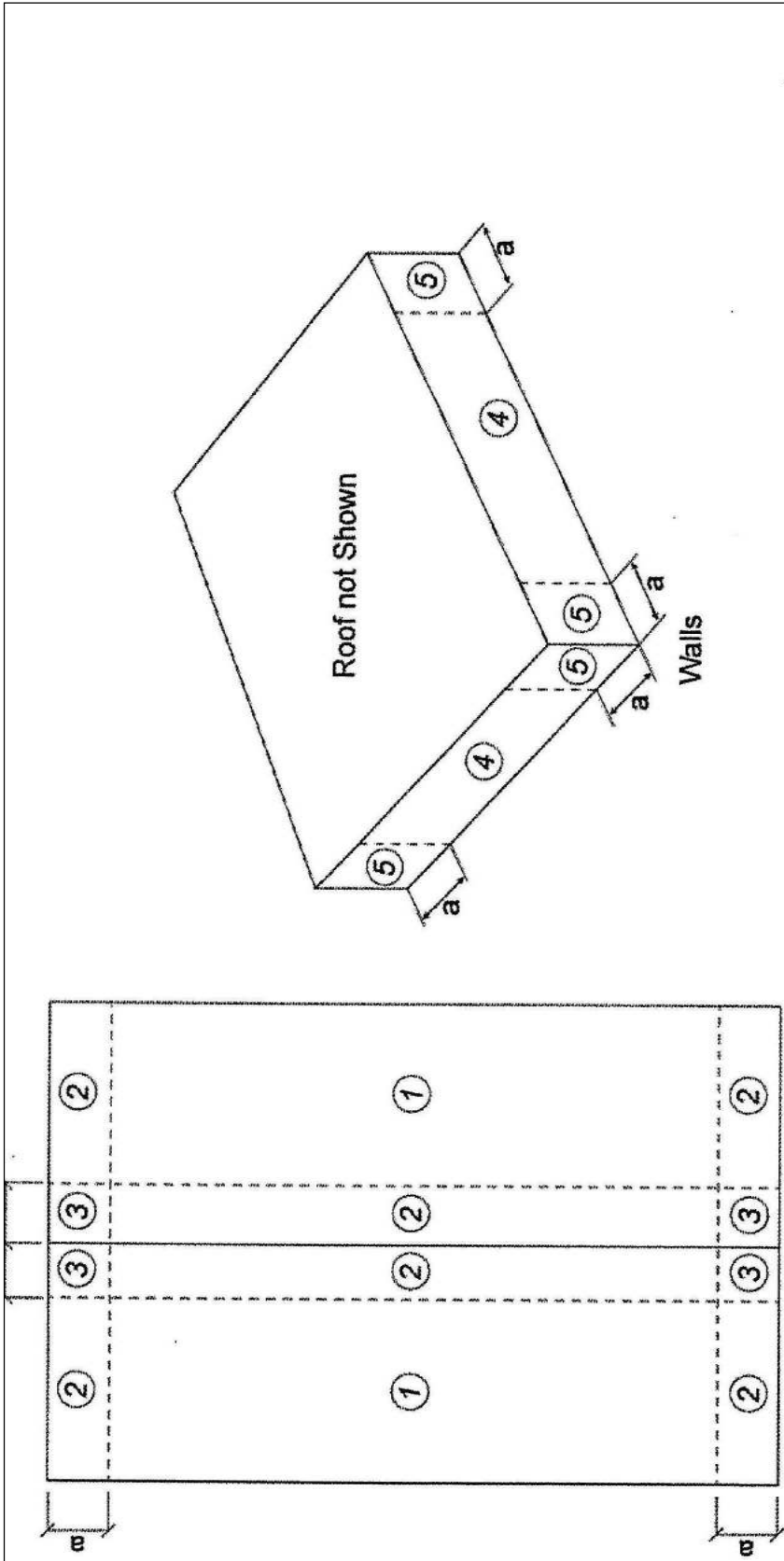




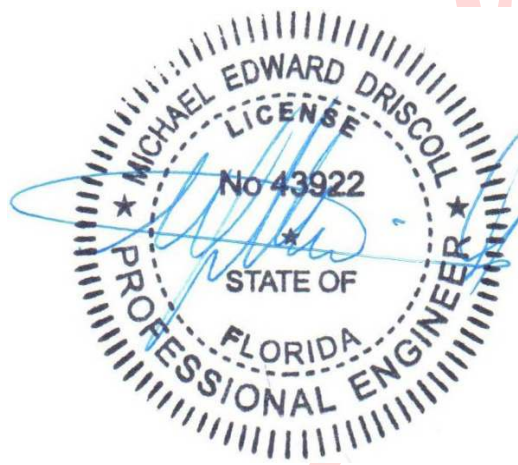
Wind Pressure Summary for C&C Roof & Wall based Upon Areas Ch 30 Pt 1 (Table 1 of 2)
All wind pressures include a Load Factor (LF) of 0.6

Zone	Figure	Pos A ≤ 10 ft ² psf	Neg A ≤ 10 ft ² psf	Pos A = 20 ft ² psf	Neg A = 20 ft ² psf	Pos A = 50 ft ² psf	Neg A = 50 ft ² psf	Pos A = 100 ft ² psf	Neg A = 100 ft ² psf
1	30.3-2B	13.60	-38.01	12.39	-32.68	10.79	-25.63	9.60	-20.30
2	30.3-2B	13.60	-50.21	12.39	-43.35	10.79	-34.29	9.60	-27.43
3	30.3-2B	13.60	-65.90	12.39	-56.46	10.79	-43.97	9.60	-34.52
4	30.3-1	20.57	-22.32	19.65	-21.39	18.42	-20.16	17.49	-19.24
5	30.3-1	20.57	-27.55	19.65	-25.69	18.42	-23.24	17.49	-21.39

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 = 200 ft ² psf	Neg A = 200 ft ² psf	Pos A = 300 ft ² psf	Neg A = 300 ft ² psf	Pos A = 500 ft ² psf	Neg A = 500 ft ² psf	Pos A > 500 ft ² psf	Neg A > 500 ft ² psf
1	30.3-2B	9.60	-14.97	9.60	-11.86	9.60	-11.86		
2	30.3-2B	9.60	-20.57	9.60	-20.57	9.60	-20.57		
3	30.3-2B	9.60	-34.52	9.60	-34.52	9.60	-34.52		
4	30.3-1	16.57	-18.31	16.03	-17.77	15.34	-17.09		
5	30.3-1	16.57	-19.54	16.03	-18.45	15.34	-17.09		

THIS ITEM HAS BEEN ELECTRONICALLY
SIGNED AND SEALED BY MICHAEL E.
DRISCOLL, P.E. USING A SHA AUTHENTICATION
CODE. PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED AND
THE SHA AUTHENTICATION CODE MUST BE
VERIFIED ON ANY ELECTRONIC COPIES ON 8-14-24



Digitally signed
by Michael E.
Driscoll PE
Date:
2024.08.14
11:52:39 -04'00'

PROFESSIONAL SERVICES BY
DRISCOLL ENGINEERING, INC.
PO BOX 357577
GAINESVILLE, FL 32609
PH (352) 331-1513
CA 8890

PLANS AND SPECIFICATIONS

The plans and specifications presented herein are applicable only for the anticipated construction at the locations shown. If construction plans change, the Design Professional should be notified so the plans and specifications can be re-evaluated. The Design Professional should be given the opportunity to review final plans and specifications to see if the intent of the plans and specifications has been followed and/or if supplemental details and recommendations are needed. The Design Professional warrants that the plans and specifications contained herein, have been prepared in accordance with generally accepted professional engineering practice. No other warranties are implied or expressed.

CORPORATE PROTECTION

It is understood and agreed that the Design Professional's Basic Services under this Agreement do not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the Client. The Client assumes all responsibility for interpretation of the Contractor Documents and for construction observation and supervision and waives any claims against the Design Professional that may be in any way connected thereto.

In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any loss, claim or cost, including reasonable attorney's fees and costs of defense, arising or resulting from the performance of such services by other person or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to Contract Documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct to the Design Professional.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Design Professional as instruments of service shall remain the property of the Design Professional. The Design Professional shall retain all common law, statutory and other reserved rights, including the copyright thereto.

DEFECTS IN SERVICE

The Client shall promptly report to the Design Professional any defects or suspected defects in the Design Professional's work or services of which the Client becomes aware, so that the Design Professional may take measures to minimize the consequences of such a defect. The Client warrants that he or she will impose a similar notification requirement on all contractors in his or her Client/Contractor contract and shall require all subcontractors at any level to contain a like requirement. Failure by the Client, and the Client's contractors or subcontractors to notify the Design Professional, shall relieve the Design Professional of the costs of remedying the defects above the sum such remedy would have cost had prompt notification been given.

VERIFICATION OF EXISTING CONDITIONS

Inasmuch as the remodeling and/or rehabilitation of an existing building requires that certain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying otherwise adequate or serviceable portions of the building, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any claim, liability or cost (including reasonable attorney's fees and costs of defense) for injury or economic loss arising or allegedly arising out of the professional services provided under this Agreement, excepting only those damages, liabilities, or costs attributable to the sole negligence or willful misconduct of the Design Professional.

Certification

I hereby certify that the accompanying wind load analysis for a new residence demonstrates compliance with the FBC 2023 8th Edition Section 1609, to the best of my knowledge.

Project Wind load Information

- Ultimate wind speed = 130 MPH
- Nominal wind speed = 101 MPH
- Risk Category = II
- Wind exposure for this design is Exposure B
- Interior Pressure Coefficient or Gcpi = +/- 0.18
- For design of MWFRS: see attached MECAWind Version 2.1.0.6 per ASCE 7-10
- Roof Design live load 20 psf.
- Floor Design load 40 psf.

Drawings

See drawings for additional details. In case of conflict, the more restrictive requirements of the drawings or these calculations govern.

- Roof Trusses: Pre-engineered wood roof trusses at 24" o.c. provided by WB Howland, Inc. Job# 24-1515
Signed & Sealed truss engineering signed & sealed by Douglas Fleming PE 66648
Dated: 08/01/2024.

- Roof Sheathing: Sheathing to be or 15/32" Structural Sheathing or 7/16" osb. min. to adequately resist exterior shear and uplift forces due to nailing. Panels to be facenailed w/ #8 ring shank (0.113 Dia.) @ 6" oc along edges and @ 6" oc along interior supports. Galv. metal edging to be nailed @ 4" oc.

- Roofing: Asphalt shingle roof shall be installed per mfg. specifications to meet 130 m.p.h. windloading & in accord with the Florida Building Code 2023.

Exterior load bearing & shearwalls

- Studs: 2 x 4 @ 16" o.c.
Governing load combination: dead + wind
Fv D+W = 55 psi
Fb D-W = 1900 psi
Use: SPF No. 2 grade or better

- Shearwall Sheathing Minimum 7/16 structural sheathing, sheathing grade; attach all edges to framing with 8d common nails @ 6" o.c. attach to intermediate framing with 8d common nails @ 12" o.c. Sheathing shall be applied to outside face of all exterior frame walls. Use same nail pattern referenced above for non-shearwall segments also. Note that 8d common nails have a min 0.131 diameter.

See this sheet for shearwalls & holdown locations for Simpson Holdown type & locations.

Headers

- Wood headers @ windows & doors 2-2"x 12" #2 syp w/ 1/2" osb 6'-0" max
- Beams @ front porch 2-2.0e 2500FB 1.75 x 12 LVL, osb 16'-0" max span
- Beams @ rear porch 2-2"x 12" #2 syp w/ 1/2" plywood in ply

Foundations (sizes based on wind load requirements only):

- Monolithic footing 20" deep x 12" wide w/ 2 #5 bars cont (if used)
- Stemwall footing: 20" wide x 10" deep w/ 2 #5 bars cont.
stem wall 1 #5 bar vertical @ each corner & 48" max spacing
6" 90 into slab & 24" into slab.

MICHAEL E DRISCOLL PE
FL REG # 43922

Sheet
WL 1

DATE: 8-14-24

HILL
PARCEL 02-75-16-04111-121
COLUMBIA CO, FL DS23-05

