7.65	-4.21	4.80
Overhang	Overhang ≥ 2•h	3,4	29.572	54.000	0.0	P	+0.18	-0.3	-0.18	-5.50	-4.21	4.80
Roof	Roof 0 to h	1,2	2.000	14.786	0.0	P	+0.18	-0.9	-0.18	-11.95	-4.21	4.80
Roof	Roof h to 2•h	1,2	14.786	29.572	0.0	P	+0.18	-0.5	-0.18	-7.65	-4.21	4.80
Roof	Roof ≥ 2•h	1,2	29.572	54.000	0.0	P	+0.18	-0.3	-0.18	-5.50	-4.21	4.80
Overhang	Overhang 0 to h	3,4	2.000	14.786	0.0	P	-0.18	-0.9	-0.18	-7.39	0.34	4.80
Overhang	Overhang h to 2•h	3,4	14.786	29.572	0.0	P	-0.18	-0.5	-0.18	-3.10	0.34	4.80
Overhang	Overhang ≥ 2•h	3,4	29.572	54.000	0.0	P	-0.18	-0.3	-0.18	-0.95	0.34	4.80
Roof	Roof 0 to h	1,2	2.000	14.786	0.0	P	-0.18	-0.9	-0.18	-7.39	0.34	4.80
Roof	Roof h to 2•h	1,2	14.786	29.572	0.0	P	-0.18	-0.5	-0.18	-3.10	0.34	4.80
Roof	Roof ≥ 2•h	1,2	29.572	54.000	0.0	P	-0.18	-0.3	-0.18	-0.95	0.34	4.80

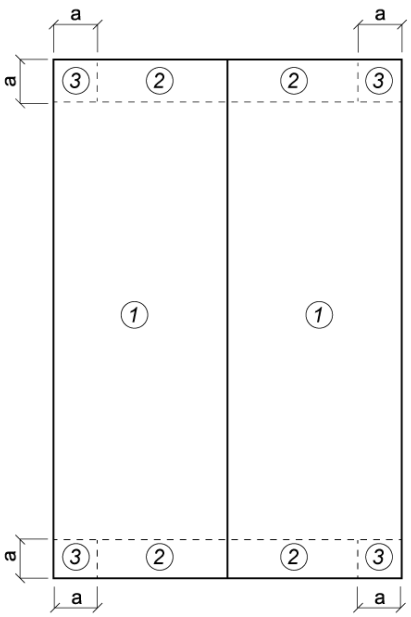
Roof Pressures based upon Ch 27:

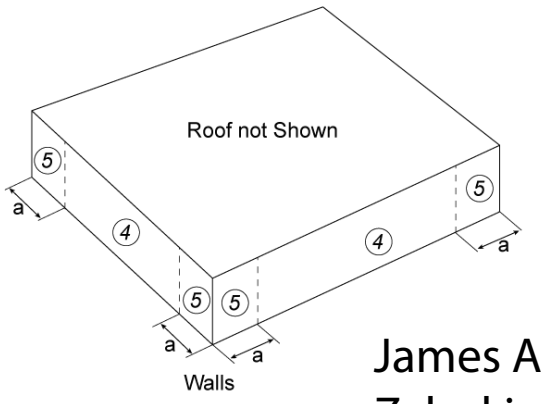
Component = The building component for pressures
Start = Start Dist from Windward Edge
C_{pMin} = Smallest Coefficient Magnitude
P_{min} = $q_h \cdot K_d \cdot G \cdot C_{pMin} - q_{ip} \cdot K_d \cdot GC_{piE:27.3-1}$
GC_{pi} = +Internal Coef T:26.13-1
P_{min} = Min Press projected on vertical plane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

• 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

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





James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:39:20 -05'00'

h = Mean structure height	=	14.786 ft	
K_{zt} = No Topographic Feature	=	1.000	
GC_{pi} = ± Internal Press Coef T:26.13-1	=	±0.18	
K_e = Ground Elev Factor T:26.10-1	=	1.000	
θ = Slope of Roof	=	30.26 °	
a = Max(a_1, 0.04•B, 3 ft [0.9 m])	=	3.533 ft	

$K_h = 2.41 \cdot (15/Z_g)^{2/\alpha}$	=	0.573
K_d = Directionality Factor T:26.6-1	=	0.85
LF = ASD Load Factor	=	0.60
$q_h = .00256 \cdot K_h \cdot K_{zt} \cdot K_e \cdot V^2 \cdot LF_{E:26.10-1}$	=	14.87 psf
a_1 = Min(0.1•B, 0.4•h)	=	3.533 ft

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 ft	Span ft	Area ft²	1/3 Rule	Reference	GC_{pi}	GC_{pd}	GC_{pu}	P_{down} psf	P_{uplift} psf
Zone 1	1	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-1.80	13.65	-25.03
Zone 2	2	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-2.00	13.65	-27.56
Zone 3	3	1.0000	1.0000	1.00	No	F:30.3-2D	±0.18	0.90	-2.50	13.65	-33.88
Zone 4	4	1.0000	1.0000	1.00	No	F:30.3-1	±0.18	1.00	-1.10	14.92	-16.18
Zone 5	5	1.0000	1.0000	1.00	No	F:30.3-1	±0.18	1.00	-1.40	14.92	-19.97

GC_{pd} = Down (+) External Coefficient
P_{down} = $q_h \cdot K_d \cdot [GC_{pd} - GC_{pi}]$ [E:30.3-1]
+Press = Pressure Acting Toward Surface
§30.2.2 = C&C Min Pressure = 9.60 psf
Width = Width of Component
Area = Span • Width
GC_{pi} = Internal Coef T:26.13-1

GC_{pu} = Uplift (-) External Coefficient
P_{uplift} = $q_h \cdot K_d \cdot [GC_{pu} - GC_{pi}]$ [E:30.3-1]
-Press = Pressure Acting Away from Surface
Zone = Applicable Zone per Figure
Span = Span of Component
1/3 Rule = Width limited to Span/3
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 ft²	1/3 Rule	Reference	GC_{pi}	GC_{pd}	GC_{pu}	P_{down} psf	P_{uplift} 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	-37.67
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	-40.20

Zone 3_OHS	3_OHS	1.0000	1.0000	1.00	No	F:30.3-2D/F:30.3-1	±0.18	0.00	-3.50	9.60	-46.52

GC_{pd} = Down (+) External Coefficient
P_{down} = $q_h \cdot K_d \cdot [GC_{pd}-GC_{pi}]$ E:30.7-1
+Press = Pressure Acting Toward Surface
§30.2.2 = C&C Min Pressure = 9.60 psf
Width = Width of Component
Area = Span • Width
GC_{pi} = Internal Coef T:26.13-1
#_OHS = Roof Zone # on Overhang Soffit

GC_{pu} = Uplift (-) External Coefficient
P_{uplift} = $q_h \cdot K_d \cdot [GC_{pu}-GC_{pi}]$ E:30.7-1
-Press = Pressure Acting Away from Surface
Zone = Applicable Zone per Figure
Span = Span of Component
1/3 Rule = Width limited to Span/3
Reference = Applicable Reference from Standard
Soffit = Soffit present so use building GC_{pi}

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

Zone	Reference	P_{max} A ≤ 10 ft² psf	P_{min} A ≤ 10 ft² psf	P_{max} A = 20 ft² psf	P_{min} A = 20 ft² psf	P_{max} A = 50 ft² psf	P_{min} A = 50 ft² psf
1	F:30.3-2D	13.65	-25.03	12.48	-21.22	10.94	-16.19
2	F:30.3-2D	13.65	-27.56	12.48	-24.63	10.94	-20.77
3	F:30.3-2D	13.65	-33.88	12.48	-29.49	10.94	-23.69
4	F:30.3-1	14.92	-16.18	14.24	-15.51	13.36	-14.62
5	F:30.3-1	14.92	-19.97	14.24	-18.63	13.36	-16.85
1_OHS	F:30.3-2D/F:30.3-1	9.60	-37.67	9.60	-33.19	9.60	-27.27
2_OHS	F:30.3-2D/F:30.3-1	9.60	-40.20	9.60	-36.60	9.60	-31.85
3_OHS	F:30.3-2D/F:30.3-1	9.60	-46.52	9.60	-41.46	9.60	-34.77

Zone	Reference	P_{max} A = 100 ft² psf	P_{min} A = 100 ft² psf	P_{max} A = 200 ft² psf	P_{min} A = 200 ft² psf	P_{max} A > 500 ft² psf	P_{min} A > 500 ft² psf
1	F:30.3-2D	9.77	-12.39	9.60	-12.39	9.60	-12.39
2	F:30.3-2D	9.77	-17.84	9.60	-14.92	9.60	-14.92
3	F:30.3-2D	9.77	-19.30	9.60	-14.92	9.60	-14.92
4	F:30.3-1	12.68	-13.95	12.01	-13.28	11.12	-12.39
5	F:30.3-1	12.68	-15.51	12.01	-14.16	11.12	-12.39
1_OHS	F:30.3-2D/F:30.3-1	9.60	-22.80	9.60	-22.12	9.60	-21.24
2_OHS	F:30.3-2D/F:30.3-1	9.60	-28.25	9.60	-24.65	9.60	-23.76
3_OHS	F:30.3-2D/F:30.3-1	9.60	-29.71	9.60	-24.65	9.60	-23.76

P_{max} = Maximum Pressure
Area = Span • Width
Span = Span of Component
§30.2.2 = C&C Min Pressure = 9.60 psf

P_{min} = Minimum Pressure
Width = Width of Component
Reference = Applicable Reference from Standard
Interpolate = Interpolate for Areas between columns

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:39:41 -05'00'

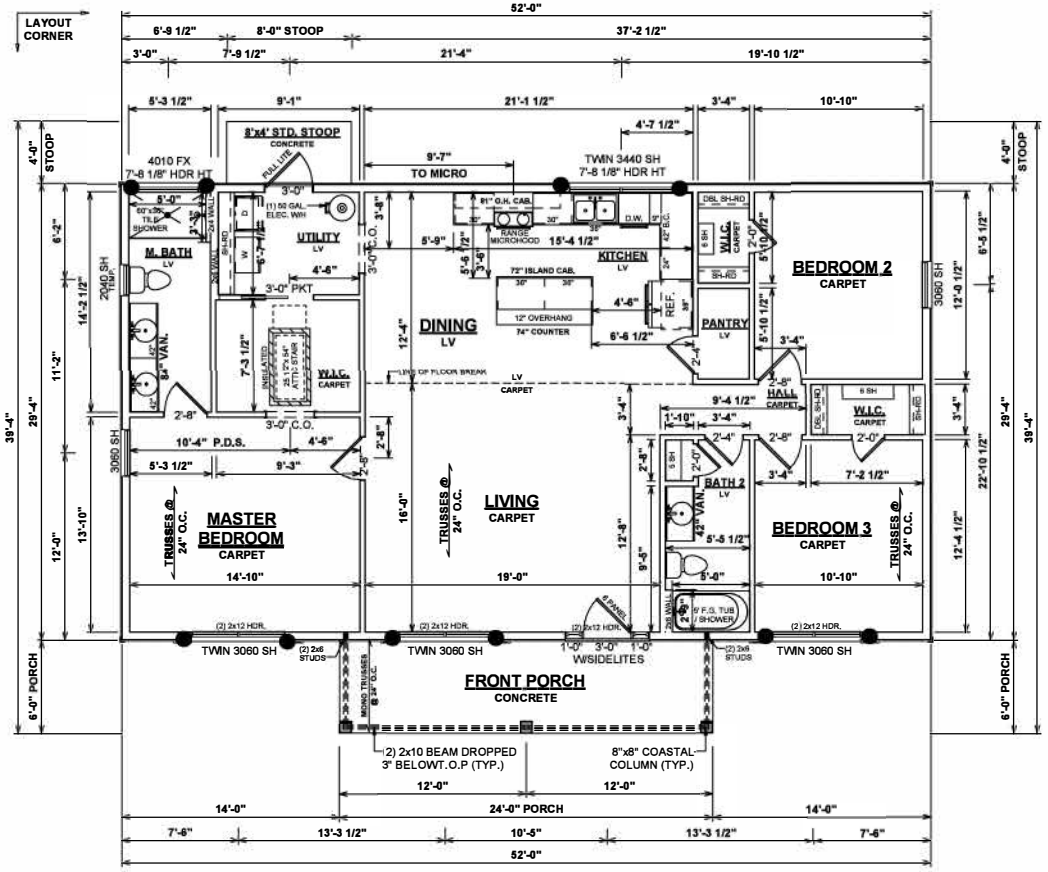
FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

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

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:40:01 -05'00'

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.



1 FIRST FLOOR PLAN
1/8" = 1'-0"

● INDICATES SIMPSON HDU2 HOLD DOWN TO DOUBLE STUD MIN WITH 8" ANCHOR

SHEATH EXTERIOR 100%

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

GENERAL NOTES:

- MINIMUM 9'-1 1/8" CEILING HEIGHT ON FIRST FLOOR U.N.O.
- ALL LOAD BEARING WALLS AND EXTERIOR OPENINGS TO HAVE (2) 2x10 HEADERS U.N.O.
- STANDARD FIRST FLOOR WINDOWHEADER HEIGHTS SHALL BE FRAMED DOWN 2'-2" FROM T.O.P., U.N.O.
- WINDOW HEADERS FOR WINDOWS LOCATED ABOVE KITCHEN SINK SHALL BE FRAMED DOWN 1'-5" FROM T.O.P., U.N.O.
- 7/16" O.S.B. AND HOUSEWRAP REQUIRED.
- DIMENSIONS ARE TO SHEATHING EXTERIOR; SUBTRACT 1/2" FROM DIMENSIONS FOR EXTERIOR WINDOWAND DOOR FRAMING LOCATION IF OPENINGS ARE FRAMED BEFORE SHEATHING INSTALLATION.
- ALL INTERIOR DOORS ARE EITHER CENTERED ON WALLS OR ROUGH OPENING STARTED MINIMUM OF 4" FROM ADJOINING WALL UNLESS OTHERWISE DIMENSIONED.
- NUMBER OF STAIR TREADS AND RISERS MAY VARY AS A RESULT OF LOCAL BUILDING CODES, STANDARDS AND FINAL GRADE.
- ALL SHELVES TO BE 12" DEEP U.N.O.
  - HEIGHT OFF FLOOR TO BE:
    1. SINGLE 68"
    2. DOUBLE 42" AND 84"
- ALL PLUMBING FIXTURES SHOWN ARE A REPRESENTATION OF SIZE AND LOCATION ONLY. ACTUAL STYLE AND BRAND OF FIXTURES MAY VARY PER OFFICE LOCATION.
- ALL TUBS / SHOWERS TO HAVE NAILERS AT FLANGE.
- INSTALL A 24" WIDE WALKWAY FROM ATTIC ACCESS TO FURNACE PLATFORM.
- PORCH, STOOP, & DECK HANDRAILS NOT INCLUDED W/ SLAB FOUNDATION.
- RAILINGS ARE A FORCED OPTION WHEN PORCH IS OVER 30" HIGH FROM FINISHED GRADE.
- **PORCH, STOOP & DECK HANDRAILS NOT INCLUDED WITH SLAB FOUNDATION AND RAILING IS A FORCED OPTION WHEN THE PORCH IS OVER 30" HIGH**

	MASTER	EDO	SHOULD BE	SHOWN	NEED ON EDO
BASE CAB.	171	+72	243	243	0
WALL CAB.	171	-69	102	120	CREDIT OF 51 NOT 69
COUNTER	39 SF	0	39 SF	51 SF	+12 SF

SPECIAL NOTES:

- SCHLUTER DITRA UNCOUPLING AND WATERPROOFING MEMBRANE TO BE USED ON ALL TILE SHOWER INSTALLATIONS.

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

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

PRELIMINARY CONSTRUCTION PLANS

AREAS:		
13,725 CUBIC FEET		
FIRST FLOOR HEATED	1,525 SF	
	1,525 SF	
FRONT PORCH	144 SF	
	144 SF	
TOTAL UNDER R.OOF	1,669 SF	
8'x4' STD. STOOP	32 SF	
TOTAL UNCOVERED	32 SF	

REVISION SCHEDULE	REV #	DATE
DESCRIPTION		

THE: ASHLEY 'A'
FOR: WILLIAM E. & TRACY R. SAULS JR.
432 SE STARDUST PL. LAKE CITY FL 32024 COLUMBIA - FL
OFFICE: GAINESVILLE SC
SOLD BY: L. HALLER

JOB #: 59-24-022
DRAWN BY: MARYORIE G.
CHECKED BY: CHECKER
2x6 EXTERIOR WALLS
FOUNDATION TYPE: MONOSLAB
PRINTED: 12/12/2024 2:58:00 PM

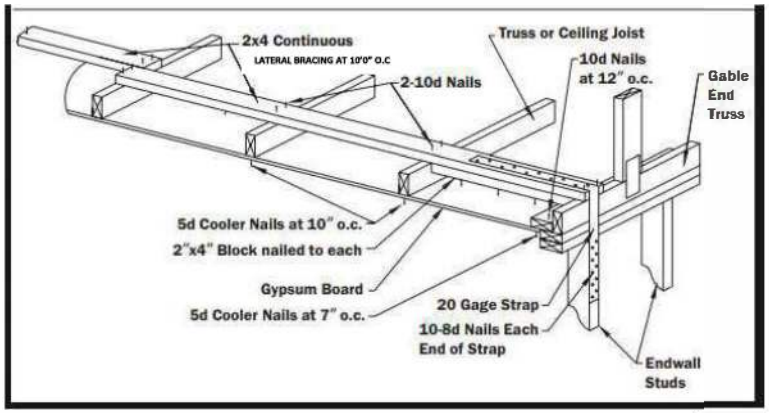
PROPERTY OF: AMERICA'S HOME PLACE

SHEET #: F-2
FIRST FLOOR PLAN

PAPER SIZE: 11" x 17"

SCALE: As indicated

GABLE END BRACING

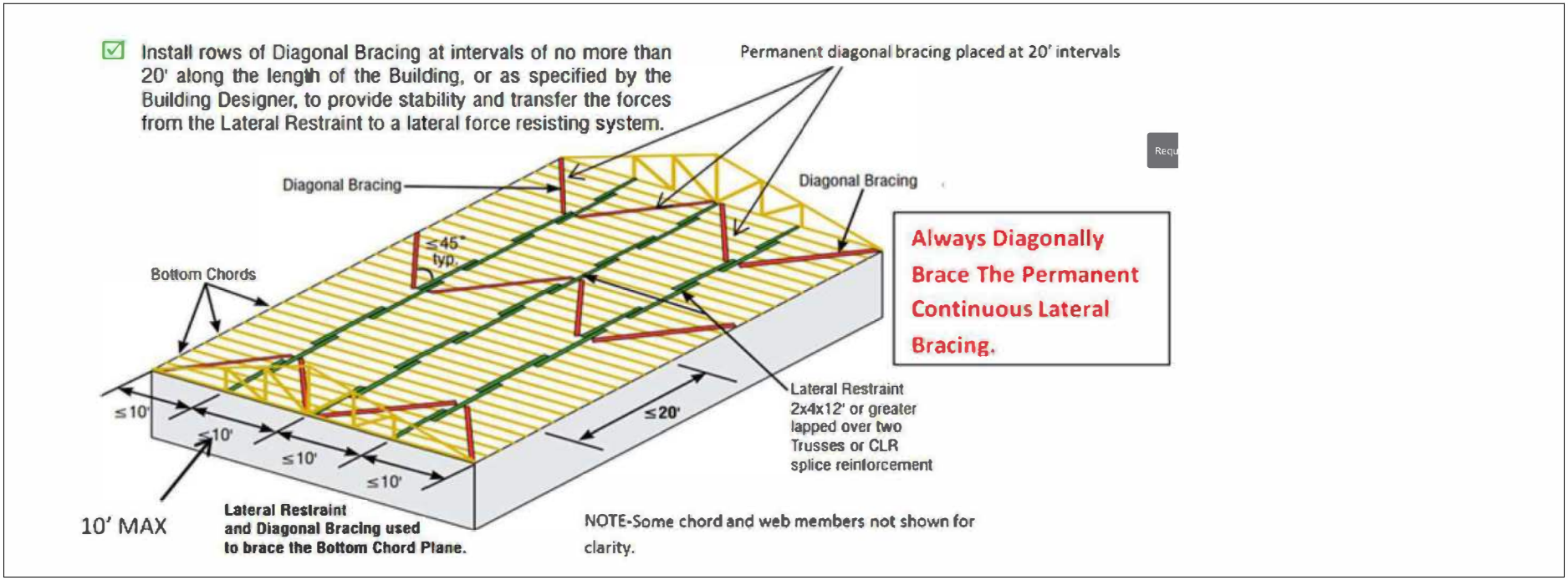


This item has been digitally signed and sealed by James A Zaleski on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:40:21 -05'00'



James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:40:44 -05'00'

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.

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).

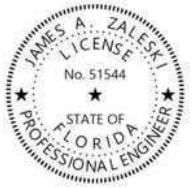
PROVIDE DRESSED SEASONED LUMBER, S4S, WITH A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF DRESSING AS LISTED BELOW.

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

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

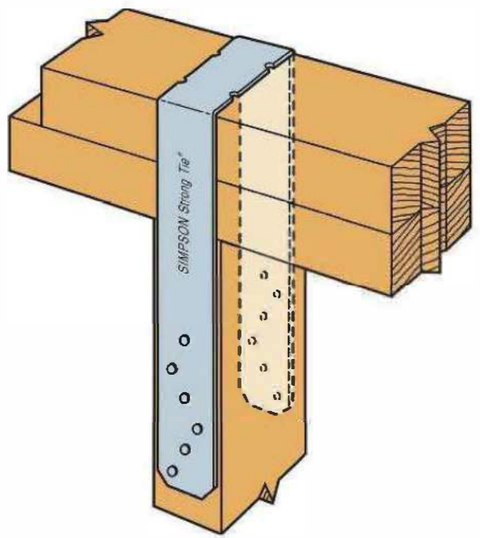
WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE PRESSURE-TREATED. USE GALVANIZED NAILS IN PRESSURE-TREATED WOOD. THE PROTECTIVE COATING ON LIGHT GAUGE STEEL CONNECTIONS IN CONTACT W/ PRESURE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURERS RECOMMENDATIONS.

This item has been digitally signed and sealed by James A Zaleski on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

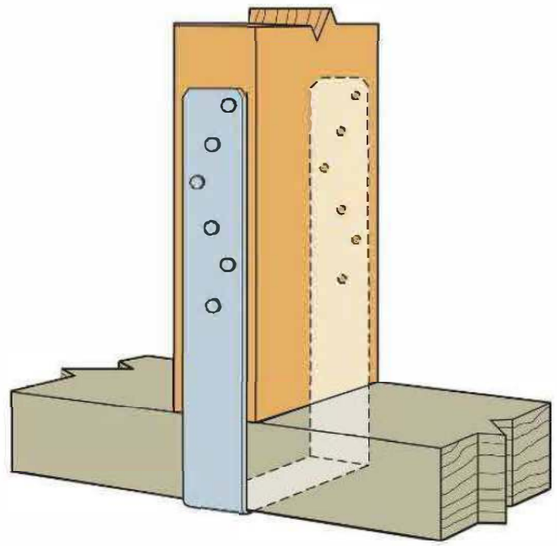


JAMES ZALESKI P.E. 51544 2305 HAVERHILL RD TALLAHASSEE, FL 32312 PH 850-766-7778

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

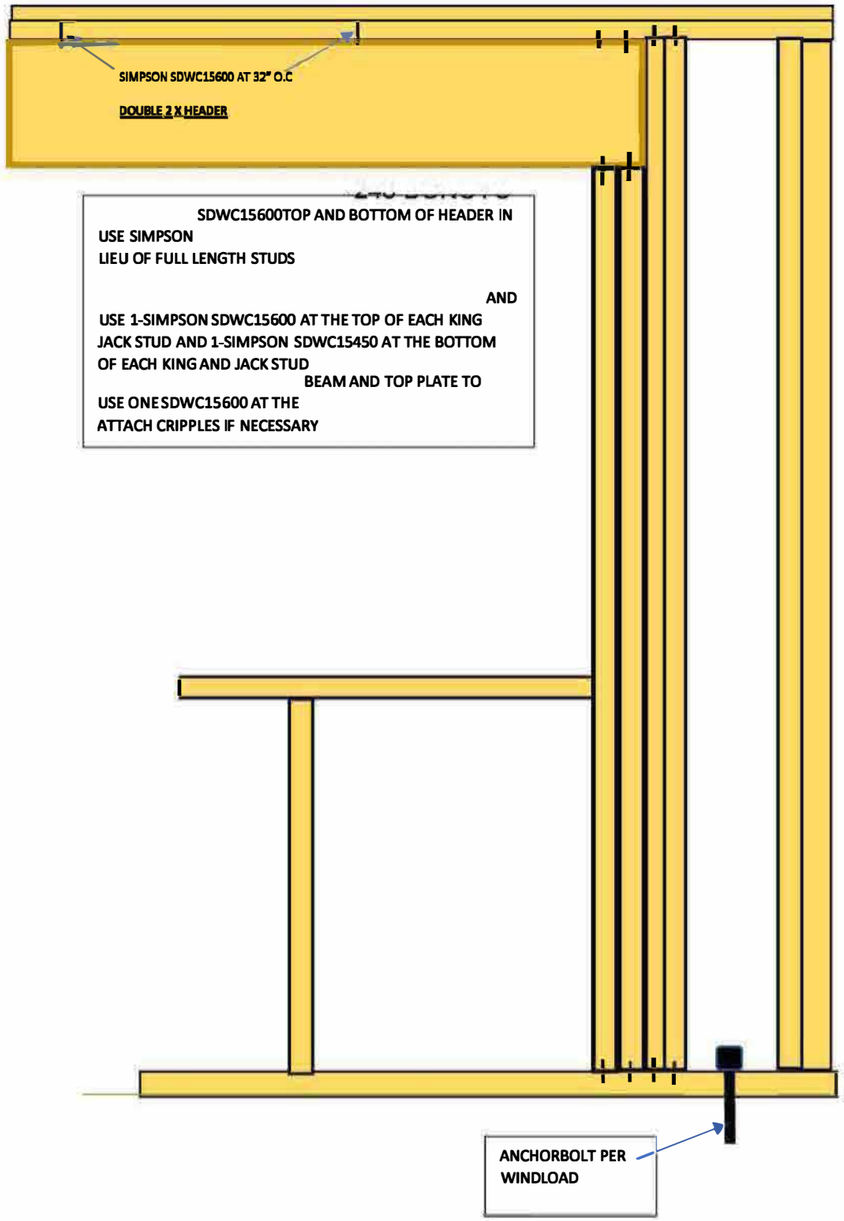
James A Zaleski

Digitally signed by James A Zaleski
Date: 2024.12.14 21:41:03 -05'00'

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

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P.E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

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



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

Digitally signed by James A Zaleski
Date: 2024.12.14 21:41:53 -05'00'

FOR DIGITAL SIGNATURES/SEAL: This item has been digitally signed and sealed by JAMES ZALESKI P E. 51544 on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on electronic copies.

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