DESIGN SPECIFICATIONS

- DESIGN CODES:
  2017 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:
- 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

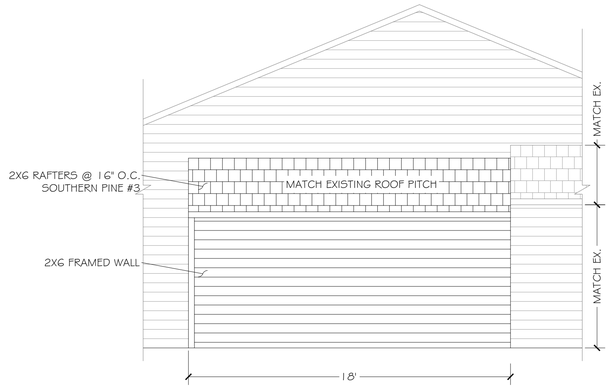
DRIP EDGE INSTALLED OVER THE UNDERLAYMENT AT RAKES AND UNDER THE UNDERLAYMENT AT EAVES

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

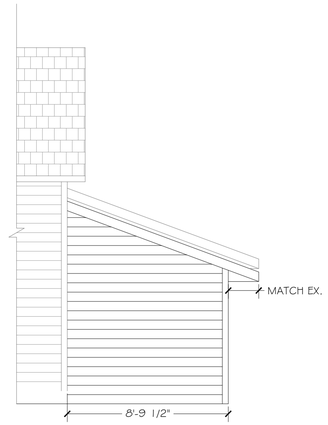
METAL ROOFING ATTACHED W/ CORRECT FASTENERS PER CODE AND MANUFACTURERS SPECS

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

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 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 PA28 at both sides of opening embedded min 4" into concrete. LST18 strap over trimmer to header each side.



END ELEVATION
NOT TO SCALE



SIDE ELEVATION
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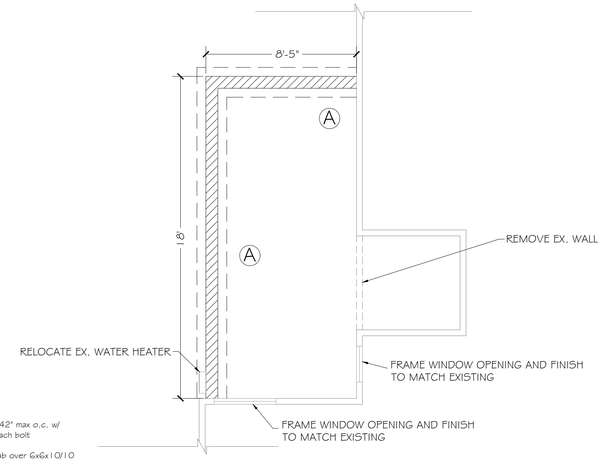
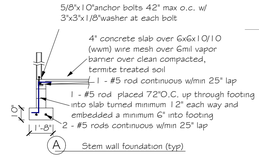
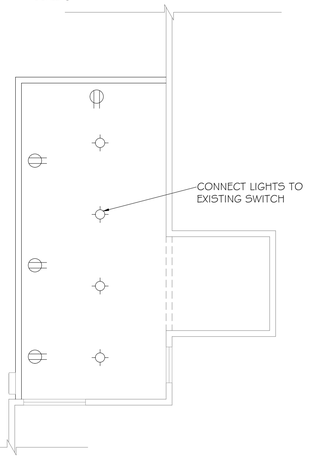


FOUNDATION PLAN
SCALE: 1/4" = 1'



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 1/2" 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



ELECTIRC PLAN
SCALE: 1/4" = 1'

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

AREA (SQ FT)	REQUIRED HIGH	REQUIRED LOW	PROVIDED VENTS	PROVIDED HIGH (SQ IN)	PROVIDED LINEAL FT	PROVIDED 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

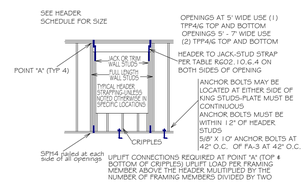
Triple 4" center vent has a 4.78 sq. inches/sq. foot rating

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

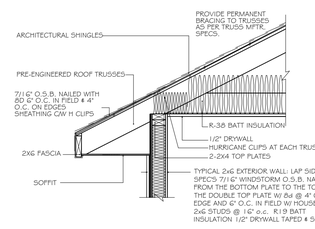
Triple 3-1/3" hidden vent soffit has a 9.19 sq. inches/sq. foot rating

NOTE

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



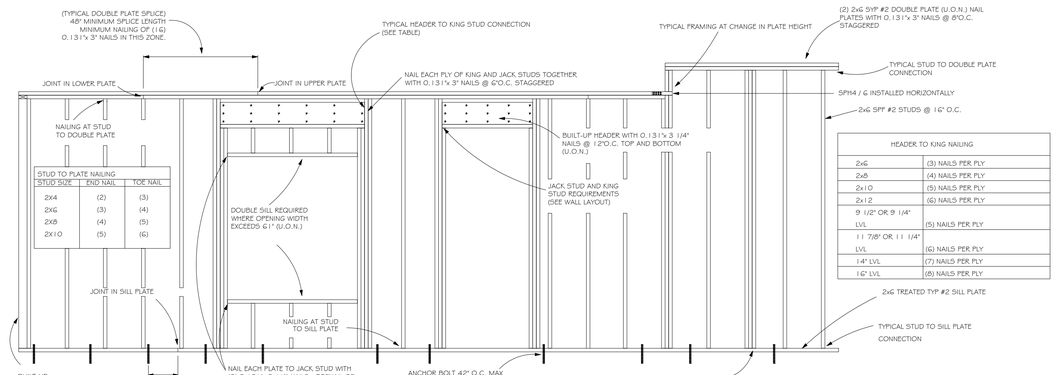
TYPICAL HEADER STRAPPING
NOT TO SCALE



4" STUD EAVE

LEGEND

- DUPLEX WALL RECEPTACLE
- SPST WALL SWITCH
- LIGHT



STUD TO PLATE NAILING

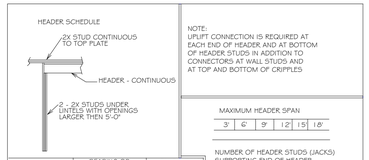
STUD SIZE	END NAIL	TOE NAIL
2X4	(2)	(3)
2X6	(3)	(4)
2X8	(4)	(5)
2X10	(5)	(6)

HEADER TO KING NAILING

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

HEADER SCHEDULE



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

ALL ELECTRICAL TO BE INSTALLED CURRENT NEC CODE.

1. PROVIDE INTERIOR SWITCH AND EXTERIOR LIGHT IN THE VICINITY OF DOORS.
2. PROVIDE RECEPTACLE OUTLET 6' FROM OPENINGS, ENDS OF WALL, AND 6' ON CENTER
3. PROVIDE AN OUTSIDE GFI, WATER PROTECTED RECEPTACLE OUTLET NEAR EGRESS DOORS AT AIR CONDENSER UNIT, AND NEAR GARAGE DOOR OPENING.
4. BATHROOM OUTLETS TO BE GFCI WITH A SEPARATE 20 AMPS CIRCUIT.
5. PROVIDE SMOKE DETECTOR AS BY BLDG CODE, IN THE BEDROOMS AND HALLWAYS WITHIN 10' SERVING SUCH ROOMS.
6. ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE PHASE 15 AND 20 AMPERE 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 IS REQUIRED IN BATHROOM AND KITCHEN A 40 LUMENS PER WATT EFFICIENCY LAMP IS REQUIRED
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 TO KITCHEN APPLIANCES
12. EACH SEPARATE KITCHEN COUNTER SPACE 12" OR WIDER SHALL HAVE A RECEPTACLE OUTLET
13. KITCHEN RECEPTACLE OUTLET SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL IS MORE THAN 24" FROM A RECEPTACLE OUTLET
14. ISLAND AND PENINSULA COUNTER TOPS 12" OR WIDER SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET FOR EACH 4' OF COUNTER TOP.
15. NOT LESS THAN 75% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR NOT LESS THAN 75% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.
16. ALL CIRCUITS IN GARAGE AREA TO BE GFI RATED 125 VOLT SINGLE PHASE 20 AMPERE

CAROL J. CHADWICK LICENSED No. 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

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=iccpewyo@gmail.com, c=US
2020.12.09 22:08:24 -05'00'

CAROL J. CHADWICK P.E. No. 82560 STATE OF FLORIDA PROFESSIONAL ENGINEER

DATE	REVISION

PREPARED FOR:
BRYAN ZECHER CONSTRUCTION
352-726-2262
bzecher@comcast.net

COLEMAN ADDITION
FOUNDATION DETAILS

PROJECT NO. F120246
DATE DEC. 9, 2020
REVISION DATE
SHEET S-1