

ROOF VENT CALCULATION

FORMULA

1 SQUARE INCH FOR EVERY 300 SQUARE INCHES OF CEILING
 1.44 SQUARE INCHES = 1 SQUARE FOOT
 BUILDING CEILING (SQ FT) x 1.44 = BUILDING (SQ IN)
 BUILDING (SQ IN) / 300 = SQ IN OF VENT REQUIRED
 SQ IN OF VENT REQUIRED / 144 = SQ FT OF VENT REQUIRED

PER FDC SECTION R802.2, 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/ 3/8" 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 LINEAL FOOT OF SOFFIT VENT SHALL NOT INCLUDE NONVENTED THE RATED SOFFIT LOCATED LESS THAN 9' FROM PROPERTY LINE.

AREA (SQ FT)	REQUIRED	PROVIDED	UNSAT. FT.	LOW (SQ IN)

SOFFIT TABLE VENT SPECS.

Double 5" perforated soffits have a 6.20 sq. inch/sq. foot rating
 Triple 4" center vent soffits has a 1.956 sq. inch/sq. foot rating
 Triple 4" full vent soffits has a 5.627 sq. inch/sq. foot rating
 Triple 4" basketweave full vent has a 14.34 sq. inch/sq. foot rating
 Triple 4" center vent has a 4.76 sq. inch/sq. foot rating
 Beaded hidden vent soffit has 2.66 sq. inch/sq. foot rating
 Triple 3-1/2" hidden vent soffit has a 9.19 sq. inch/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 5DWC TRUSS Screws may be used for uplift connection in lieu of straps. Strong-Drive 5DWC 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.

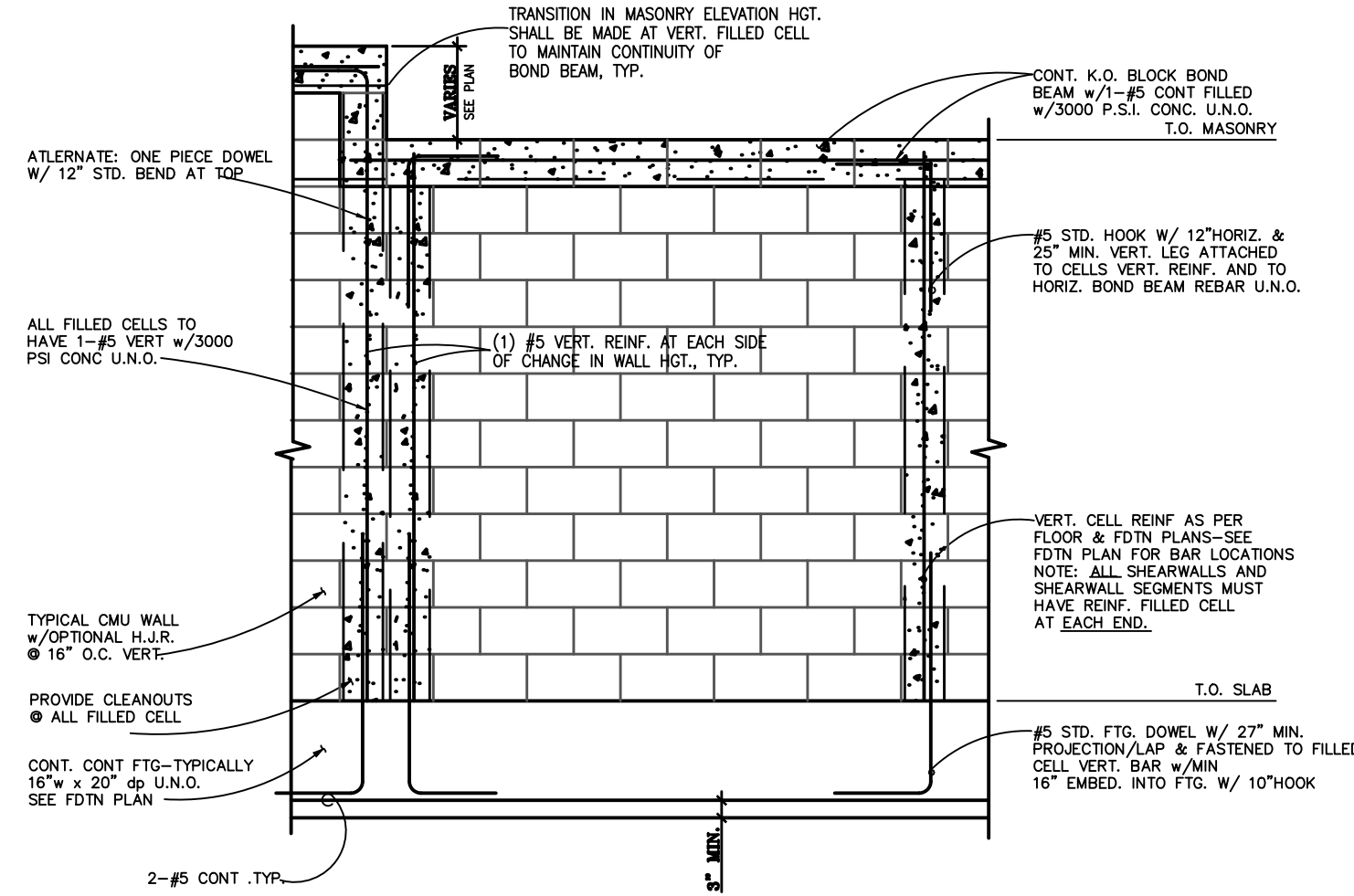
ROOF SHEATHING FASTENING

- 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)

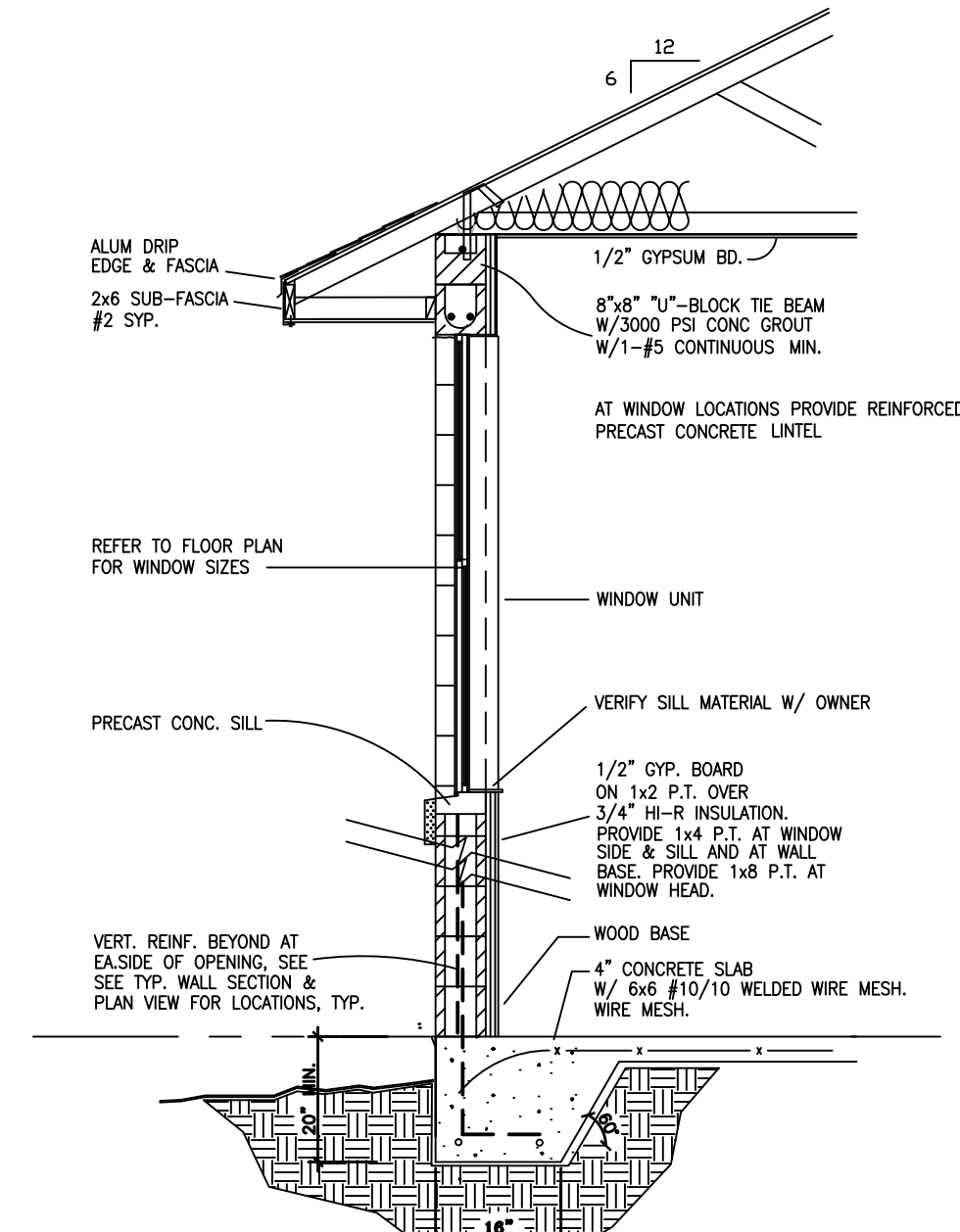
SEE FIGURE R803.2.3.1, SECTION R803.1, 2017 FLORIDA BUILDING CODE - RESIDENTIAL, SIXTH EDITION FOR ROOF SHEATHING NAILING ZONES

ROOF NOTES

- ROOF PITCH LESS THAN 4:12 DBL LAYER OF UNDERLAYMENT IS REQUIRED
- OVERLAP ROOFING UNDERLAYMENT 4(MIN) OVER HIP'S AND RIDGES
- BUTTON CAP NAILS ARE USED TO FASTEN UNDERLAYMENT TO ROOF DECK WHEN SPRINGLES 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



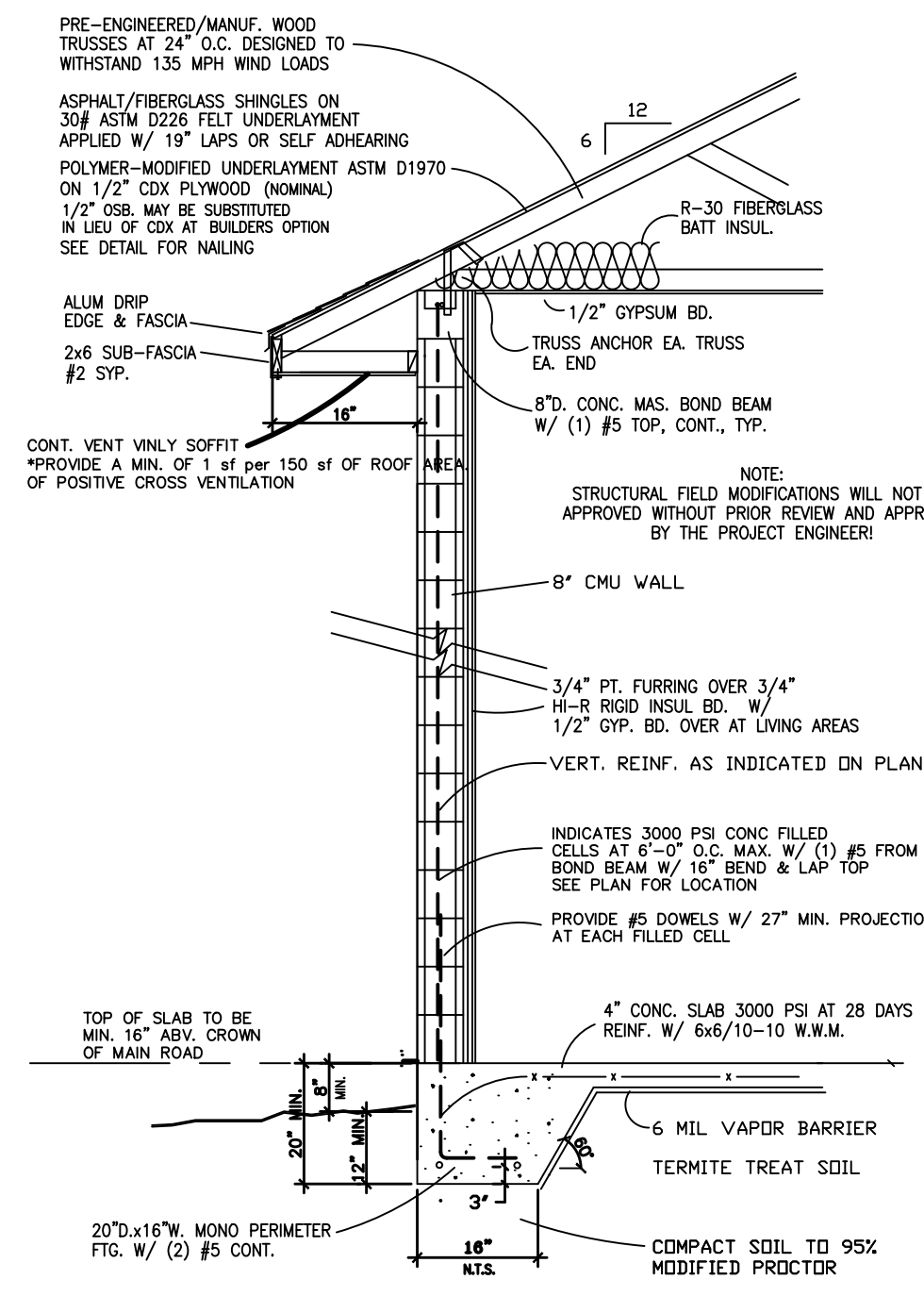
TYP. MASONRY SHEARWALL DETAIL
 SCALE: 1/2"=1'-0"



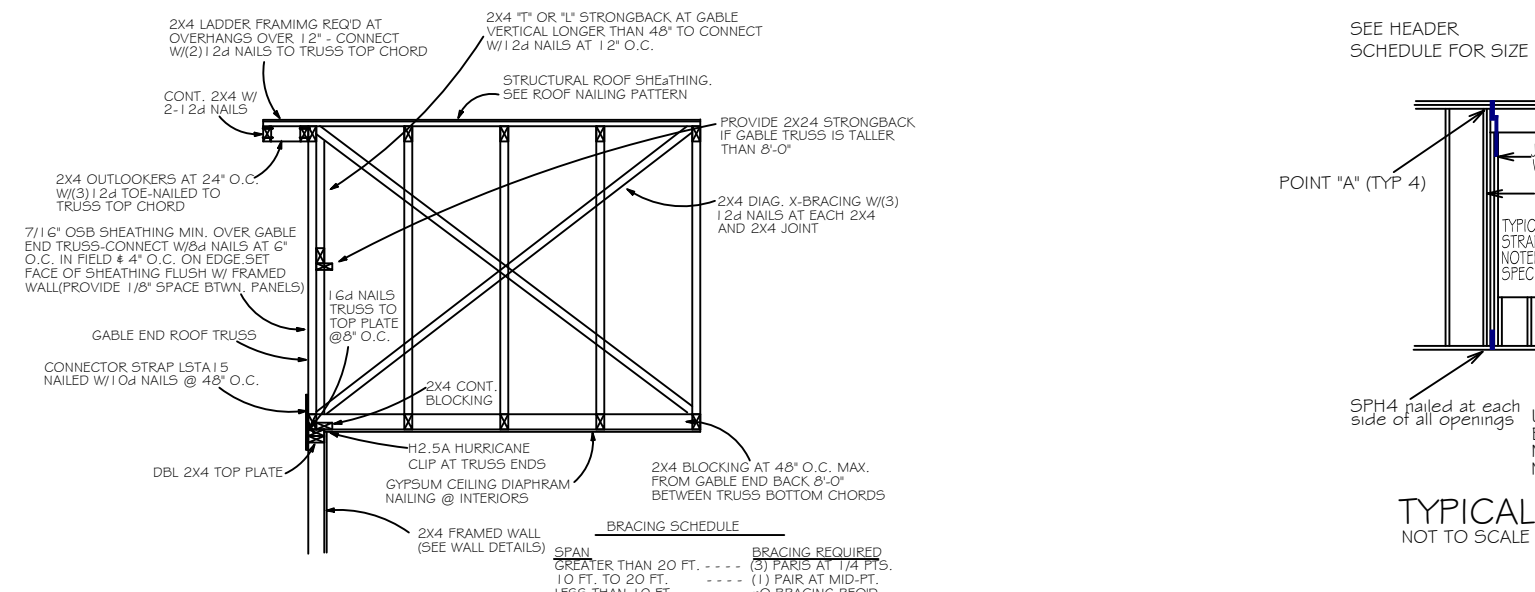
TYP. WALL SECTION AT WINDOW OPENING
 SCALE: 1/2"=1'-0"

MINIMUM ROOF DESIGN LOADS:

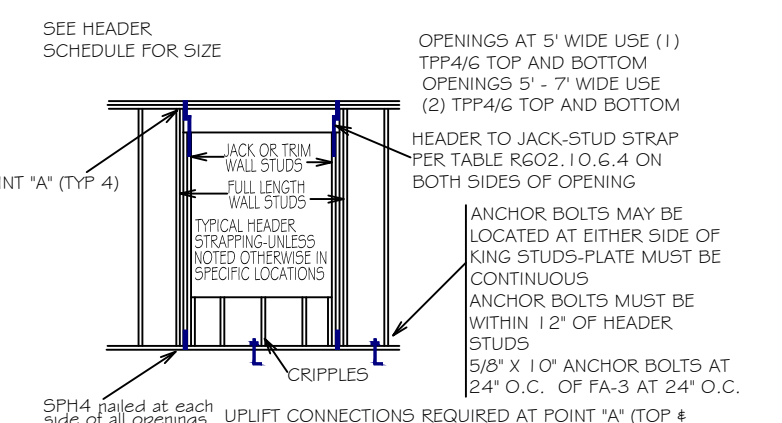
ROOF LIVE LOAD: 20 PSF
ROOF DEAD LOAD: 15PSF (WITHOUT STORAGE)
20PSF W/ LIMITED STORAGE
ROOF WIND LOAD: ±40PSF



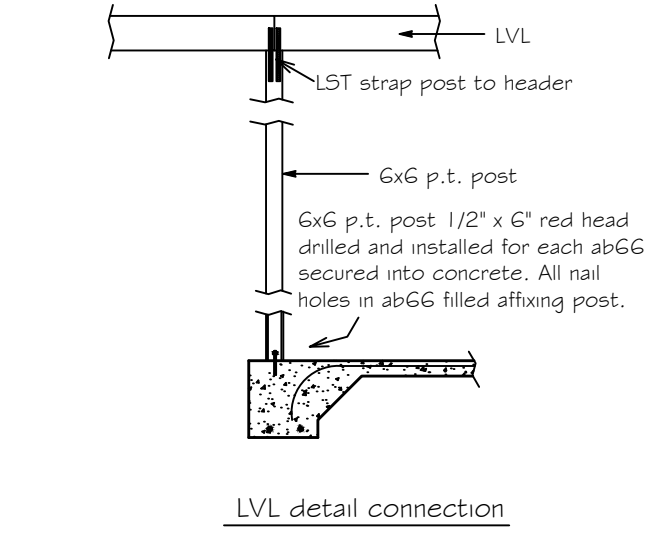
TYPICAL WALL SECTION
 SCALE: 3/4"=1'-0"



GABLE END BRACING
 NOT TO SCALE



TYPICAL HEADER STRAPPING
 NOT TO SCALE



LVL detail connection

Double 1 3/4" x 11-1/4" LVL beam over opening up to 12' and up to 14'
 Double 1 3/4" x 11-7/8" 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 1 1/2" nails to top plate and framing members. One PA20 at both sides of opening embedded min 4" into concrete. LST10 strap over trimmer to header each side.

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

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

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

CAROL CHADWICK
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 No. 12583
 Exp. 12/31/2024

SOTO RESIDENCE WALL DETAILS
 TBD MAGNOLIA LANE, FORT WHITE, FL

DATE: MAY 9, 2023
 SHEET: 2

Digitally signed by Carol Chadwick
 DN: cn=, o=Florida, email=carol@carolchadwick.com, c=US
 Date: 2023.05.09 12:12:16 -0400

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