

FLORIDA BUILDING CODE

Compliance Summary

TYPE OF CONSTRUCTION

Roof: Gable and/or Hip Construction, Wood Trusses @ 24" O.C.
Walls: 2x 4 or 2x 6 Wood Studs @ 16" O.C.
Floor: 4" Thk. Concrete Slab W/ 6x8/10-10 WWM ON CHAIRS @ 36" O.C.,
Foundation: Continuous monolithic footing or /Stem Wall foundation system

ROOF DECKING

Material: 19/32" CDX Plywood or 7/16" O.S.B.
Sheet Size: 48"x96" Sheets Placed Vertical, stagger each sheet.
Fasteners: 8d Common Nails @ 4" O.C. Edges & 8" O.C. Interior
10d Ring-Shank nails per schedule on sheet S.4

SHEARWALLS

Material: 1/2" CD Plywood or 7/16" O.S.B.
Sheet Size: 48"x96" Sheets Placed Vertical, stagger each sheet.
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: 2x 4 or 6 Wood Studs @ 16" O.C.

HURRICANE UPLIFT CONNECTORS

Truss Anchors: SIMPSON H2.5A (OR EQUIVALENT), W/ 6 - 10d NAILS
Wall Tension: Wall Sheathing Nailing is Adequate - 8d @ 4" O.C. Top & Bot.
Porch Column Base Connector: Simpson ABU66/ABU66 @ each column (or equiv.)
Porch Column to Beam Connector: Simpson EPC66/PC66 @ each column (or equiv.)

FOOTINGS AND FOUNDATIONS

Footing: 10"x 20" Cont. mono ftg. W/ (2) #5 Bars Cont. on chairs or (1) #3 Transverse @ 24" O.C.
Stemwall: 8" C.M.U. W/1-#5 Vertical Dowel @ 48" O.C.

STRUCTURAL DESIGN CRITERIA:

1. THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2023 FLORIDA BUILDING CODE AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.

2. WIND LOAD CRITERIA: RISK CATEGORY: 2, EXPOSURE: "B"
BASED ON ANSI/ASCE 7-16, 2023 FBC 1609-A WIND VELOCITY: $V_{ult} = 130$ MPH
 $V_{des} = 101$ 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

FRAMING ANCHOR SCHEDULE

APPLICATION	MANUF'R/MODEL	CAP.
TRUSS TO WALL:	SIMPSON H2.5A (OR EQUIVALENT), W/ 6 - 10d NAILS	960#
GIRDER TRUSS TO POST/HEADER:	SIMPSON LGT, W/ 28 - 16d NAILS	1785#
HEADER TO KING STUD(S):	SIMPSON ST22	1370#
PLATE TO STUD:	SIMPSON SP2	1065#
STUD TO BILL:	SIMPSON SP1	585#
PORCH BEAM TO POST:	SIMPSON PC44/EPC44	1700#
PORCH POST TO FND.:	(6) LOG TOE-SCREWS	
MISC. JOINTS	SIMPSON A34	

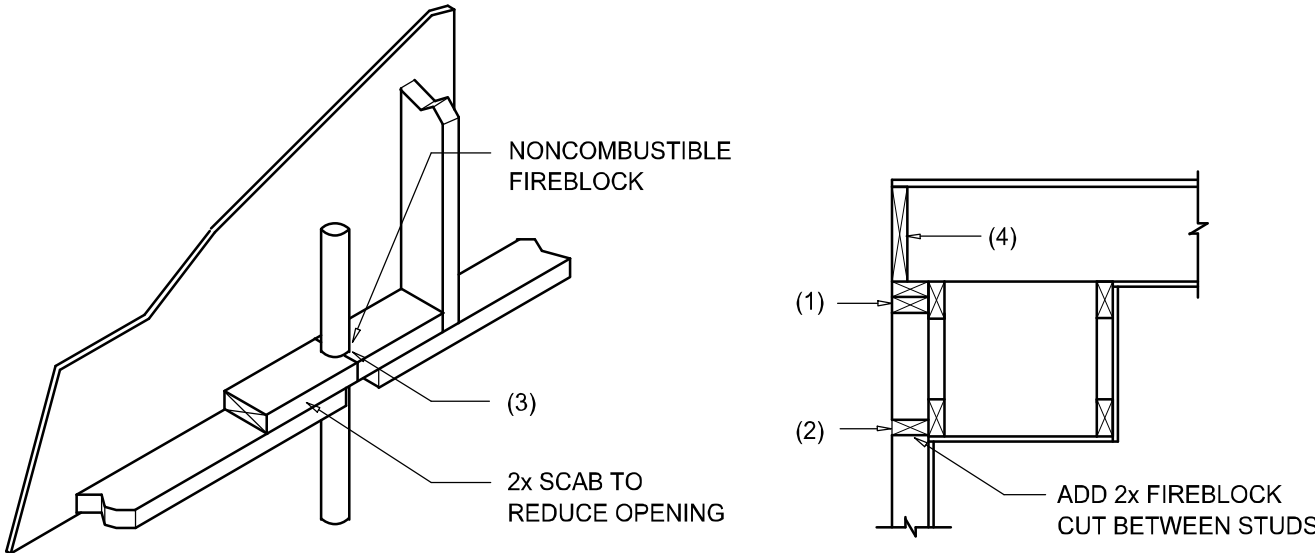
NOTE:
ALL ANCHORS SHALL BE SECURED W/ NAILS AS PRESCRIBED BY THE MANUFACTURER FOR MAXIMUM JOINT STRENGTH, UNLESS NOTED OTHERWISE.

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
SBCC1 NER-443, NER-393



PENETRATIONS

SOFFIT/DROPPED CLG.

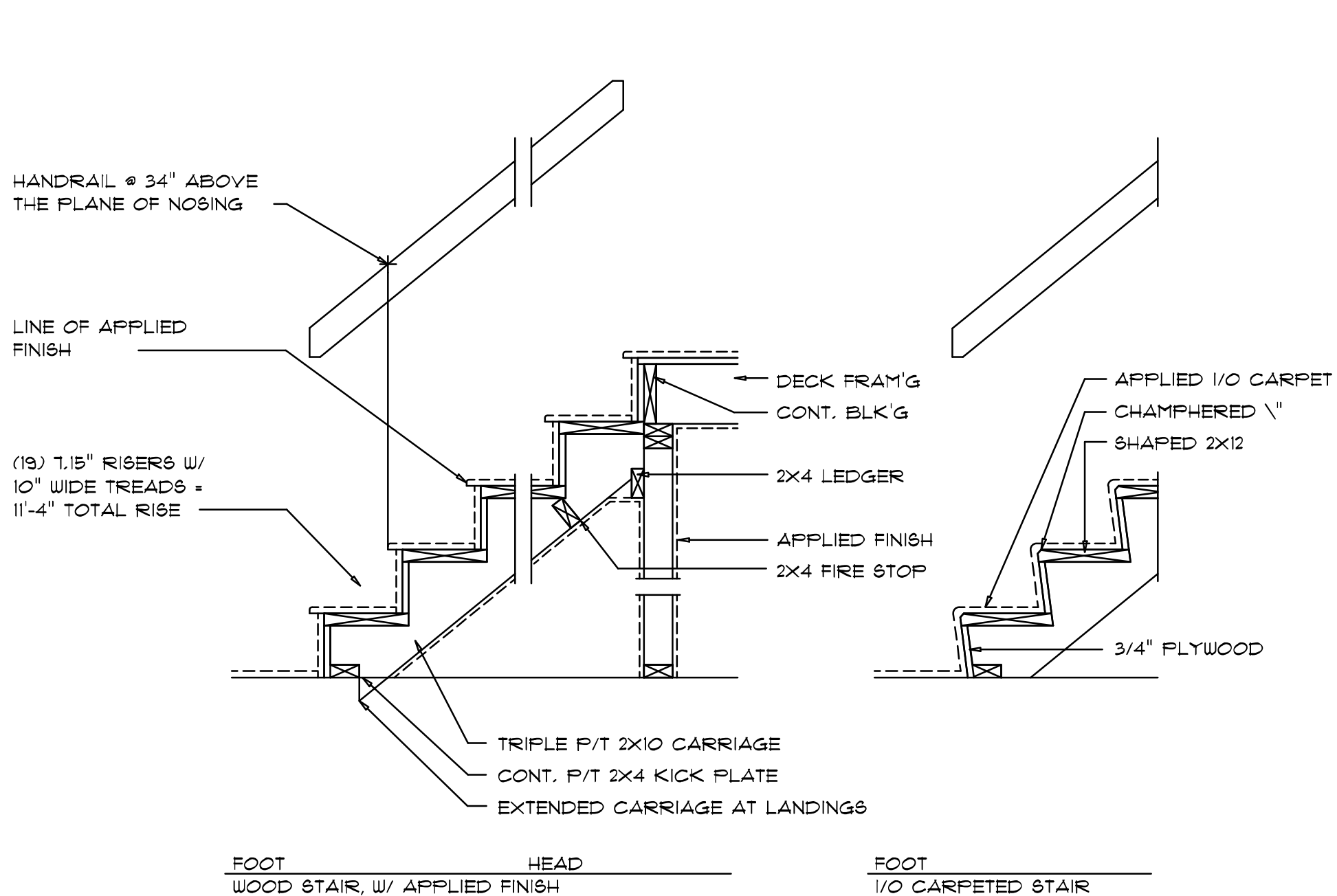
FIREBLOCKING NOTES:

FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH "PYROPANEL MULTIFLEX SEALANT"
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS. FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.

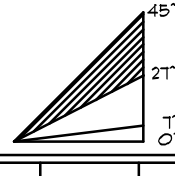
Fire Stopping DETAILS

SCALE: NONE



Typical Stair DETAIL

SCALE: 3/4" = 1'-0"

<div></div> <div>BUILDING COMPONENTS & CLADDING LOADS MEAN BUILDING HEIGHT = 30.0', EXPOSURE "B" ROOF ANGLE 21° TO 45°</div>										
ZONE	AREA (ft ²)	Vult 115 MPH		Vult 120 MPH		Vult 130 MPH		Vult 140 MPH		
		Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	
ROOF 21° TO 45°	1	50	10.2	-28.5	11.1	-28.1	13	-28	15.1	-30.1
	1	20	10	-18	10	-19.5	11.3	-23	13.1	-26.7
	1	80	10	-18	10	-19.5	10	-19.2	10.8	-22.2
	1	100	10	-12.7	10	-13.8	10	-16.2	10	-18.8
	36	10	10.2	-28.5	11.1	-28.1	13	-28	15.1	-30.8
	36	20	10	-18.1	10	-20.8	11.3	-24.4	13.1	-28.5
	36	36	10	-11.9	10	-12.9	10	-15.1	10.2	-17.6
	36	100	10	-11.9	10	-12.9	10	-15.1	10	-17.6
	21	10	10.2	-30.6	11.1	-33.3	13	-30.1	15.1	-45.4
	21	20	10	-28.7	10	-28	11.3	-35.8	13.1	-38.1
	21	36	10	-19.2	10	-20.9	10	-24.2	10.8	-28.4
	21	100	10	-14.3	10	-15.3	10	-17.2	10	-21.2
WALL	3	10	10.2	-32.7	11.1	-35.5	13	-31.7	15.1	-48.4
	3	20	10	-24.6	10	-26.7	11.3	-31.4	13.1	-36.4
	3	36	10	-14.5	10	-15.5	10	-18.2	10.5	-21.2
	3	100	10	-14.5	10	-15.5	10	-18.2	10	-21.2
	4	10	10.3	-16.7	10.5	-16.9	10.2	-19.9	11.2	-23.9
	4	20	13.6	-14.8	14.8	-16.1	17.4	-19	20.2	-22
	4	36	13.8	-14	13.9	-15.2	16.3	-17.9	18	-20.7
	4	100	12.1	-15.5	13.2	-14.6	16.5	-17.1	18	-20.8
	4	500	10.6	-11.9	11.6	-12.9	13.6	-15.1	15.8	-17.6
	5	10	10.3	-18.1	10.5	-20.1	10.2	-24.4	11.2	-28.3
	5	20	13.6	-17.8	14.8	-19.4	17.4	-22.8	20.2	-26.4
	5	36	13.8	-16.1	13.8	-17.5	16.3	-20.6	18	-23.9
	5	100	12.1	-14.5	13.2	-15.1	16.5	-19	18	-22
	5	500	10.6	-11.9	11.6	-12.9	13.6	-15.1	15.8	-17.6

HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENTS FOR BUILDING COMPONENTS & CLADDING			
BLDG HEIGHT (ft)	EXPOSURE "B"	EXPOSURE "C"	EXPOSURE "D"
15	.82	1.21	1.41
20	.88	1.28	1.55
25	.94	1.35	1.61
30	1.00	1.40	1.66

BUILDING COMPONENTS & CLADDING LOADS
MEAN BUILDING HEIGHT = 30.0'. EXPOSURE "B"
ROOF ANGLE 21° TO 45°

ZONE	AREA (ft ²)	Vult 115 MPH		Vult 120 MPH		Vult 130 MPH		Vult 140 MPH		
		Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	
		(ft ²)								
ROOF 21° TO 45°	1.26	10	10.6	-28.4	11.6	-28.7	12.6	-32.7	12.8	-36.1
	1.26	20	10	-28.4	10	-28.7	11.7	-33.7	13.8	-39.1
	1.26	10	10	-16.1	10	-17.6	10	-20.6	10.8	-23.8
	1.26	100	10	6.2	10	8	10	10.5	10	-12.2
	26.25.36	10	10.8	-28.2	11.6	-21.8	12.6	-29.2	12.8	-37
	26.25.36	20	10	-28.2	10	-28.7	11.7	-31.1	13.8	-40.1
	26.25.36	10	10	-26.2	10	-25.5	10	-23.5	10.8	-28.8
	26.25.36	100	10	-25.9	10	-22.8	10	-25.7	10	-31
	36	10	10.6	-45.7	11.6	-49.8	12.6	-58.4	12.8	-67.6
	36	20	10	-28.2	10	-28.7	11.7	-30.1	13.8	-40.1
	36	10	10	-25.2	10	-23.2	10	-20	10.8	-23.2
	36	100	10	-24	10	-25.1	10	-30.6	10	-35.6

NOTE !!!
ROOFSHINGLES SHALL BE AS MANUFACTURED BY "TAMKO ROOFING PRODUCTS" OF THE FOLLOWING MODELS:

GLASS-SEAL AR
ELITE GLASS-SEAL AR
HERITAGE 30 AR
HERITAGE 40 AR
HERITAGE 50 AR

THESE SHINGLES MEET THE REQUIREMENTS OF ASTM D-3161 TYPE 1 MODIFIED TO 110 MPH WINDS & FBC TAS 100, USING 4 NAILS/SHINGLE

General Roofing NOTES:

DECK REQUIREMENTS:
ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

SLOPE:
ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 2:12 OR GREATER. PER R005, DOUBLE UNDERLAYMENT IS REQUIRED ON ROOF SOPES GREATER THAN 4:12.

UNDERLAYMENT:
UNLESS OTHERWISE NOTED, UNDERLAYMENT SHALL CONFORM W/ ASTM D 226, TYPE 1, OR ASTM D 4869, TYPE 1.

SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET:
SELF ADHERING POLYMER MODIFIED BITUMEN SHALL COMPLY W/ ASTM D 1970.

ASPHALT SHINGLES:
ASPHALT SHINGLES SHALL HAVE SELF SEAL STRIPS OR BE INTERLOCKING, AND COMPLY WITH ASTM D 225 OR ASTM D 3462.

FASTENERS:
FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12 GAUGE SHANK WITH A MINIMUM 3/8 INCH DIAMETER HEAD, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIAL AND A MINIMUM 3/4" INTO THE ROOF SHEATHING. WHERE THE SHEATHING IS LESS THAN 3/4" THICK, THE NAILS SHALL PENETRATE THROUGH THE SHEATHING.

ATTACHMENT:
ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE ROOFS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH ASTM D 3161 OR M-DC PA 107-95.

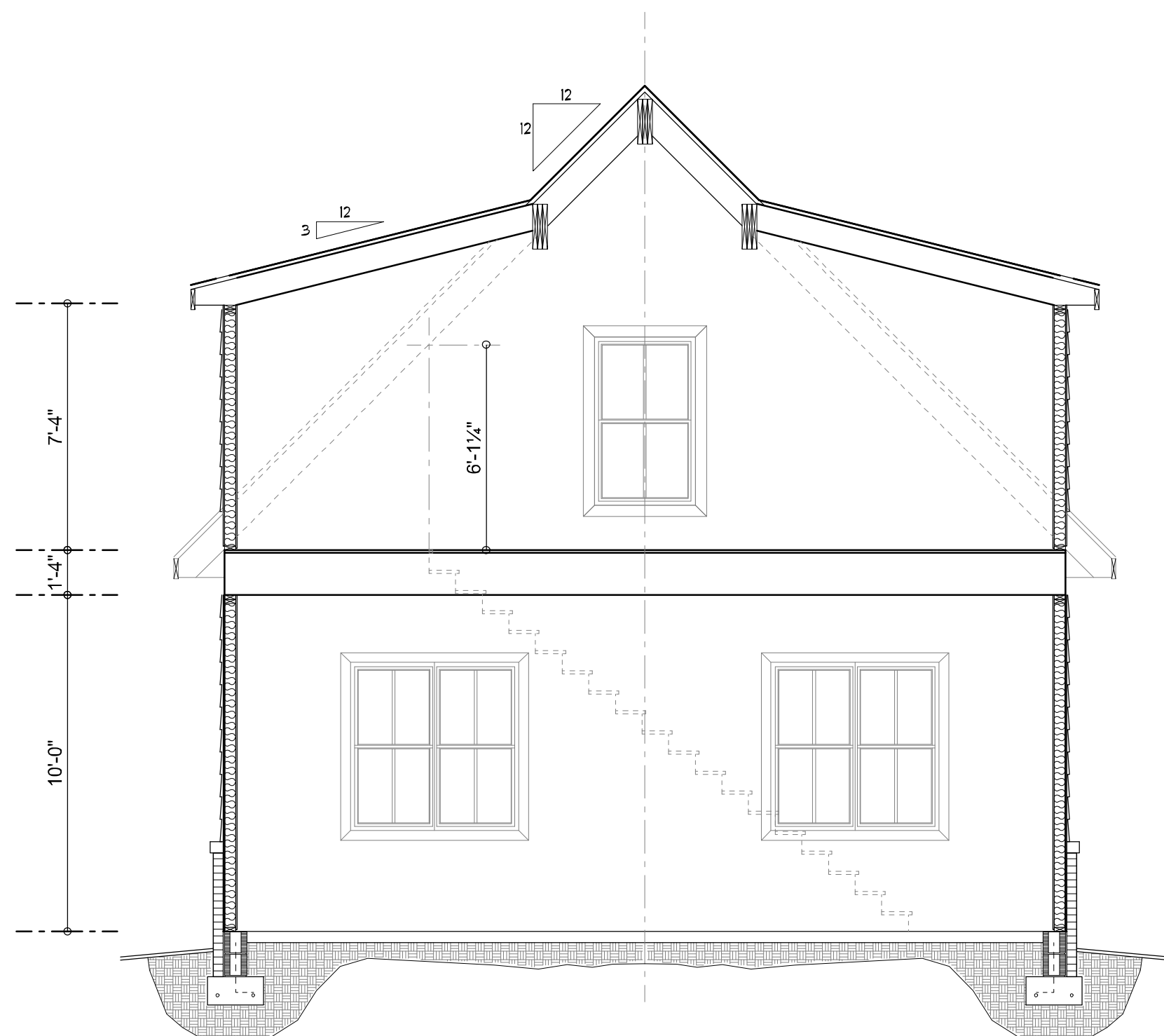
UNDERLAYMENT APPLICATION:
FOR ROOF SLOPES FROM 2:12 TO 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF TWO LAYERS APPLIED AS FOLLOWS:
1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

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 TWO LAYERS 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 OF 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 ASPHALT SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED.
1. FOR 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. FOR OPEN VALLEYS, VALLEY LINING OF TWO PLYS 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. FOR 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 AND COMPLYING WITH ASTM D 1970.



FULL BUILDING SECTION

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

NOTE: ALL DRAWINGS NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS

REVISIONS

October 08, 2024

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

DETAILS SHEET

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

Columbia County Building Department
Plans Reviewed for Code Compliance
State of Florida

A DETACHED GARAGE DESIGN FOR:

Micah & Alisha Cady

PROJECT ADDRESS: 413 SW Highpoint Glenn, Lake City, Florida 32024

Digitally signed by: Nicholas P Geisler
DN: CN = Nicholas P Geisler C = US
O = Unaffiliated
Date: 2024.10.08 15:50:35 -0400

AR0007005

NICHOLAS PAUL GEISLER
ARCHITECT
N.C.A.R.B. Certified (386) 365-4355

1758 NW Brown Rd.
Lake City, FL 32055

JOB NUMBER

20240712

SHEET NUMBER

5.2

OF 3 SHEETS