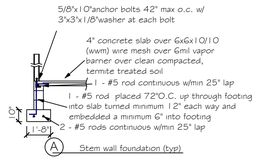
DESIGN SPECIFICATIONS

- 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:

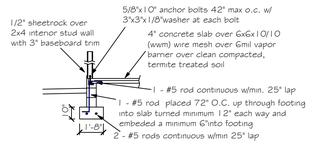
  ROOF TRUSS:
  LL 20 PSF TOP CHORD
  LL 0 PSF BOTTOM CHORD
  DL 7 PSF TOP CHORD
  DL 5 PSF BOTTOM CHORD

  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

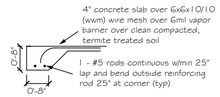
  FLOORS:
  LL 40 PSF TOP CHORD
  LL 0 PSF BOTTOM CHORD
  DL 10 PSF TOP CHORD
  DL 5 PSF BOTTOM CHORD
- MAXIMUM HEIGHT OF STRUCTURE: 20'-1"
- NUMBER OF STORIES: 1
- TYPE OF CONSTRUCTION: TYPE V-G, UNPROTECTED, UNSPRINKLERED
- WIND ZONE INFORMATION
  BUILDING: ENCLOSED STRUCTURE
  ULTIMATE DESIGN WIND SPEED: 130 MPH
  NOMINAL DESIGN WIND SPEED: 110 MPH
  BUILDING RISK CATEGORY: II
  WIND EXPOSURE CATEGORY: C
  INTERNAL PRESSURE COEFFICIENT: 0.18 CGpi ±



A Stem wall foundation (typ)

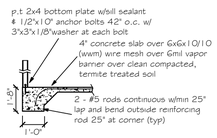


B Stem wall foundation drop footing

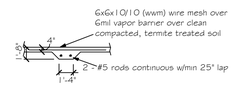


FOOTING AT POSTS:
2'-0" x 2'-0" x 1'-0" depth with 3 - #5 bars each way at bottom w/ 6x6 p.t. post on ABA66z base attached to slab using 1/2"x4" redhead anchor

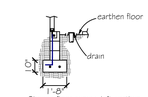
C Monolythic slab detail at porch



D Monolythic slab detail



E Load beanng in-field foundation



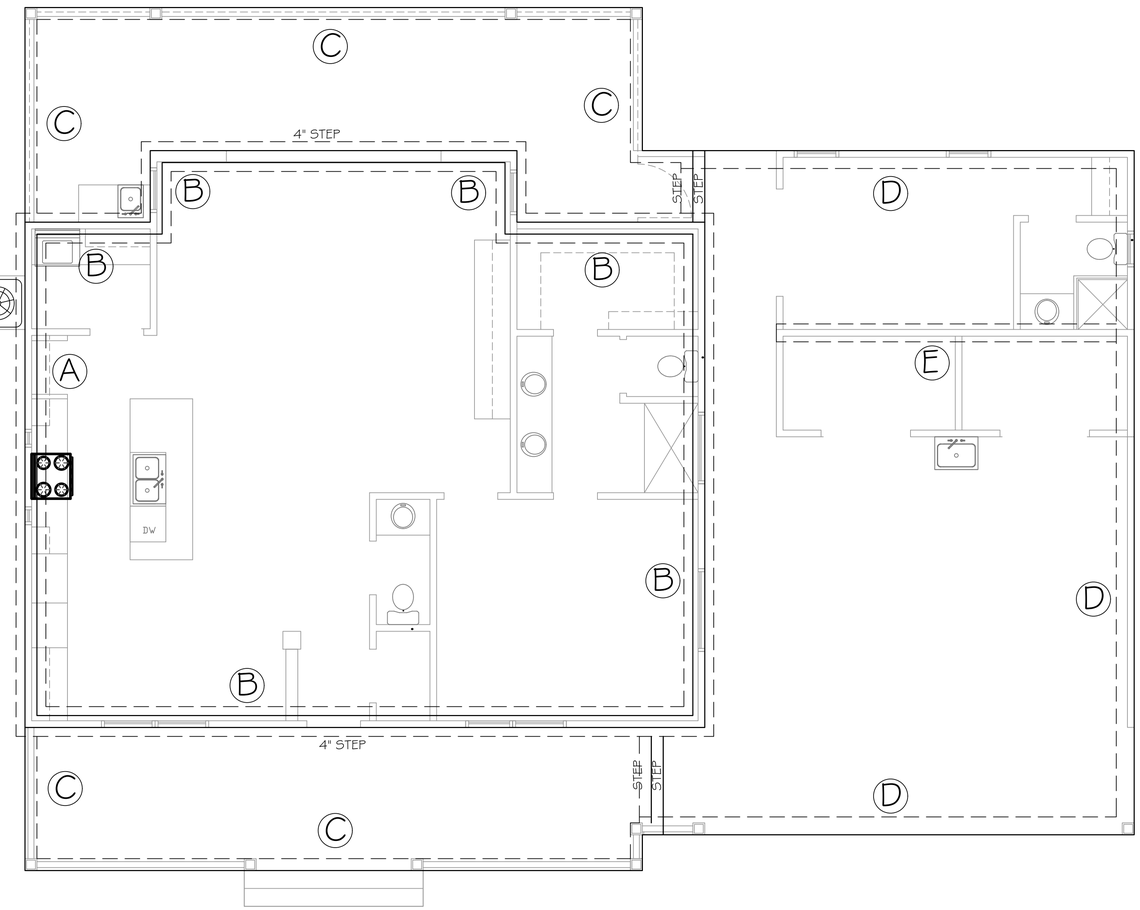
Shower floor recess left earthen to be hard packed after in prep for tile application

F Recessed Shower Detail

FOUNDATION NOTES

1. REFER TO ARCHITECTURAL & BUILDING PLANS FOR ACTUAL DIMENSIONS, RECESSES IN SLAB, STEP DOWNS, ETC.
2. CONTRACTOR SHALL VERIFY ALL ROUGH PLUMBING LOCATIONS WITH OWNER PRIOR TO POURING SLAB
3. THE SLAB SHALL BE 4" CONCRETE SLAB REINFORCED w/ 6X6-1.4/1.4 WELDED WIRE MESH PLACED ON CHAIRS 1 ½" DEPTH OR FIBER MESH CONCRETE, 6-MIL POLY VAPOR BARRIER w/ 6" LAPS SEALED w/ POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL
4. BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW UNDISTURBED SOIL OR ENGINEERED FILL PER FBC-RES. SECTION R403.1.4

NOTE:
SOIL UNDER FOOTING SHALL BE COMPRESSED TO 2000 PSF AT 95% DENSITY. CONCRETE STRENGTH SHALL BE 2500 PSI



FOUNDATION PLAN
SCALE: 1/4" = 1'

Carol Chadwick, PE
cn=Carol Chadwick, PE, o=This item has been electronically signed and sealed by Carol Chadwick, PE using a digital signature., ou, email=ccpewyo@gmail.com, c=US
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PROJECT No. P21042
DATE APRIL 17, 2021
REVISION DATE
SHEET No. S-1

PRIMOSCH RESIDENCE
FOUNDATION DETAILS

PREPARED FOR:
BRYAN ZECHER CONSTRUCTION
307-272-4660
bzecher@comcast.net

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

CALCULATED LINEAL 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) in VENT = 21.6 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 1.356 sq. inches/sq. foot rating

Triple 4" full vent soffit has a 5.067 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

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

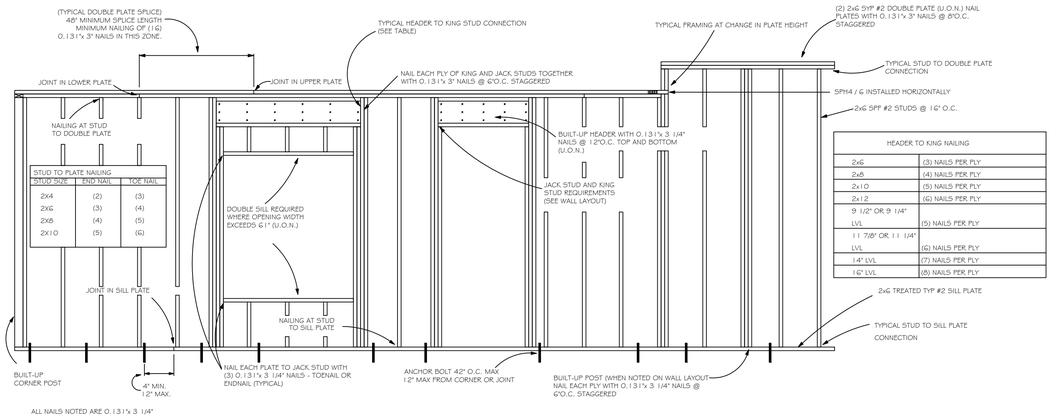
BUTTON CAP NAILS ARE USED TO FASTEN UNDERLAYMENT TO ROOF DECK WHEN SHINGLES NOT INSTALLED SAME DAY

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

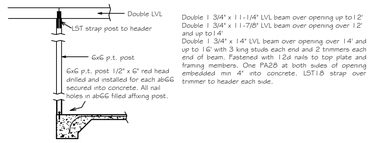
METAL ROOFING ATTACHED W/ CORRECT FASTENERS PER CODE AND MANUFACTURERS SPECS

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



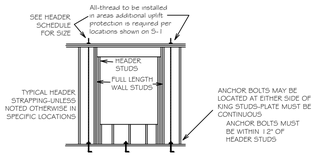
HEADER TO KING NAILING	
2xG	(3) NAILS PER PLY
2x8	(4) NAILS PER PLY
2x10	(5) NAILS PER PLY
2x12	(6) NAILS PER PLY
9 1/2" OR 9 1/4" LVL	(5) NAILS PER PLY
11 7/8" OR 11 1/4" LVL	(6) NAILS PER PLY
14" LVL	(7) NAILS PER PLY
16" LVL	(8) NAILS PER PLY

TYPICAL WALL FRAMING
NOT TO SCALE

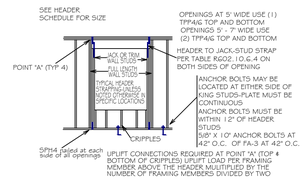


Double 1 3/4" x 11-1/4" LVL beam over opening up to 12'
Double 1 3/4" x 11-7/8" LVL beam over opening over 12' and up to 14'
Double 1 3/4" x 14" LVL beam over opening over 14' and up to 16' with 3 king studs each end and 2 trimmers each end of beam. Fastened with 12d nails to top plate and framing members. One PA26 at both sides of opening embedded min 4" into concrete. LST1.5 strap over trimmer to header each side.

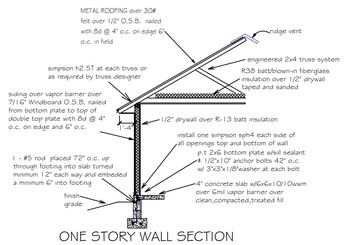
LVL CONNECTION DETAIL
NOT TO SCALE



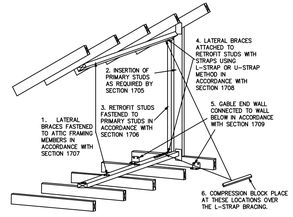
TYPICAL ALL THREAD DETAIL
NOT TO SCALE



TYPICAL HEADER STRAPPING
NOT TO SCALE

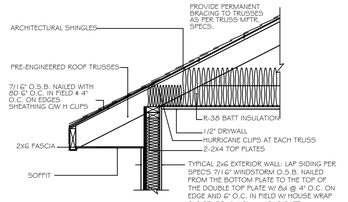


ONE STORY WALL SECTION



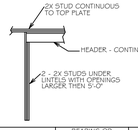
THIS FIGURE SHOWS A TRUSS GABLE END USING THE L-BENT STRAP METHOD IN ORDER TO SHOW STRAPS, COMPRESSION BLOCKS ARE NOT SHOWN. THE METHODOLOGY FOR A CONVENTIONALLY FRAMED GABLE END IS SIMILAR. NOT ALL DETAILS ARE SHOWN.

GABLE END BRACING
NOT TO SCALE



4" STUD EAVE

HEADER SCHEDULE



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

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

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

Carol Chadwick, PE
cn=Carol Chadwick, PE, o=This item has been electronically signed and sealed by Carol Chadwick, PE using a digital signature., ou, email=ccpewoi@gmail.com, c=US
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CAROL CHADWICK PE
No. 82565
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER

PROJECT ADDRESS

PREPARED FOR:
BRYAN ZEGHER CONSTRUCTION
239-246-5555
bzacher@comcast.net

PRIMOSCH RESIDENCE
FRAMING DETAILS

PROJECT NO: 17-2-042
DATE: APRIL 17, 2021
REVISIONS:
SHEET NO: S-2

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