

DESIGN SPECIFICATIONS

- DESIGN CODES:
2020 FLORIDA BUILDING CODE (FBC) - RESIDENTIAL
ASCE 7-10, 2005
NDS, ACI, ATC, AWP, APA, ICC 600-06
- 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: 21'-1 1/4"

- NUMBER OF STORIES: 1

- TYPE OF CONSTRUCTION: TYPE V-G, UNPROTECTED, UNSPRINKLERED

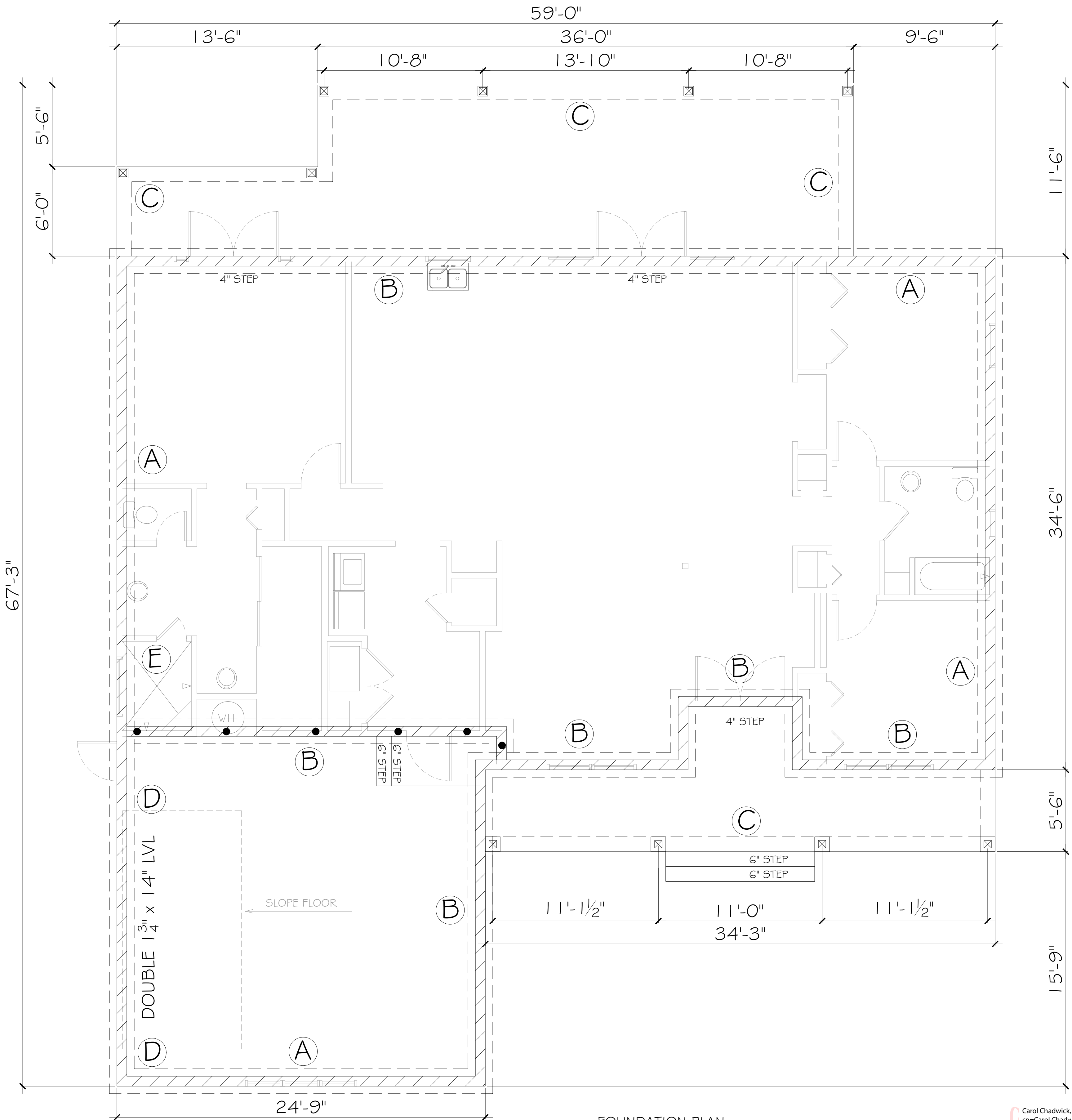
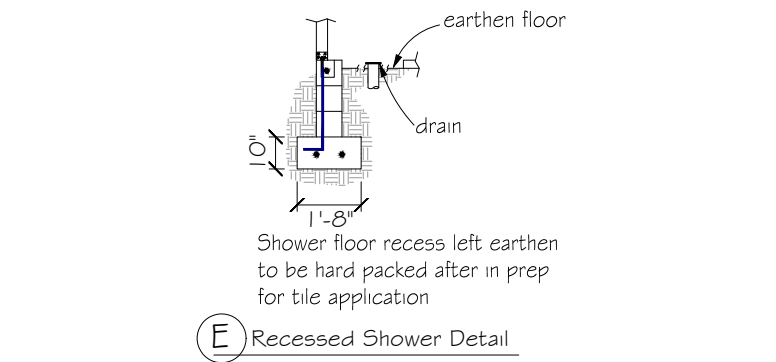
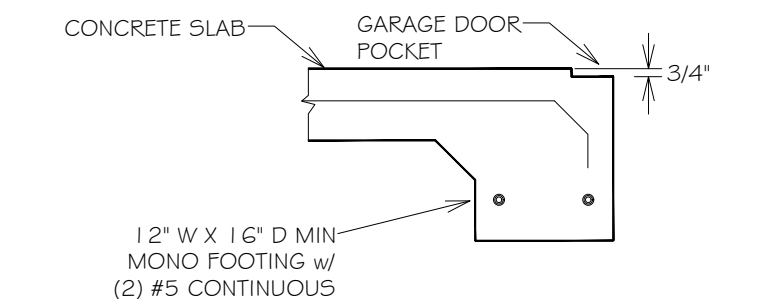
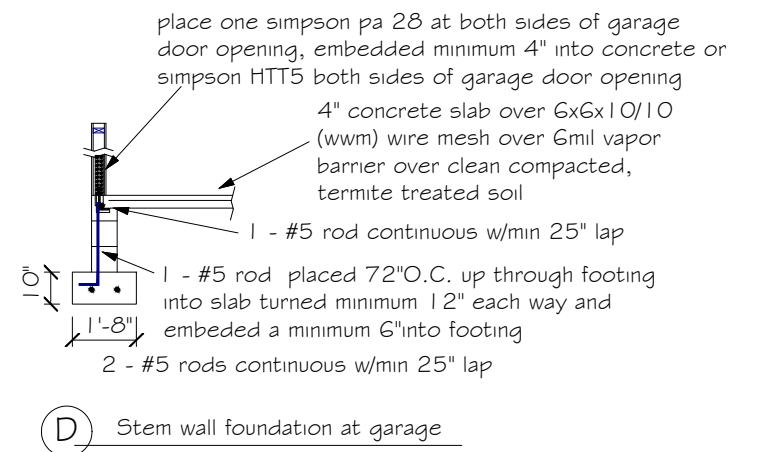
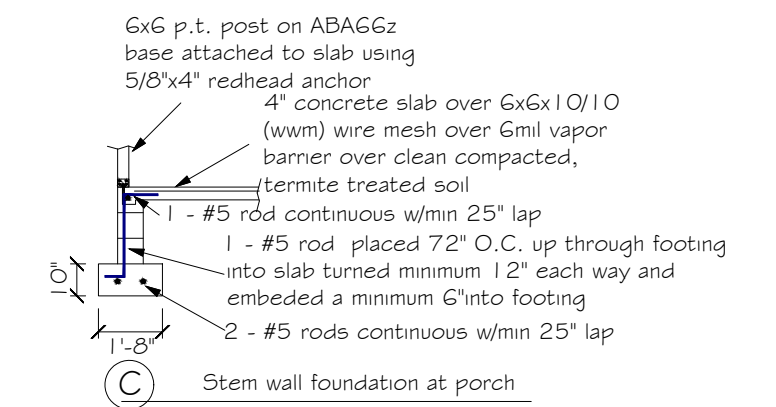
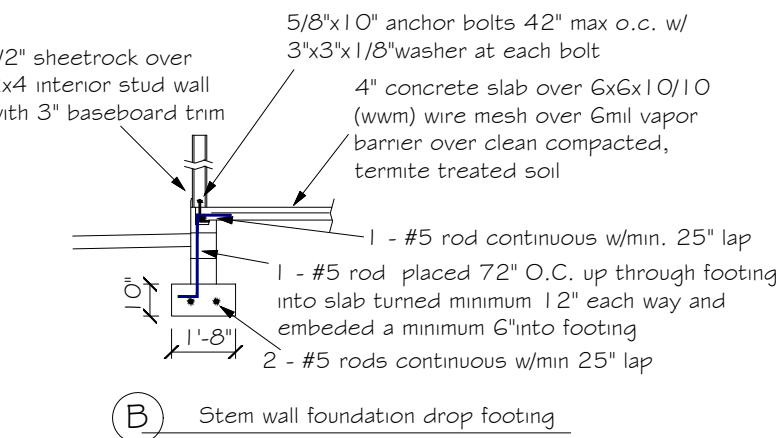
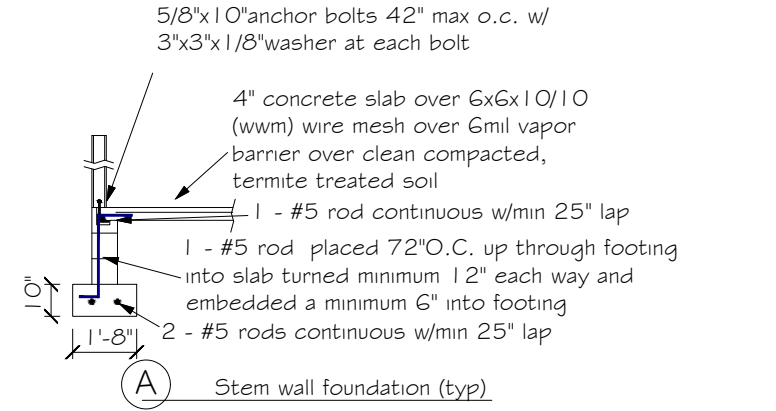
- WIND ZONE INFORMATION:
BUILDING: ENCLOSED STRUCTURE
ULTIMATE DESIGN WIND SPEED: 130 MPH
NOMINAL DESIGN WIND SPEED: 110 MPH
BUILDING RISK CATEGORY: II
WIND EXPOSURE CATEGORY: C
INTERNAL PRESSURE COEFFICIENT: 0.18 C_{gpi} ±

FOUNDATION NOTES

- REFER TO ARCHITECTURAL & BUILDING PLANS FOR ACTUAL DIMENSIONS, RECESSES IN SLAB, STEP DOWNS, ETC.
- CONTRACTOR SHALL VERIFY ALL ROUGH PLUMBING LOCATIONS WITH OWNER PRIOR TO POURING SLAB
- THE SLAB SHALL BE 4" CONCRETE SLAB REINFORCED W/ 6X6-1/4/1/4 WELDED WIRE MESH PLACED ON CHAIRS, 1/8" DEPTH OR FIBER MESH CONCRETE, 6-MIL POLY VAPOR BARRIER W/ 6" LAPS SEALED W/ POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL
- BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW UNDISTURBED SOIL OR ENGINEERED FILL PER FBC-RES. SECTION R403.1.4

ALL THREAD NOTES

- 3/8" A307 DIAMETER THREADED ROD TERMINATES AT TOP PLATE PER DETAIL ON S-2



FOUNDATION PLAN

SCALE: 1/4" = 1'



Carol Chadwick, PE
cm=Carol Chadwick,
PE, on This item has
been electronically
signed and sealed by
Carol Chadwick, PE
using a digital
signature, ou,
email=ccpeyo@gmail
com, c=US
2021.01.12 18:22:39
-05'00'

CAROL CHADWICK, P.E. Professional Engineer No. 82560 State of Florida	
DORCAS RESIDENCE FOUNDATION DETAILS	
DATE: 1/12/2021	BY: CC
PROJECT: DORCAS RESIDENCE DRAWN: JACOB CONSTRUCTION 354-752-2653 jacob@jacobcon.net	
REVISIONS:	DATE: 1/12/2021
1. 1/12/2021	2. 1/12/2021
3. 1/12/2021	4. 1/12/2021
5. 1/12/2021	6. 1/12/2021
7. 1/12/2021	8. 1/12/2021
9. 1/12/2021	10. 1/12/2021
11. 1/12/2021	12. 1/12/2021
13. 1/12/2021	14. 1/12/2021
15. 1/12/2021	16. 1/12/2021
17. 1/12/2021	18. 1/12/2021
19. 1/12/2021	20. 1/12/2021
21. 1/12/2021	22. 1/12/2021
23. 1/12/2021	24. 1/12/2021
25. 1/12/2021	26. 1/12/2021
27. 1/12/2021	28. 1/12/2021
29. 1/12/2021	30. 1/12/2021
31. 1/12/2021	32. 1/12/2021
33. 1/12/2021	34. 1/12/2021
35. 1/12/2021	36. 1/12/2021
37. 1/12/2021	38. 1/12/2021
39. 1/12/2021	40. 1/12/2021
41. 1/12/2021	42. 1/12/2021
43. 1/12/2021	44. 1/12/2021
45. 1/12/2021	46. 1/12/2021
47. 1/12/2021	48. 1/12/2021
49. 1/12/2021	50. 1/12/2021
51. 1/12/2021	52. 1/12/2021
53. 1/12/2021	54. 1/12/2021
55. 1/12/2021	56. 1/12/2021
57. 1/12/2021	58. 1/12/2021
59. 1/12/2021	60. 1/12/2021
61. 1/12/2021	62. 1/12/2021
63. 1/12/2021	64. 1/12/2021
65. 1/12/2021	66. 1/12/2021
67. 1/12/2021	68. 1/12/2021
69. 1/12/2021	70. 1/12/2021
71. 1/12/2021	72. 1/12/2021
73. 1/12/2021	74. 1/12/2021
75. 1/12/2021	76. 1/12/2021
77. 1/12/2021	78. 1/12/2021
79. 1/12/2021	80. 1/12/2021
81. 1/12/2021	82. 1/12/2021
83. 1/12/2021	84. 1/12/2021
85. 1/12/2021	86. 1/12/2021
87. 1/12/2021	88. 1/12/2021
89. 1/12/2021	90. 1/12/2021
91. 1/12/2021	92. 1/12/2021
93. 1/12/2021	94. 1/12/2021
95. 1/12/2021	96. 1/12/2021
97. 1/12/2021	98. 1/12/2021
99. 1/12/2021	100. 1/12/2021

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 ÷ 2 = SQ IN HIGH AND 50% AT LOW					
PER IRC SECTION R800.2: 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/ 5G SQ IN (NPVA) PER LINE FT					
(b) SOPFIT VENTS - 6" T3-1/3" FULL VENT PERFORMED W/ 9.19 SQ IN (NPVA) PER LINE FT					
CALCULATED UNDER A FOOT OF SOPFIT VENT SHALL NOT INCLUDE NON-VENTED FIRE RATED SOPFIT LOCATED LESS THAN 5' FROM PROPERTY LINE					
AREA (SQ FT)	REQUIRED	PROVIDED	UNSAT FT	LOW (SQ IN)	LOW (SQ IN)
ROOF 11'0" VENT - 2' x 4' SQ IN LOW (11'0" LINEAL FT) = 31.9 SQ IN					
SOPFIT 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 5.567 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 4.79 sq. inch/sq. foot rating					
Beaded hidden vent soffits has 2.66 sq. inch/sq. foot rating					
Triple 3-1/3" hidden vent soffits 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 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 THAN 4/12 DBL LAYER OF UNDERLAYMENT IS REQUIRED

OVERLAP ROOFING UNDERLAYMENT 4" (MIN) OVER HIPPS AND RIDGES

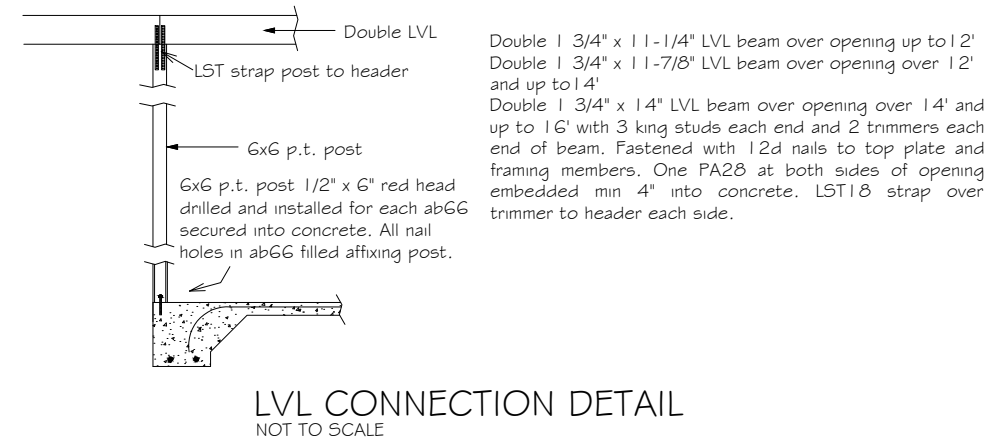
BUTTON CAP NAILS ARE USED TO FASTEN UNDERLAYMENT TO ROOF DECK WHEN SHINGLES NOT INSTALLED SAME DAY

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

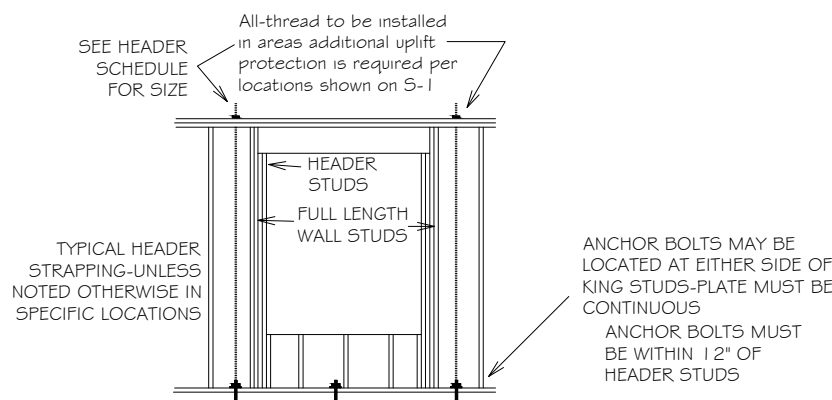
ALL ROOF PENETRATIONS ARE PROPERLY FLASHED W/ FLASHING OF THE CORRECT SIZE FOR THE PENETRATION

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

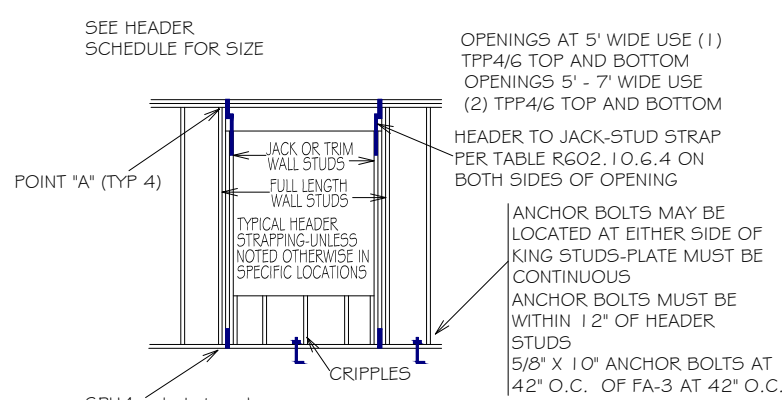
1" SPACE IS MAINTAINED BETWEEN THE END OF THE GUTTER AND THE WALL CLADDING



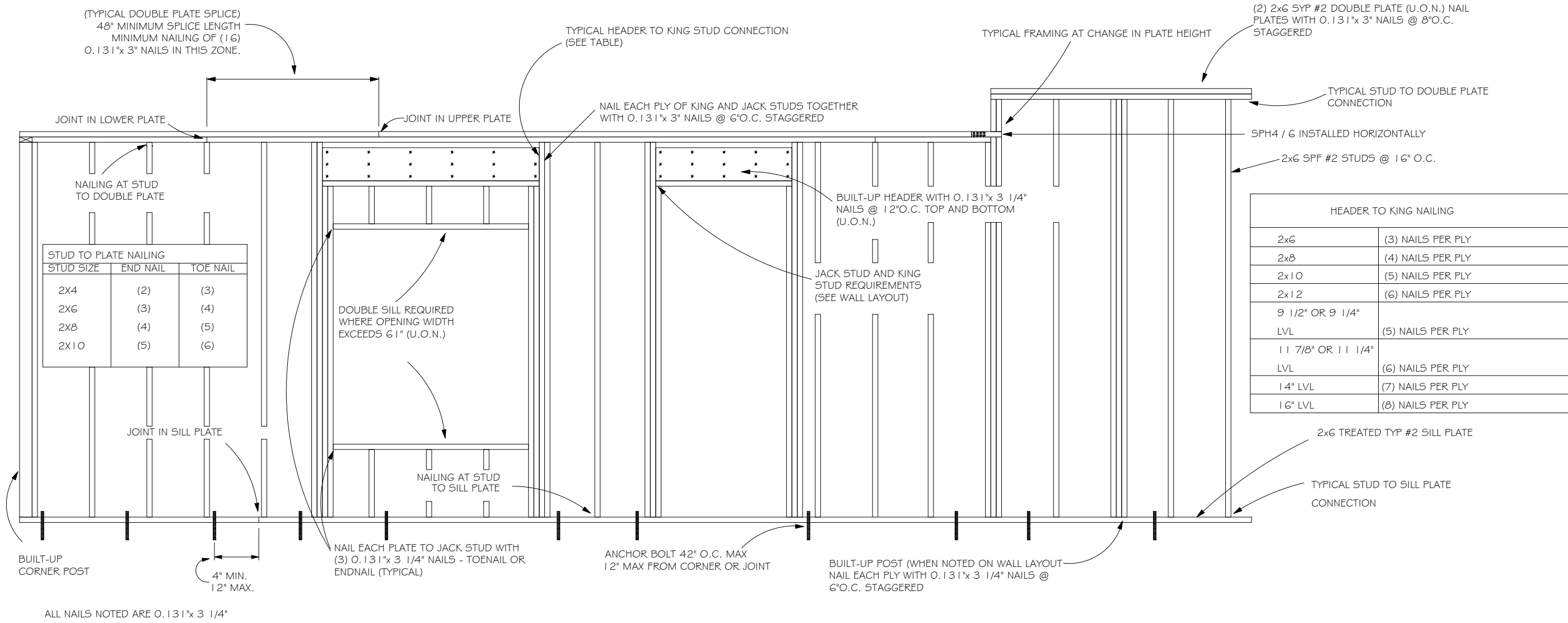
LVL CONNECTION DETAIL
NOT TO SCALE



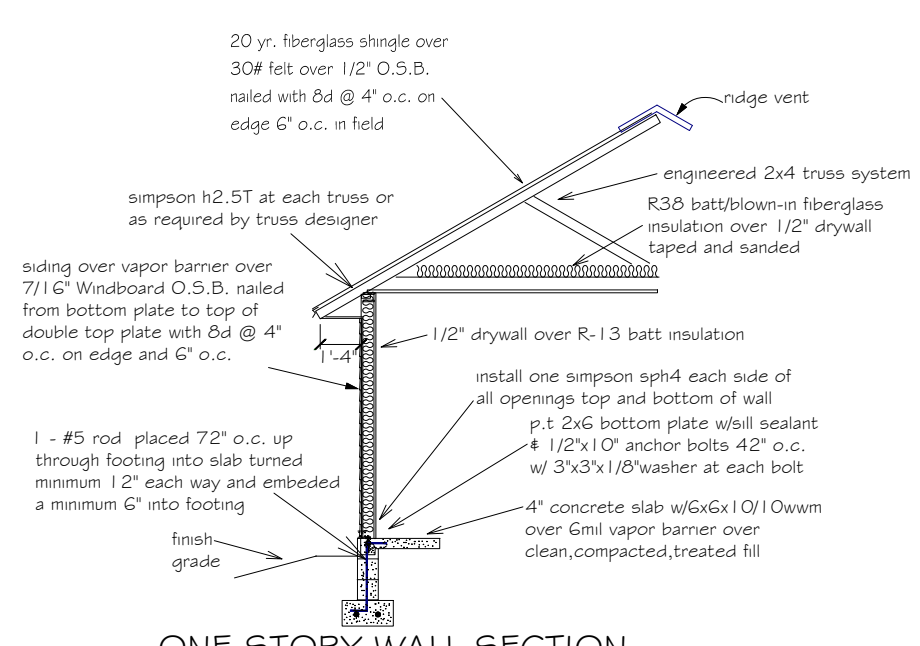
TYPICAL ALL THREAD DETAIL
NOT TO SCALE



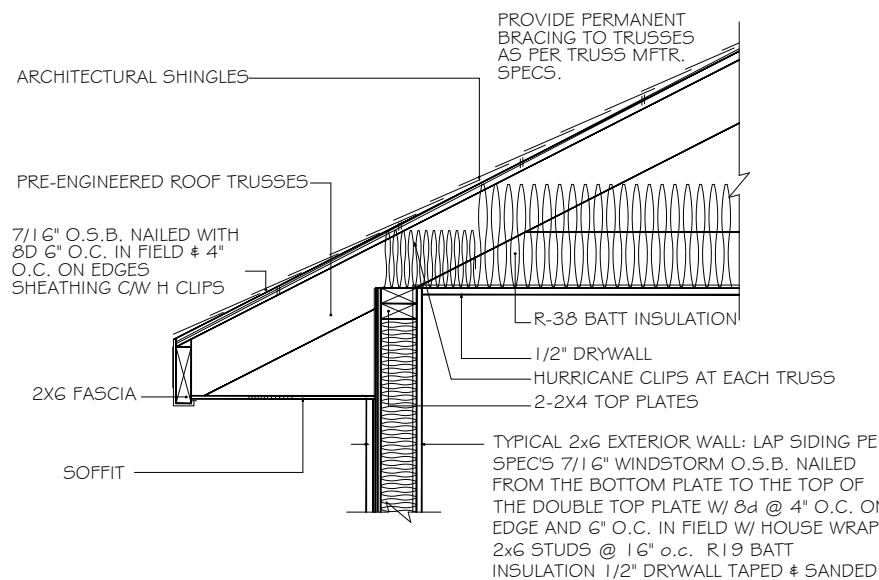
TYPICAL HEADER STRAPPING
NOT TO SCALE



TYPICAL WALL FRAMING
NOT TO SCALE



ONE STORY WALL SECTION



4" STUD EAVE

HEADER SCHEDULE			NOTE:	
2X STUD CONTINUOUS TO TOP PLATE			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	
2 - 2X STUDS UNDER UNITS WITH OPENINGS LARGER THEN 5'-0"			MAXIMUM HEADER SPAN	
			3' 6' 9' 12' 15' 18'	
OPENING WIDTH	BEARING OR SHEAR WALLS	NON-BEARING WALLS	NUMBER OF HEADER STUDS (JACKS) SUPPORTING END OF HEADER	
0'-0" TO 3'-0"	2 - 2 x 6's	2 - 2 x 4's	1	1
3'-1" TO 5'-0"	2 - 2 x 10's	2 - 2 x 6's	2	2
5'-1" TO 7'-0"	2 - 2 x 10's	2 - 2 x 8's	2	2
7'-1" TO 10'-0"	2 - 2 x 10's	2 - 2 x 10's	2	2
			NUMBER OF FULL LENGTH STUDS (KINGS) AT END OF HEADER	
			2	



Carol Chadwick, PE
has been electronically signed and sealed by Carol Chadwick, PE using a digital signature, Inc.
www.sealprogeoprogram.com/cus
20210113 12:25:05 0907