DESIGN SPECIFICATIONS

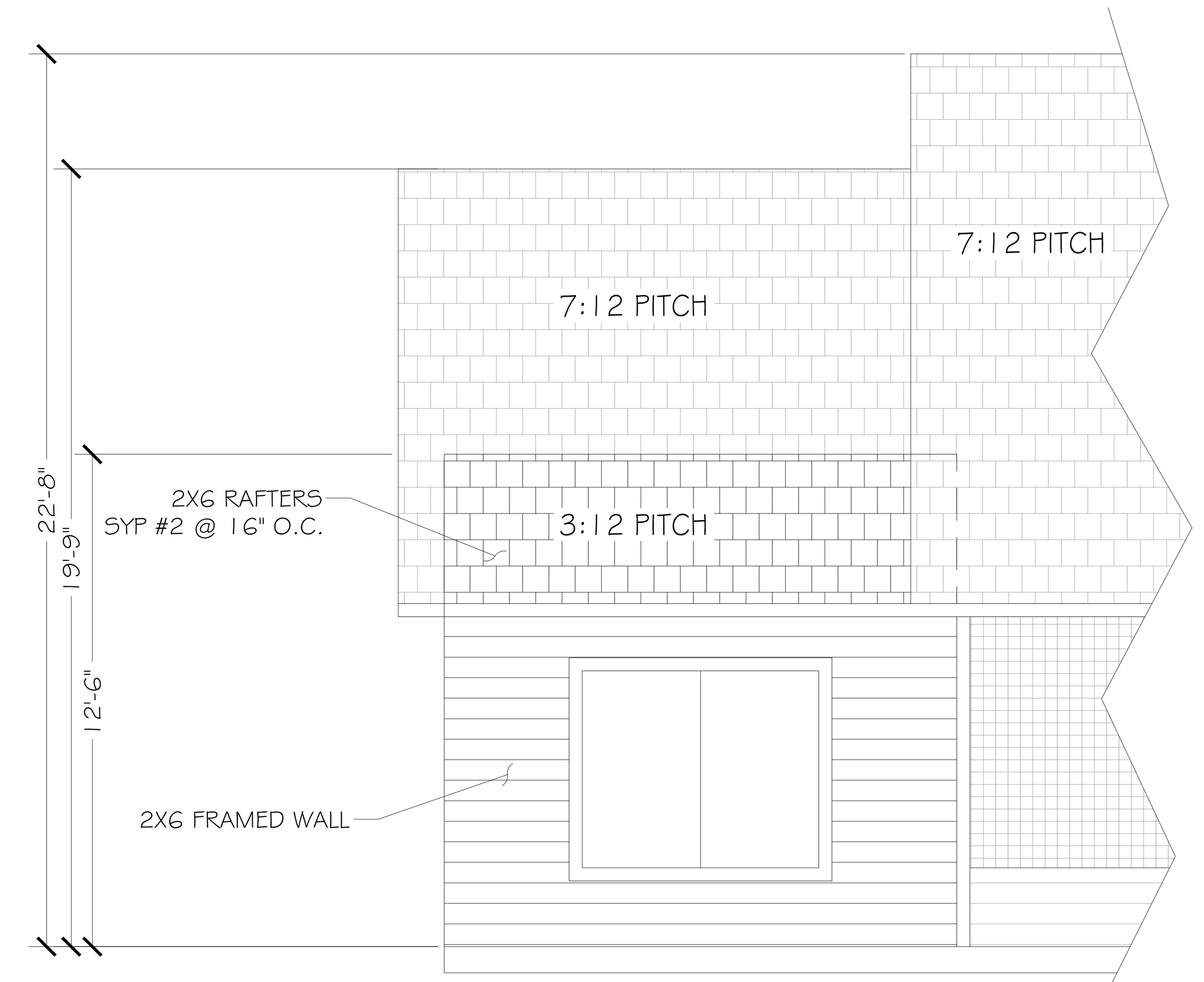
- DESIGN CODES:
  2020 FLORIDA BUILDING CODE (FBC) - RESIDENTIAL
  ASCE 7-10, 2005
  NDS, ACI, ATIC, AWPA, APA, ICC 600-08
- OCCUPANCY: RESIDENTIAL GROUP R-3 (ONE- AND TWO-FAMILY DWELLINGS
- DESIGN LOADS:

  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 CG_{pi} ±

END ELEVATION
SCALE: 1/4" = 1'



REAR ELEVATION
SCALE: 1/4" = 1'

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

Double 1 3/4" x 9-1/4" LVL beam over opening up to 12'
Double 1 3/4" x 11-7/8" LVL beam over opening over 12' and up to14'
Double 1 3/4" x 14" LVL beam over opening over 14' and up to 16' with 3 king studs each end and 2 trimmers each end of beam. Fastened with 12d nails to top plate and framing members. One PA28 at both sides of opening embedded min 4" into concrete. LST18 strap over trimmer to header each side.

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 - GP T3-1/3" FULL VENT PERFORATED W/ 9.19 SQ IN (NFVA) PER LINEAL FT

CALCULATED LINELA 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

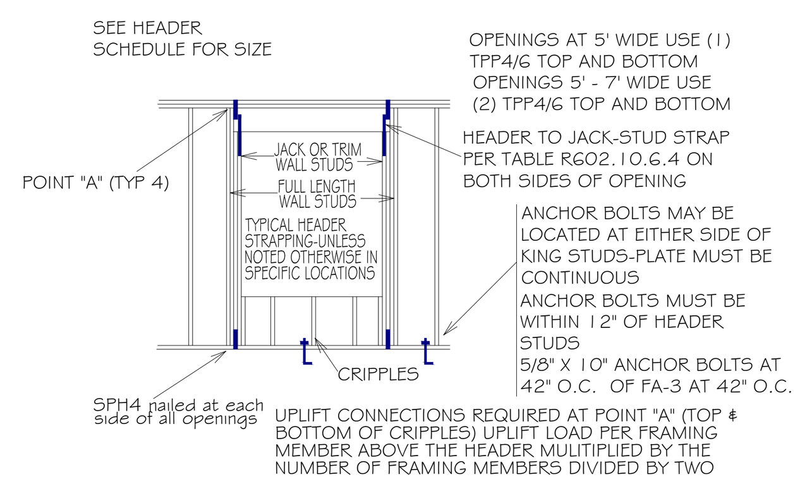
Triple 4" center vent has a 4.78 sq. inches/sq. foot rating

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



UPLIFT CONNECTIONS REQUIRED AT POINT "A" (TOP & BOTTOM OF CRIPPLES) UPLIFT LOAD PER FRAMING MEMBER ABOVE THE HEADER MULIPLIED BY THE NUMBER OF FRAMING MEMBERS DIVIDED BY TWO

TYPICAL HEADER STRAPPING
NOT TO SCALE

HEADER SCHEDULE

2X STUD CONTINUOUS TO TOP PLATE
HEADER - CONTINUOUS
2 - 2X STUDS UNDER LINTELS WITH OPENINGS LARGER THEN 5'-0"

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

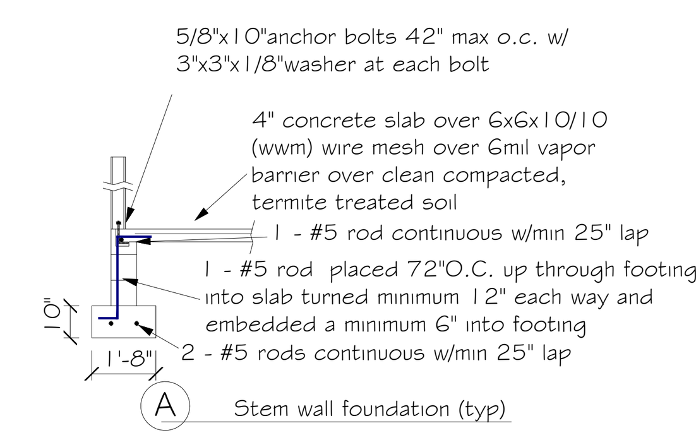
NOTE:
UPLIFT CONNECTION IS REQUIRED AT EACH END OF HEADER AND AT BOTTOM OF HEADER STUDS IN ADDITION TO CONNECTORS AT WALL STUDS AND AT TOP AND BOTTOM OF CRIPPLES

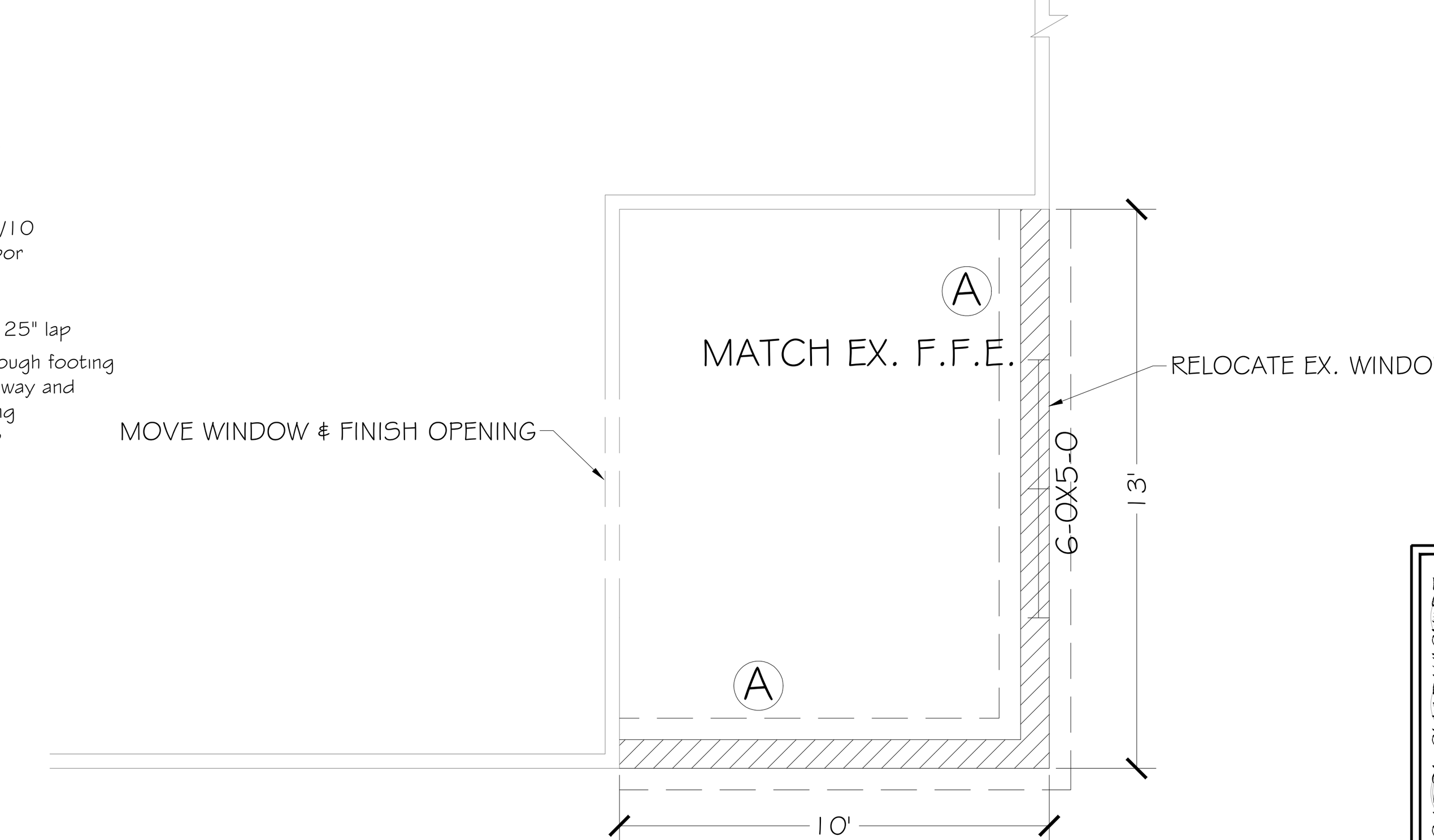
MAXIMUM HEADER SPAN	3'	6'	9'	12'	15'	18'
NUMBER OF HEADER STUDS (JACKS) SUPPORTING END OF HEADER	1	1	2	2	2	2

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

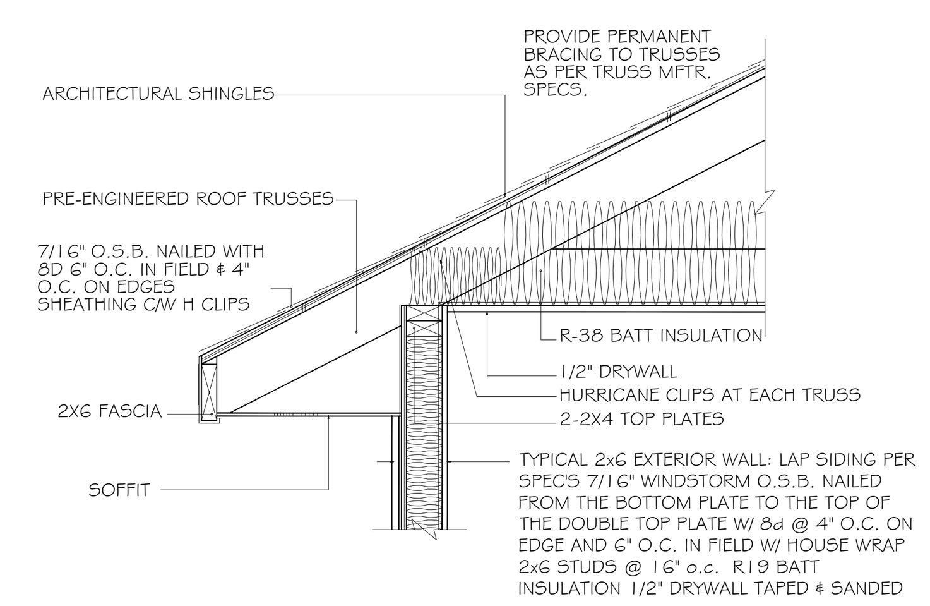
FOUNDATION NOTES

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

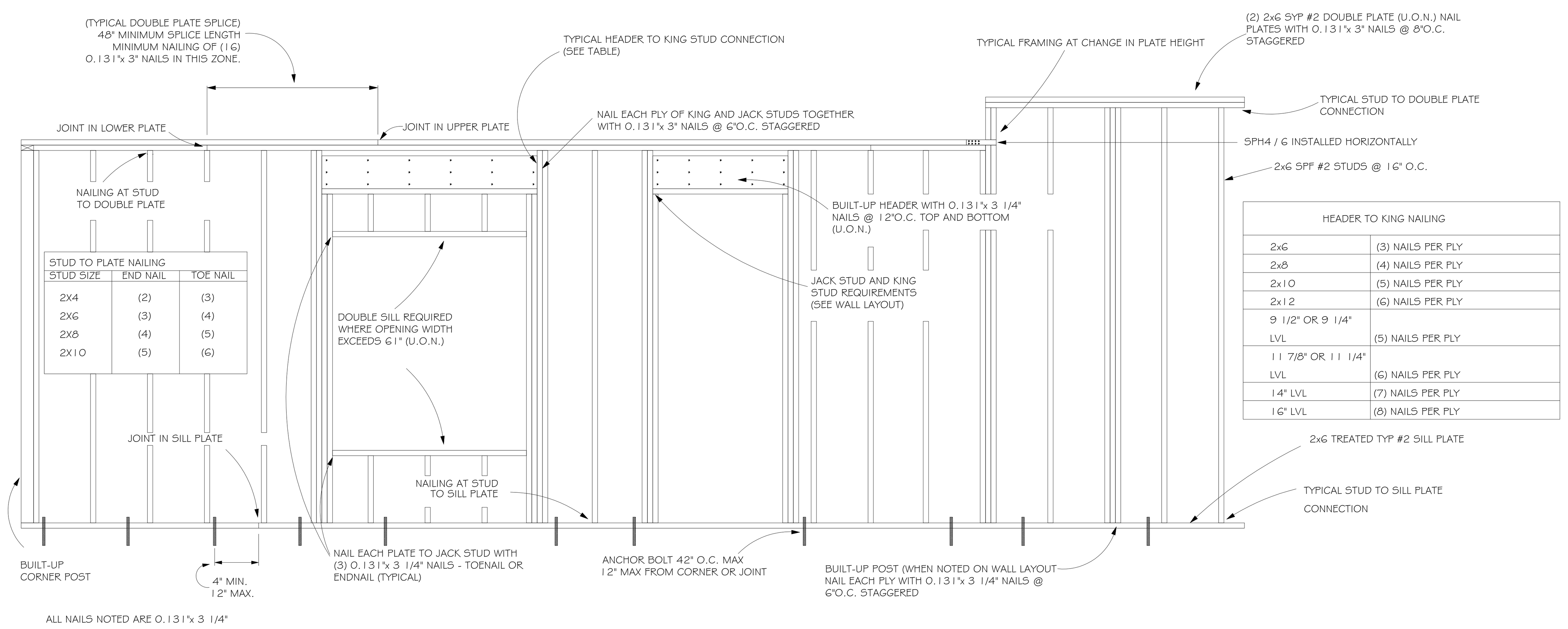




FOUNDATION PLAN
SCALE: 1/4" = 1'



4" STUD EAVE



STUD TO PLATE NAILING

STUD SIZE	END NAIL	TOE NAIL
2X4	(2)	(3)
2X6	(3)	(4)
2X8	(4)	(5)
2X10	(5)	(6)

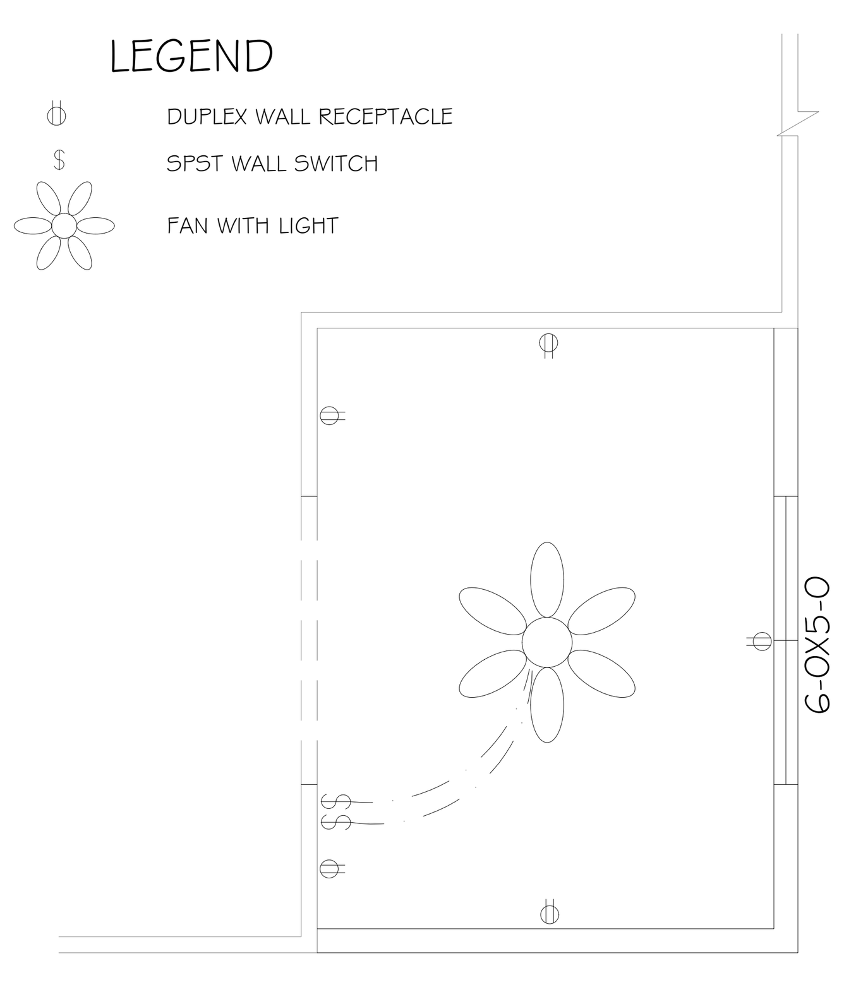
HEADER TO KING NAILING

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

TYPICAL WALL FRAMING
NOT TO SCALE

LEGEND

DUPLEX WALL RECEPTACLE
SPST WALL SWITCH
FAN WITH LIGHT



ELECTRIC PLAN
SCALE: 1/4" = 1'

ELECTRICAL NOTES

ALL ELECTRICAL TO BE INSTALLED PER CURRENT NEC CODE

1. PROVIDE INTERIOR SWITCH AND EXTERIOR LIGHT IN THE VICINITY OF ALL EXTERIOR DOORS.
2. PROVIDE RECEPTACLE OUTLET 6' FROM OPENINGS, END OF WALLS AND 6' ON CENTERS.
3. PROVIDE AN OUTSIDE GFI, WATER PROTECTED RECEPTACLE NEAR EGRESS DOORS, AT AIR CONDENSER UNIT AND NEAR GARAGE DOOR OPENINGS.
4. BATHROOM RECEPTACLES TO BE GFI WITH A SEPARATE 20 AMP CIRCUIT.
5. PROVIDE SMOKE DETECTOR PER BUILDING CODE IN THE BEDROOMS AND HALLWAYS WITHIN 10' SERVING SUCH ROOMS.
6. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN DWELLING UNIT SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
7. LIGHT FIXTURE IN CLOTHES CLOSET SHALL BE SURFACE-MOUNTED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMP ON THE WALL ABOVE DOOR OR ON CEILING WITH MIN. 12" CLEAR TO STORAGE AREA.
8. FLUORESCENT GENERAL LIGHTING IN BATH AND KITCHEN IS REQUIRED TO HAVE A 40 LUMENS PER WATT EFFICIENCY LAMP.
9. LIGHT FIXTURES IN TUB OR SHOWER ENCLOSURES MUST HAVE LABEL STATING "SUITABLE FOR DAMP LOCATIONS".
10. RECESSED CEILING FIXTURES MUST BE IC RATED.
11. ALL RECEPTACLES AT KITCHEN COUNTER SHALL BE GFCI. PROVIDE TWO MINIMUM SEPARATE 20 AMP CIRCUITS FOR KITCHEN APPLIANCES.
12. EACH SEPARATE KITCHEN COUNTER SPACE 12" OR WIDER SHALL HAVE A RECEPTACLE.
13. KITCHEN RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL IS MORE THAN 24" FROM A RECEPTACLE.
14. ISLAND AND PENINSULA COUNTERTOPS 12" OR WIDER SHALL HAVE A LEAST ONE RECEPTACLE FOR EACH 4' OF COUNTERTOP.
15. NOT LESS THAN 75% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICIENCY LAMPS OR NOT LESS THAN 75% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICIENCY LAMPS.
16. ALL CIRCUITS IN GARAGE AREA TO BE GFI RATED, 125 VOLT, SINGLE PHASE, 20 AMPERE.

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

Digitally signed by Carol Chadwick
DN: c=US, o=Florida, dnQualifier=A01410D0000017EB6D924CE0005954C, cn=Carol Chadwick
Date: 2022.11.15 14:26:22 -05'00'

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CAROL J. CHADWICK
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STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE	REVISION DESCRIPTION

PREPARED FOR
BRYAN ZECHER CONSTRUCTION
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COLEMAN ADDITION
FOUNDATION DETAILS

PROJECT NO. FL22438
DATE NOV. 15, 2022
REVISION DATE
SHEET S-1