FLORIDA BUILDING CODE

Compliance Summary

TYPE OF CONSTRUCTION

Roof: Gable Construction, Wood Trusses @ 24" O
Walls: 2x6 Wood Studs @ 16" O.C.
Floor: 4" Thk. Concrete Slab W/ Fibermesh Concrete Additive
Foundation: Continuous Footer/Stem Wall

ROOF DECKING

Material: 1/2" CD Plywood or 7/16" O.S.B.
Sheet Size: 48"x96" Sheets Perpendicular to Roof Framing
Fasteners: 8d Common Nails per schedule on sheet A.1

SHEARWALLS

Material: Hardi Panel Siding
Sheet Size: 48"x96" Sheets Placed Vertical
Fasteners: 8d Common Nails @ 4" O.C. Edges & 8" O.C. Interior
Dragstrut: Double Top Plate (S.Y.P.) W/16d Nails @ 12" O.C.
Wall Studs: 2x4 Studs @ 16" O.C.

HURRICANE UPLIFT CONNECTORS

Truss Anchors: SIMPSON H2.5a or SDWC15600 @ Ea. Truss End (Typ. U.O.N.)
Wall Tension: Wall Sheathing Nailing is Adequate - 8d @ 4" O.C. Top & Bot.
Anchor Bolts: 1/2" A307 Bolts @ 48" O.C. - 1st Bolt 12"-16" from corner
Corner Hold-down Device: (1) HD5a @ each corner
Porch Column Base Connector: Simpson ABU66 @ each column
Porch Column to Beam Connector: Simpson EPC66/PC66 @ each column

FOOTINGS AND FOUNDATIONS

Footing: 12"X12" X CONT., CONCRETE FOOTING W/ 2 #5 REBAR.

STRUCTURAL DESIGN CRITERIA:

1. THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE - SECTION 1609 AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.

2. WIND LOAD CRITERIA: RISK CATAGORY: 2, EXPOSURE: "B"

BASED ON ANSI/ASCE 7-16. 2020 FBC 1609-A WIND VELOCITY: V_{ULT} = 130 MPH
V_{ASD} = 101 MPH

3. ROOF DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: . . . . . 20 PSF
SUPERIMPOSED LIVE LOADS: . . . . . 20 PSF

4. FLOOR DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: . . . . . 25 PSF
SUPERIMPOSED LIVE LOADS:
RESIDENTIAL . . . . . 40 PSF
BALCONIES . . . . . 60 PSF

5. WIND NET UPLIFT: ARE AS INDICATED ON PLANS

TERMITE PROTECTION NOTES:

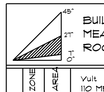
SOIL CHEMICAL BARRIER METHOD:

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR REINSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL. FBC 104.2.6
2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS. FBC 1503.4.4
3. IRRIGATION/SPRINKLER SYSTEMS INCLUDING ALL RISERS AND SPRAY HEADS SHALL NOT BE INSTALLED WITHIN 1'-0" FROM BUILDING SIDE WALLS. FBC 1503.4.4
4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION, BETWEEN WALL COVERINGS AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6".
EXCEPTION: PAINT AND DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL. FBC 1403.1.6
5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. FBC 1816.1.1
6. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED OR FORMED. FBC 1816.1.2
7. BOXED AREAS IN CONCRETE FLOOR FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC., SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT. FBC 1816.1.3
8. MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION. IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT, RETREATMENT IS REQUIRED. FBC 1816.1.4
9. CONCRETE OVERPOUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. FBC 1816.1.5
10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURE SIDEWALLS. FBC 1816.1.6
11. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. FBC 1816.1.6
12. ALL BUILDINGS ARE REQUIRED TO HAVE PER-CONSTRUCTION TREATMENT. FBC 1816.1.7
13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES". FBC 1816.1.7
14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL. FBC 2303.1.3
15. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING. FBC 2303.1.4

FRAMING ANCHOR SCHEDULE

APPLICATION	MANUFR/MODEL	CAP.
TRUSS TO WALL:	SIMPSON H2.5a or SDWC15600 screws	600#
GIRDER TRUSS TO POST/HEADER:	SIMPSON LGT, W/ 28 - 16d NAILS	1185#
HEADER TO KING STUD(S):	SIMPSON ST22	1370#
PLATE TO STUD:	NO CONNECTION REQ. WHEN USING WINDSTORM BOARD	
STUD TO SILL:	NO CONNECTION REQ. WHEN USING WINDSTORM BOARD	
PORCH BEAM TO POST:	SIMPSON PC66/EPC66	1700#
PORCH POST TO FND.:	SIMPSON ABU66	2200#
MISC. JOINTS	SIMPSON A34	315#/240#

NOTE:
ALL ANCHORS SHALL BE SECURED W/ NAILS AS PRESCRIBED BY THE MANUFACTURER FOR MAXIMUM JOINT STRENGTH, UNLESS NOTED OTHERWISE.
NOTE:
REFER TO THE INCLUDED STRUCTURAL DETAILS FOR ADDITIONAL ANCHORS/ JOINT REINFORCEMENT AND FASTENERS.
NOTE:
ALL UNLISTED JOINTS IN THE LOAD PATH SHALL BE REINFORCED WITH SIMPSON A34 FRAMING ANCHORS, TYPICAL T.O.
NOTE:
"SEMCO" PRODUCT APPROVAL:
MIAMI/DADE COUNTY REPORT #95-0818.15
NOTE:
"SIMPSON" PRODUCT APPROVALS:
MIAMI/DADE COUNTY REPORT #97-0107.05, #96-1126.11, #99-0623.04
SBCCI NER-443, NER-393

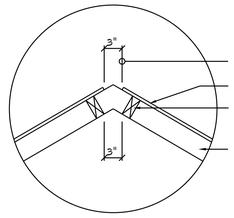


BUILDING COMPONENTS & CLADDING LOADS
MEAN BUILDING HEIGHT = 30.0', EXPOSURE "B"
ROOF ANGLE 7° TO 27°

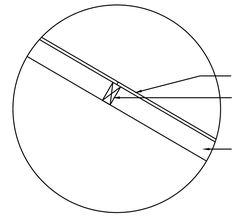
	ZONE	AREA	Vult 110 MPH	Vult 120 MPH	Vult 130 MPH	Vult 140 MPH
ROOF 7° TO 27°	1	10	12.0 / -19.9	14.9 / -23.7	17.5 / -27.8	20.3 / -32.3
	1	20	11.4 / -19.4	13.6 / -23.0	16.0 / -27.0	18.5 / -31.4
	1	50	10.0 / -18.6	11.9 / -22.2	13.9 / -26.0	16.1 / -30.2
	2	10	12.5 / -34.7	14.9 / -41.3	17.5 / -48.4	20.3 / -56.2
	2	20	11.4 / -31.9	13.6 / -38.0	16.0 / -44.6	18.5 / -51.7
	2	50	10.0 / -28.2	11.9 / -33.6	13.9 / -39.4	16.1 / -45.7
	3	10	12.5 / -51.3	14.9 / -61.0	17.5 / -71.6	20.3 / -83.1
	3	20	11.4 /-47.9	13.6 / -57.1	16.0 / -67.0	18.5 / -77.7
	3	50	10.0 / -43.5	11.9 / -51.8	13.9 / -60.8	16.1 / -70.5
WALL	4	10	21.8 / -23.6	25.9 / -34.7	30.4 / -33.0	35.3 / -38.2
	4	20	20.8 / -22.6	24.7 / -26.9	29.0 / -31.6	33.7 / -36.7
	4	50	19.5 / -21.3	23.2 / -25.4	27.2 / -29.8	31.6 / -34.6
	5	10	21.8 / -29.1	25.9 / -34.7	30.4 /-40.7	35.3 / -47.2
	5	20	20.8 / -27.2	24.7 / -32.4	29.0 / -38.0	33.7 / -44.0
	5	50	19.5 / -24.6	23.2 / -29.3	27.2 / -34.3	31.6 / -39.8

HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENTS FOR BUILDING COMPONENTS & CLADDING

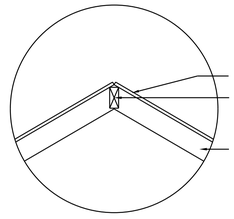
BLDG HEIGHT	EXPOSURE "B"	EXPOSURE "C"	EXPOSURE "D"
15	1.00	1.21	1.47
20	1.00	1.29	1.55
25	1.00	1.35	1.61
30	1.00	1.40	1.66



Vent DETAIL — A1
SCALE: 1" = 1'-0"



Joint DETAIL — A2
SCALE: 1" = 1'-0"



Ridge DETAIL — A3
SCALE: 1" = 1'-0"

SM-RIB METAL ROOFING PANELS
ALTERNATE FASTENER SCHEDULE FOR VARIOUS WIND VELOCITIES

MANUFACTURER'S RECOMMENDED FASTENER SCHEDULE
FOR BUILDINGS W/ 35' MEAN ROOF HEIGHT, MIN. 3/12 PITCH
BASED ON ASCE 7-98, EXPOSURE "C"

ROOF ZONE	FASTENER TYPE	FASTENER SIZE	PLACEMENT TO	100 - 110 O/C SPACING	100 - 110 TRIM	120 - 130 O/C SPACING	120 - 130 TRIM	140 - 150 O/C SPACING	140 - 150 TRIM
1	WD. SCREW	#9 X 1 1/2"	WOOD	36"	18"	24"	12"	24"	12"
	MTL. SCR.	#12 X 1"	< 18 GA	36"	18"	24"	12"	24"	12"
		#14 X 7/8"	> 18 GA						
2 & 3	WD. SCREW	#9 X 1 1/2"	WOOD	36"	18"	24"	12"	24"	8"
	MTL. SCR.	#12 X 1"	< 18 GA	36"	18"	24"	12"	24"	8"
		#14 X 7/8"	> 18 GA						

General Roofing NOTES:

DECK REQUIREMENTS:
METAL PANELS MUST BE FASTENED TO MIN. 1/2" CDX PLYWOOD.

SLOPE:
METAL PANELS SHALL BE USED ONLY ON ROOF SLOPES OF 3:12 OR GREATER TO INSURE PROPER DRAINAGE.

CAULKING:
MUST BE APPROVED BY THE MANUFACTURER, BUTYL SEALANT SUPPLIED IN TAPE OR GUN-GRADE FORM.

METAL PANEL:
METAL PANELS SHALL BE
MIN. 26 GUAGE AND COMPLY WITH ASTM A-792 AND D 7-98
EXPOSURE C AS ADOPTED IN SOUTH FLORIDA.

FASTENERS:
FASTENERS FOR METAL PANELS SHALL BE GALVANIZED WOOD FAST SCREW, MINIMUM OF #9 X 1 1/2" HEX HEAD.

ATTACHMENT:
METAL PANELS SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN 24" O.C. WHERE ROOF IS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF METAL PANELS SHALL CONFORM WITH ASTM E 330 OR PA 125.

BASE AND CAP FLASHINGS:
BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE W/ MFGR'S INSTALLATION INSTRUCTIONS.

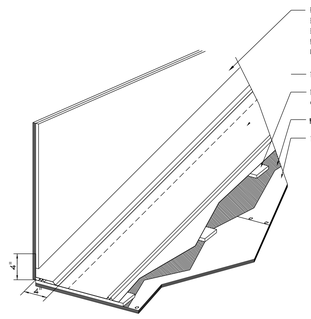
1. RC-1 - RIDGE CAP
2. ED-1 - EAVE DRIP
3. EF-3 - EAVE FLASHING
4. SW-1 - SIDEWALL FLASHING
5. EW-1 - ENDWALL FLASHING
6. GR-4 - GABLE END OR RAKE BOARD FLASHING
7. TF-1 - TRANSITION FLASHING
8. PV-2 - PREFORMED VALLEY FLASHING
9. BUTYL TAPE
10. SEALANT TAPE
11. PIPEBOOT

UNDERLAYMENT APPLICATION:
FOR ROOF SLOPES FROM 3:12 TO 4:12, UNDERLAYMENT SHALL BE A MINIMUM OF TWO LAYERS APPLIED AS FOLLOWS:
1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE.
2. STARTING AT THE EAVE, 36 INCH WIDE STRIPS OF UNDERLAYMENT FELT SHALL BE APPLIED OVERLAPPING SUCCESSIVE SHEETS 19 INCHES AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

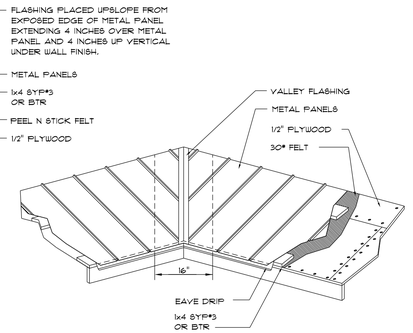
FOR ROOF SLOPED 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF ONE LAYER OF UNDERLAYMENT FELT APPLIED AS FOLLOWS:
STARTING AT THE EAVE, UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION PARALLEL TO THE EAVE, LAPPED 2 INCHES, AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

BASE AND CAP FLASHINGS:
BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE W/ MFGR'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE EITHER CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS 0.019 INCH OR MINERAL SURFACE ROLL ROOFING WEIGHING A MINIMUM OF 77 LBS PER 100 SQUARE FEET. CAP FLASHING SHALL BE CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS OF 0.019 INCH.

VALLEYS:
VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE W/ MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING ROOFING MATERIAL. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED.
1. OPEN VALLEYS LINED WITH METAL: THE VALLEY LINING SHALL BE AT LEAST 16" WIDE AND OF ANY OF THE CORROSION RESISTANT METALS IN FBC TABLE 1507.3.9.2.
2. OPEN VALLEYS: VALLEY LINING OF TWO PLIES OF MINERAL SURFACE ROLL ROOFING SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER A MINIMUM OF 36 INCHES WIDE.
3. CLOSED VALLEYS: VALLEY LINING SHALL BE ONE OF THE FOLLOWING:
1. BOTH TYPES 1 AND 2 ABOVE, COMBINED.
2. ONE PLY OF SMOOTH ROLL ROOFING AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 224.
3. SPECIALTY UNDERLAYMENT AT LEAST 36 INCHES WIDE & COMPLYING WITH ASTM D 1970.



SIDE WALL FLASHING



VALLEY FLASHING

METAL ROOFING. DET.

SCALE: NONE

REVISIONS
Sept. 9th, 2023

DETACHED GARAGE ADDITION FOR:
BURTON RESIDENCE
COLUMBIA COUNTY, FLORIDA

NICHOLAS PAUL GEISLER
ARCHITECT
N.C.A.R.B. Certified
1736 NW Brown Rd.
Lake City, FL 32055

SHEET NUMBER
S.3
OF 4 SHEETS

N.P. GEISLER
AR0007005
Digitally signed by: N. P. GEISLER
DN: CN = N. P. GEISLER email = npgeisler47@gmail.com C = US O = AR0007005 OU = N.P. GEISLER
Date: 2023.09.08 13:38:13 -05'00'