DESIGN SPECIFICATIONS

- DESIGN CODES:
  2020 FLORIDA BUILDING CODE (FBC) - RESIDENTIAL
  ASCE 7-10, 2005
  ND5, ACI, ATIC, AWPA, APA, ICC 600-08
- OCCUPANCY: RESIDENTIAL GROUP R-3 (ONE- AND TWO-FAMILY DWELLINGS
- DESIGN LOADS:

  ROOF TRUSS:
  LL 20 PSF TOP CHORD
  LL 0 PSF BOTTOM CHORD
  DL 7 PSF TOP CHORD
  DL 5 PSF BOTTOM CHORD

  ROOF CONVENTIONAL FRAMING:
  LL 20 PSF RAFTERS
  LL 20 PSF CEILING JOISTS
  DL 10 PSF RAFTERS
  DL 10 PSF CEILING JOISTS
  DL 30 PSF ATTICS WITH STORAGE
  DL 10 PSF ATTICS W/O STORAGE

  FLOORS:
  LL 40 PSF TOP CHORD
  LL 0 PSF BOTTOM CHORD
  DL 10 PSF TOP CHORD
  DL 5 PSF BOTTOM CHORD
- NUMBER OF STORIES: 1
- TYPE OF CONSTRUCTION: TYPE V-6, UNPROTECTED, UNSPRINKLERED
- WIND ZONE INFORMATION
  BUILDING: ENCLOSED STRUCTURE
  ULTIMATE DESIGN WIND SPEED: 130 MPH
  NOMINAL DESIGN WIND SPEED: 110 MPH
  BUILDING RISK CATEGORY: II
  WIND EXPOSURE CATEGORY: C
  INTERNAL PRESSURE COEFFICIENT: 0.18 CGpi ±

NOTE

Simpson Strong-Tie Co. Strong-Drive SDWC TRUSS Screws may be used for uplift connection in lieu of straps. Strong-Drive SDWC TRUSS Screws to be installed per manufacturer's specifications.

Simpson Strong-Tie Co. Titen HD Heavy-Duty Screw Anchors 5/8" x 8", maximum spacing of 42" o.c., may be used in lieu of 5/8"x10" anchor bolts with 3"x3"x1/8" washer. Titen HD Heavy-Duty Screw Anchors shall be installed per manufacturer's specifications.

ROOF SHEATHING FASTENING

- 4" O.C. GABLE END
- 6" O.C. EDGES (ALL ZONES)
- 6" O.C. INTERMEDIATE FRAMING (ZONE 3)
- 12" O.C. INTERMEDIATE FRAMING (ZONES 1 & 2)

SEE FIGURE R803.2.3.1, SECTION R803.1, 2017 FLORIDA BUILDING CODE - RESIDENTIAL, SIXTH EDITION FOR ROOF SHEATHING NAILING ZONES

ROOF NOTES

ROOF PITCH LESS THEN 4:12 DBL LAYER OF UNDERLAYMENT IS REQUIRED

OVERLAP ROOFING UNDERLAYMENT 4'(MIN) OVER HIPS AND RIDGES

BUTTON CAP NAILS ARE USED TO FASTEN UNDERLAYMENT TO ROOF DECK WHEN SHINGLES NOT INSTALLED SAME DAY

DRIP EDGE INSTALLED OVER THE UNDERLAYMENT AT RAKES AND UNDER THE UNDERLAYMENT AT EAVES

ALL ROOF PENETRATIONS ARE PROPERLY FLASHED W/ FLASHING OF THE CORRECT SIZE FOR THE PENETRATION

METAL ROOFING ATTACHED W/ CORRECT FASTENERS PER CODE AND MANUFACTURERS SPECS

1" SPACE IS MAINTAINED BETWEEN THE END OF THE GUTTER AND THE WALL CLADDING

ROOF VENT CALCULATION

FORMULA

1 SQUARE INCH FOR EVERY 300 SQUARE INCHES OF CEILING
144 SQUARE INCHES = 1 SQUARE FOOT
BUILDING CEILING (SQ FT) X 144 ÷ BUILDING (SQ IN)
BUILDING (SQ IN) /300 = SQ IN OF VENT REQUIRED
SQ IN OF VENT REQUIRED/2 = 50% AT HIGH AND 50% AT LOW

PER FBC SECTION R806.2: 40% MIN, BUT NOT MORE THAN 50% OF VENTILATION MUST BE PROVIDED BY VENTILATORS LOCATED A MIN 3'-0" ABOVE EAVE

BASE OF CALCULATION:

(a) OFF RIDGE VENTS - STAMPCO W/ 36 SQ IN (NFVA) PER LINEAL FT

(b) SOFFIT VENTS - GF 135-1/3" FULL VENT PERFORATED W/ 9.19 SQ IN (NFVA) PER LINEAL FT

CALCULATED LINEA FOOT OF SOFFIT VENT SHALL NOT INCLUDE NON-VENTED FIRE RATED SOFFIT LOCATED LESS THAN 5' FROM PROPERTY LINE

	AREA (SQ FT)	REQUIRED		PROVIDED		
		HIGH	LOW	VENTS	HIGH (SQ IN)	LINEAL FT	LOW (SQ IN)
HIGH: (1) 6" VENT = 216 SQ IN LOW: (1) LINEAL FT = 9.19 SQ IN							

SOFFIT TABLE VENT SPECS

Double 5" perforated soffits have a 6.20 sq. inches/sq. foot rating

Triple 4" center vent soffit has a 1.956 sq. inches/sq. foot rating

Triple 4" full vent soffit has a 5.867 sq. inches/sq. foot rating

Triple 4" basketweave full vent has a 14.34 sq. inches/sq. foot rating

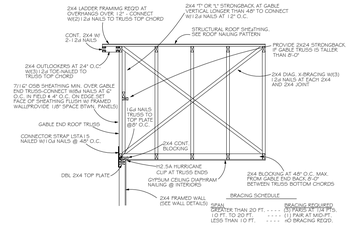
Triple 4" center vent has a 4.78 sq. inches/sq. foot rating

Beaded hidden vent soffit has 2.66 sq. inches/sq. foot rating

Triple 3-1/3" hidden vent soffit has a 9.19 sq. inches/sq. foot rating

NOTE

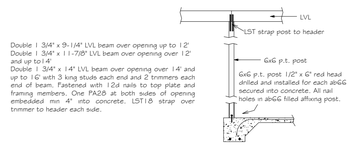
7/16" O.S.B. NAILED WITH 8D 6" O.C. IN FIELD & 4" O.C. ON EDGES



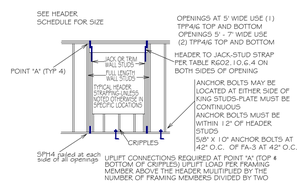
BRACING SCHEDULE

SPAN	BRACING REQUIRED (STARTING AT ENDS)
GREATER THAN 20 FT.	(2) PAIR AT MID-PT.
(15 FT TO 20 FT)	(1) PAIR AT MID-PT.
LESS THAN 15 FT.	NO BRACING REQD.

GABLE END BRACING
NOT TO SCALE

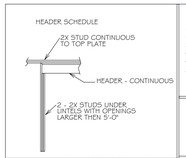


LVL detail connection



TYPICAL HEADER STRAPPING
NOT TO SCALE

HEADER SCHEDULE



OPENING WIDTH	BEARING OR SHEAR WALL	NON-BEARING WALLS
0'-0" TO 3'0"	2 - 2 x 6's	2 - 2 x 4s
3'-1" TO 5'-0"	2 - 2 x 10's	2 - 2 x 6s
5'-1" TO 7'-0"	2 - 2 x 10's	2 - 2 x 8s
7'-1" TO 10'-0"	2 - 2 x 10's	2 - 2 x 10's

NOTE:
UPLIFT CONNECTION IS REQUIRED AT EACH END OF HEADER AND AT BOTTOM OF HEADER STUDS IN ADDITION TO CONNECTORS AT WALL STUDS AND AT TOP AND BOTTOM OF CRIPPLES

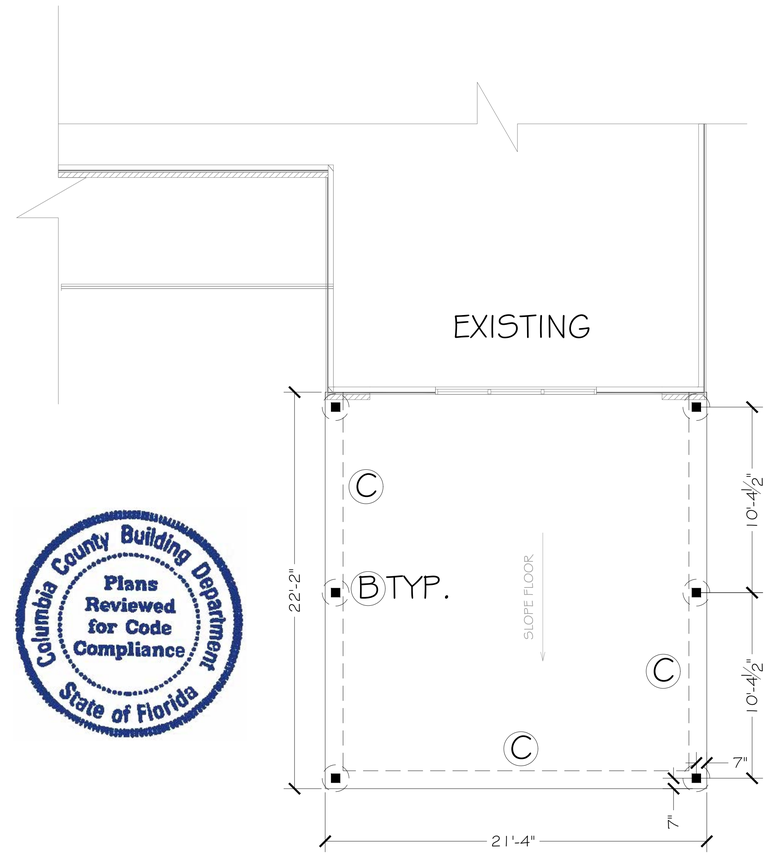
MAXIMUM HEADER SPAN

3'	6'	9'	12'	15'	18'

NUMBER OF HEADER STUDS (JACKS) SUPPORTING END OF HEADER

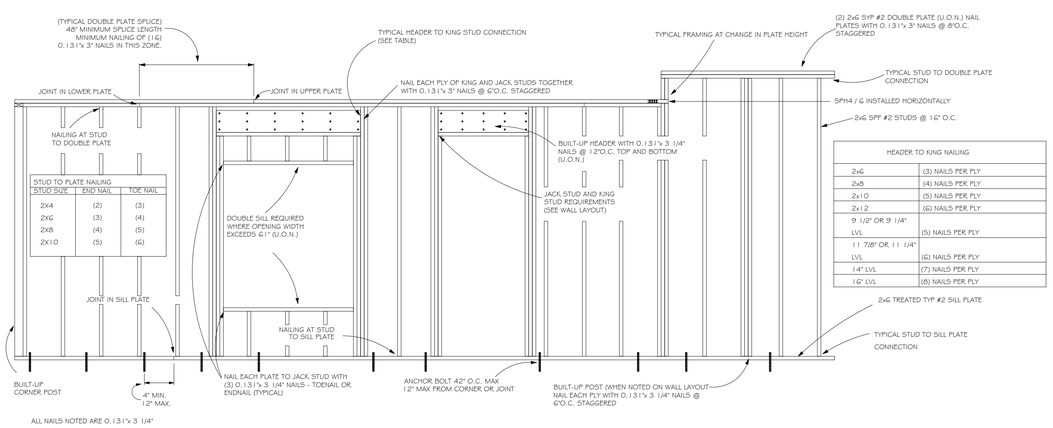
1	1	2	2	2	2

NUMBER OF FULL LENGTH STUDS (KINGS) AT END OF HEADER	2



FOUNDATION PLAN
SCALE: 1/4" = 1'

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



STUD TO PLATE NAILING

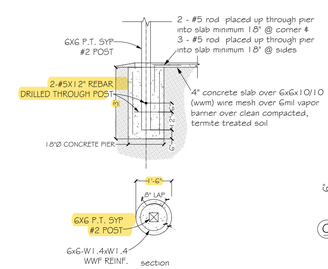
STUD SIZE	END NAIL	TOE NAIL
2x4	(2)	(3)
2x6	(3)	(4)
2x8	(4)	(5)
2x10	(5)	(6)

HEADER TO KING NAILING

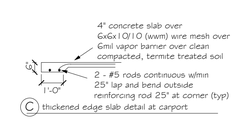
2x6	(3) NAILS PER PLY
2x8	(4) NAILS PER PLY
2x10	(5) NAILS PER PLY
2x12	(6) NAILS PER PLY
9 1/2" OR 9 1/4" LVL	(5) NAILS PER PLY
11 7/8" OR 11 1/4" LVL	(6) NAILS PER PLY
14" LVL	(7) NAILS PER PLY
16" LVL	(8) NAILS PER PLY

ALL NAILS NOTED ARE 0.131"x 3 1/4"

TYPICAL WALL FRAMING
NOT TO SCALE



B Embedded post detail



C thickened edge slab detail at carport

FOUNDATION NOTES

1. THE SLAB SHALL BE 4" CONCRETE SLAB REINFORCED w/ 6X6-1.4/1.4 WELDED WIRE MESH PLACED ON CHAIRS 1 1/2" DEPTH OR FIBER MESH CONCRETE, 6-MIL POLY VAPOR BARRIER w/ 6" LAPS SEALED w/ POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL
2. BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW UNDISTURBED SOIL OR ENGINEERED FILL PER FBC-RES, SECTION R403.1.4

CAROL CHADWICK, P.E.
No. 80201
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Carol Chadwick
DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE000595E4C, cn=Carol Chadwick
Date: 2023.03.30 11:29:18 -04'00'

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

PREPARED FOR:
WINDOOR CONSTRUCTION CO.
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LAKE CITY, FL 32055
386.754.1367

RIOS CARPORT
FOUNDATION DETAILS

PROJECT NO. T-23-126
DATE MAR. 30, 2023
REVISIONS DATE
SHEET S-1

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