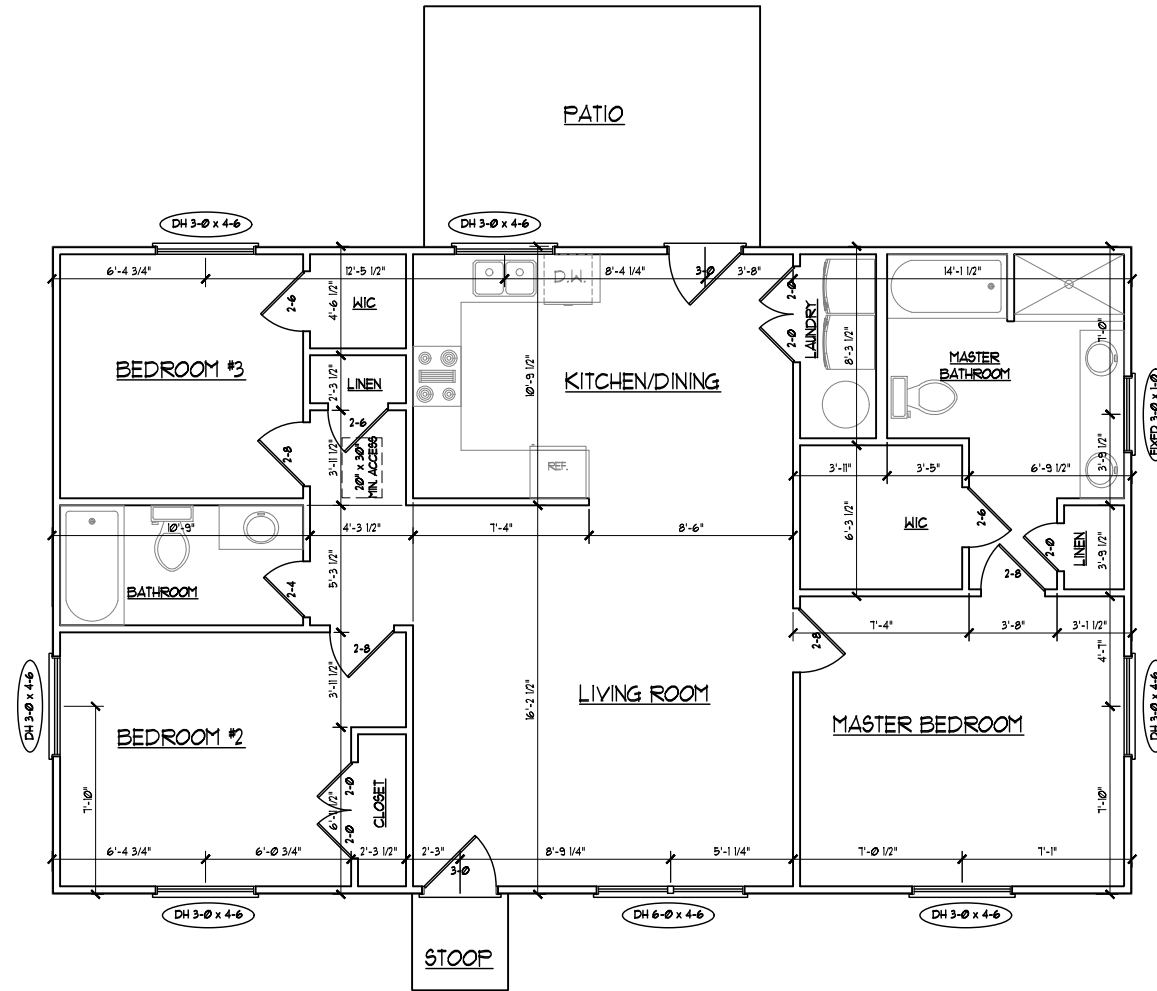




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 TEL.: (919) 228-2841  
 LICENSE NO. NC: P-09346 VA: \*\*\*\*\*

DATE: JUNE 17, 2022  
 SCALE: 1/8" = 1'-0"  
 DRAWN BY: JBM  
 ENGINEERED BY: JBM  
 REVIEWED BY: T5Z



SQUARE FOOTAGE:  
 FIRST FLOOR: 125 SQ. FT.

LOT 38 JASMINE RD.  
 ADDRESS  
 FUGUAY-VARINA, NORTH CAROLINA  
 BUILDER: FAMILY BUILDING COMPANY  
 DESIGNER: DESIGNER COMPANY NAME

FIRST FLOOR PLAN

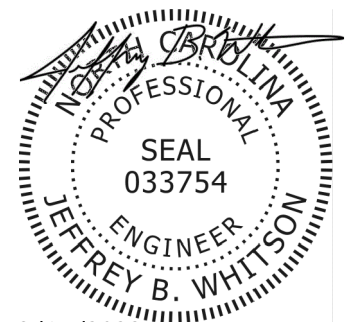
A=1  
 SHEET 1 OF 4



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 N.C. LICENSE NO. P-0946

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 SCALE: 1/8" = 1'-0"  
 DRAWN BY: JBM  
 ENGINEERED BY: JBM  
 REVIEWED BY: T5Z

LOT 38 JASMINE RD.  
 FUGUAY-YARINA, NORTH CAROLINA  
 FAMILY BUILDING COMPANY  
 DESIGNER COMPANY NAME

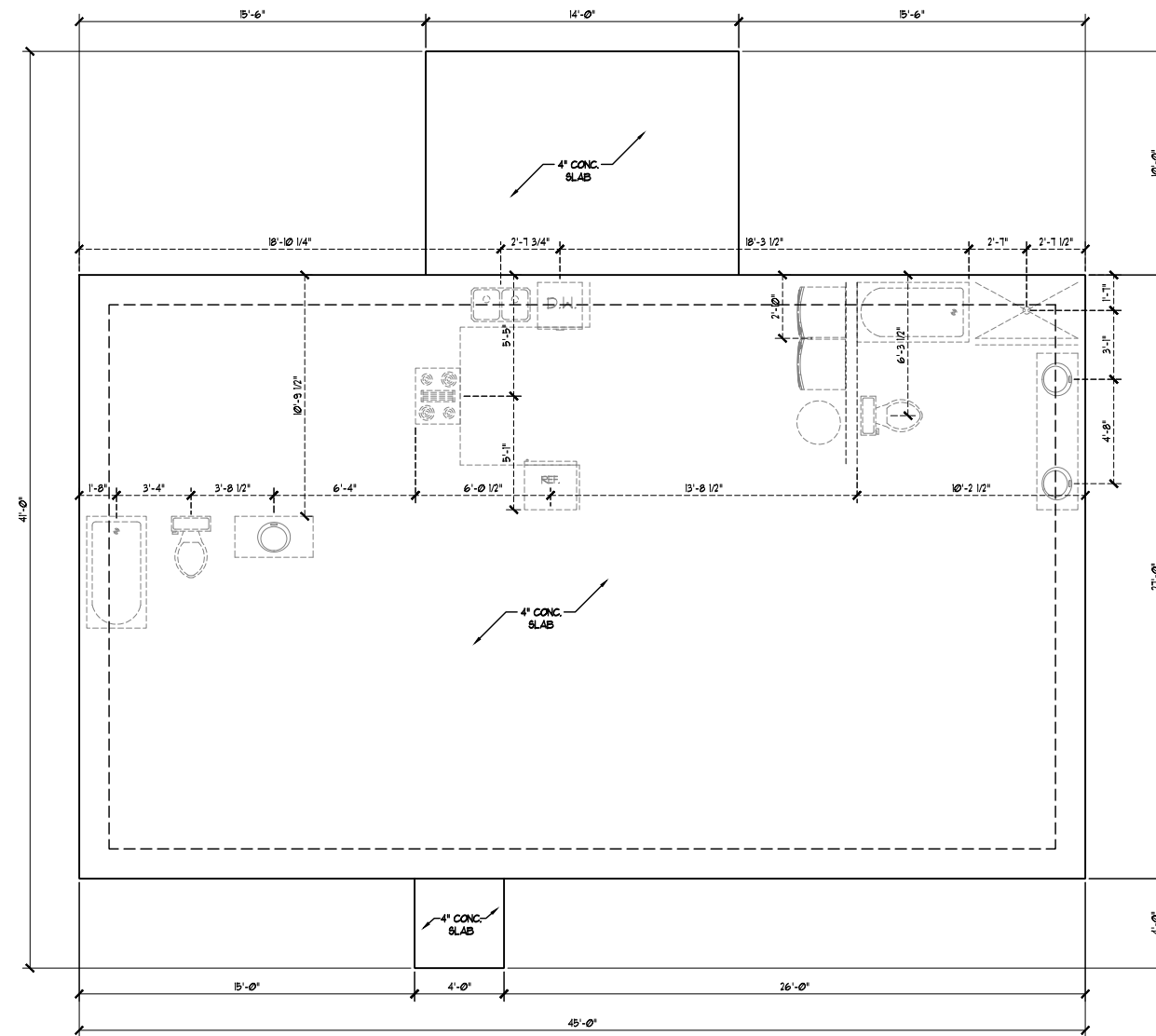


6/17/2022

MONOSLAB  
 FOUNDATION PLAN

S = 1

SHEET 1 OF 4



**STRUCTURAL NOTES:**  
 1) REFER TO STANDARD STRUCTURAL NOTES, MONOLITHIC SLAB DETAILS AND WALL BRACING DETAILS PAGES FOR ADDITIONAL STRUCTURAL INFORMATION.  
 2) WALL BRACING DESIGN AS PER THE INTERNATIONAL RESIDENTIAL CODE, 2006 EDITION.

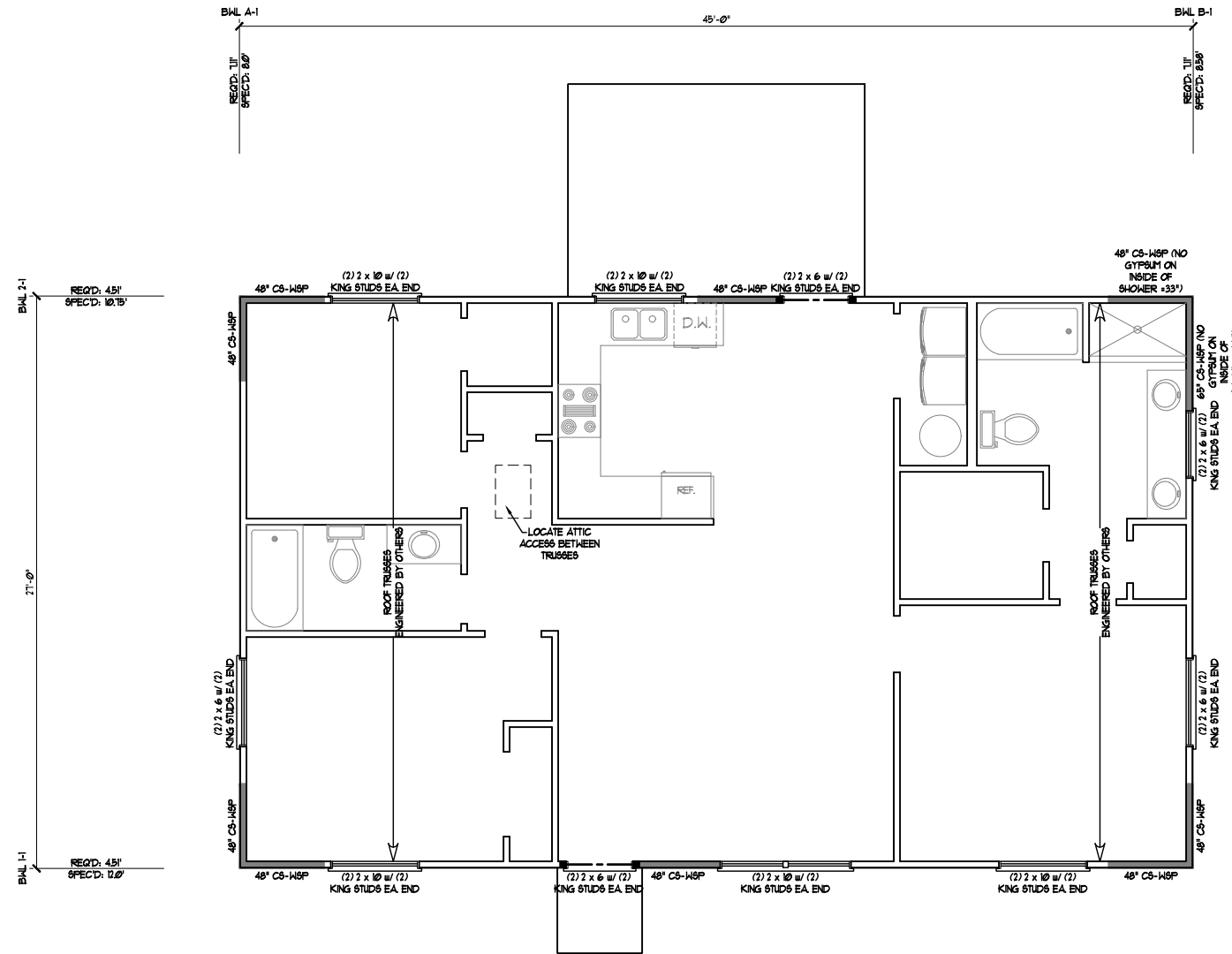
ENGINEER'S SEAL IS VALID UP TO ONE YEAR OF SEAL DATE.



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 DRAWN BY: JBM  
 ENGINEERED BY: JBM  
 REVIEWED BY: T5Z

LOT 38 JASMINE RD.  
 FUGUAY-YARINA, NORTH CAROLINA  
 FAMILY BUILDING COMPANY  
 DESIGNER COMPANY NAME



**STRUCTURAL NOTES:**  
 1) REFER TO STANDARD STRUCTURAL NOTES AND WALL BRACING DETAILS PAGES FOR ADDITIONAL STRUCTURAL INFORMATION.  
 2) WALL BRACING DESIGN AS PER THE INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION.



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CEILING FRAMING PLAN  
 S-2  
 SHEET 2 OF 4

ENGINEER'S SEAL IS VALID UP TO ONE YEAR OF SEAL DATE.



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 N.C. LICENSE NO. P-0946

DATE: JUNE 17, 2022  
 SCALE: 1/8" = 1'-0"  
 DRAWN BY: JBM  
 ENGINEERED BY: JBM  
 REVIEWED BY: T5Z

LOT 38 JASMINE RD.  
 FUGUAY-YARINA, NORTH CAROLINA  
 FAMILY BUILDING COMPANY  
 DESIGNER COMPANY NAME



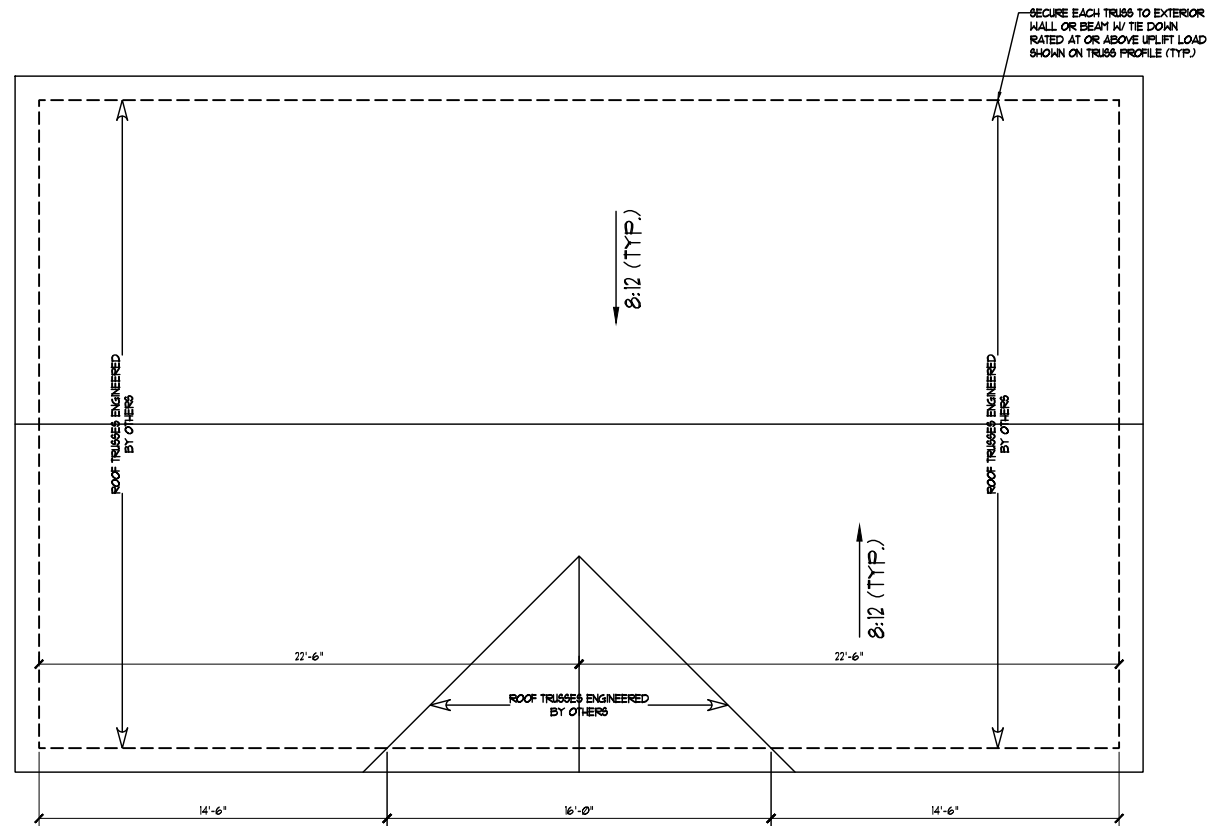
6/17/2022

ROOF PLAN

S = 3

SHEET 3 OF 4

**ATTIC VENT CALCULATION:**  
 125 SQ. FT. OF ATTIC DIVIDED BY 50  
 REQUIRES 2.5 SQ. FT. MINIMUM OF TOTAL NET  
 FREE VENTILATING AREA.  
 SEE SECTION R806.2 OF THE NCRC, 2018  
 EDITION FOR ALTERNATIVES AND  
 EXCEPTIONS.



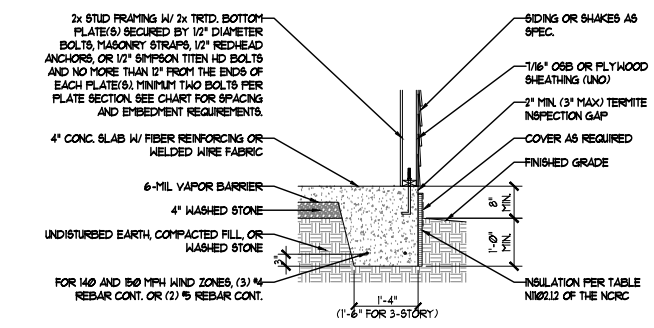
**STRUCTURAL NOTES:**  
 1) REFER TO STANDARD STRUCTURAL NOTES AND WALL BRACING DETAILS PAGES FOR ADDITIONAL STRUCTURAL INFORMATION.  
 2) WALL BRACING DESIGN AS PER THE INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION.

ENGINEER'S SEAL IS VALID UP TO ONE YEAR OF SEAL DATE.

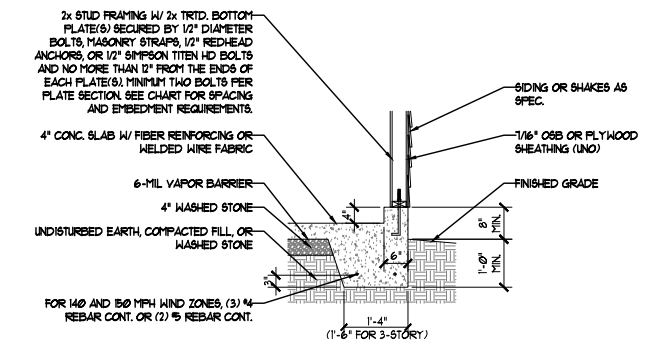


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 LICENSE NO. NC: P-09946 YA: 000462

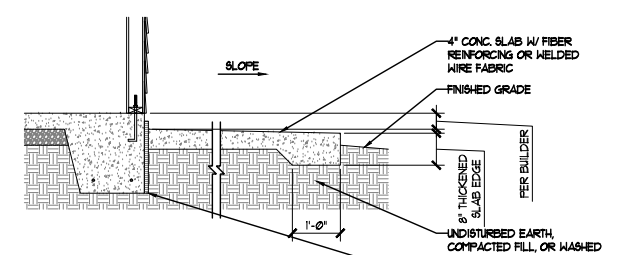
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 ENGINEERED BY: T5Z  
 REVIEWED BY: T5Z



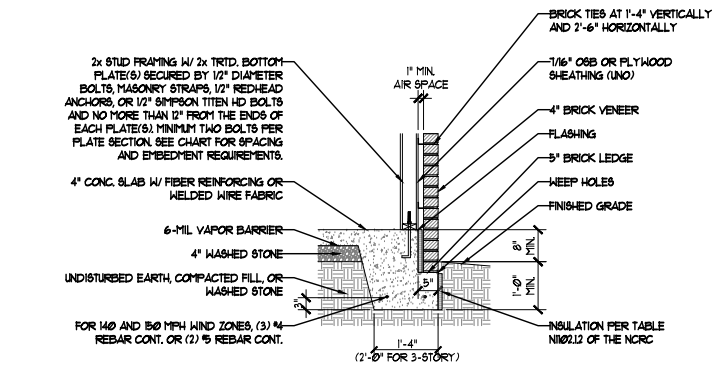
1 TYPICAL SLAB DETAIL W/ SIDING OR SHAKE SIDING



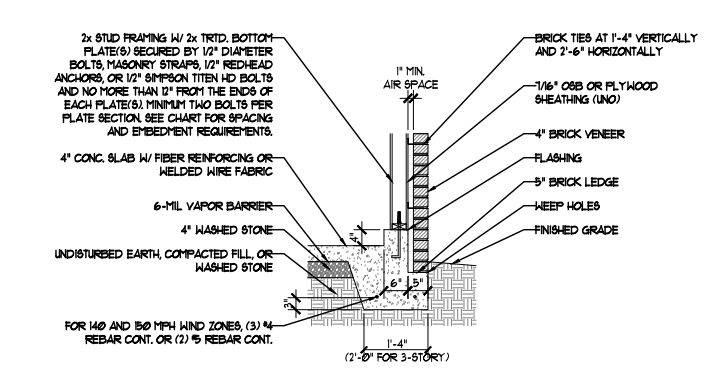
2 GARAGE CURB WALL DETAIL W/ SIDING OR SHAKE SIDING



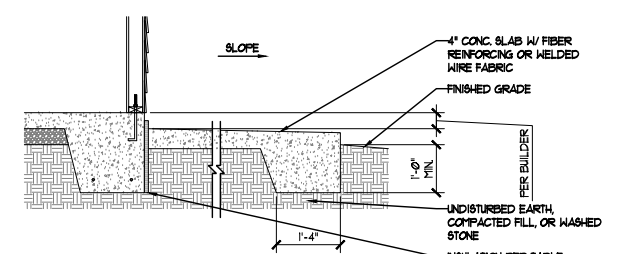
3 TYPICAL PORCH SLAB DETAIL W/ NON-LOAD BEARING EDGE



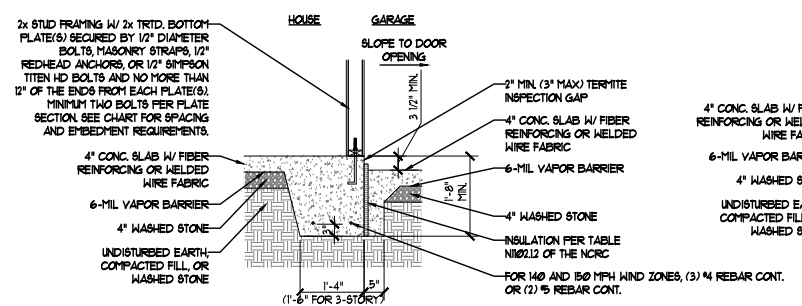
4 TYPICAL SLAB DETAIL W/ BRICK VENEER



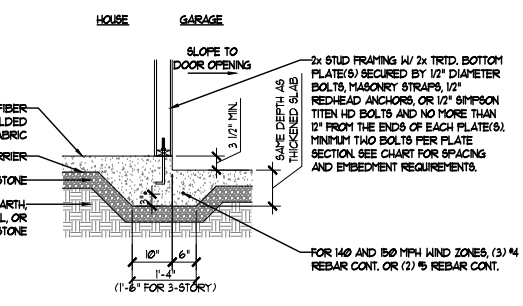
5 GARAGE CURB WALL DETAIL W/ BRICK VENEER



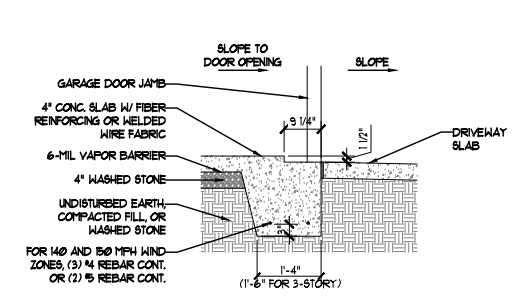
6 TYPICAL PORCH SLAB DETAIL W/ LOAD BEARING EDGE



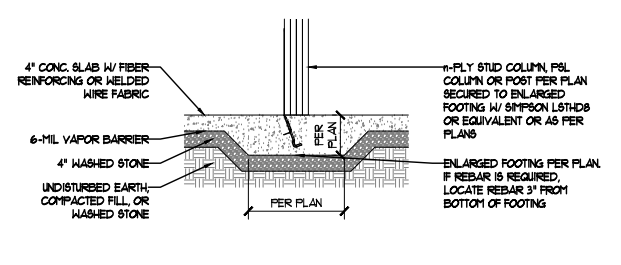
7a STEP AT GARAGE/HOUSE WALL DETAIL W/ INSULATION



7b STEP AT GARAGE/HOUSE WALL DETAIL W/O INSULATION



8 SLAB AT GARAGE DOOR OPENING DETAIL



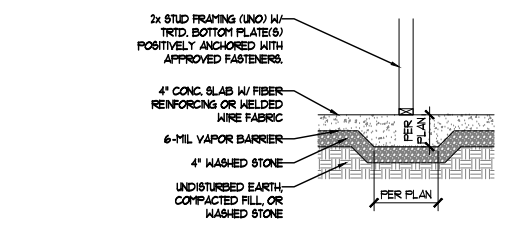
9 ENLARGED FOOTING DETAIL

NOTE: PLEASE CONTACT US FOR ADDITIONAL DETAILS IF BRICK VENEER IS TO ONLY BE INSTALLED AT THE BASEMENT LEVEL BUT NOT ON THE FIRST FLOOR LEVEL.

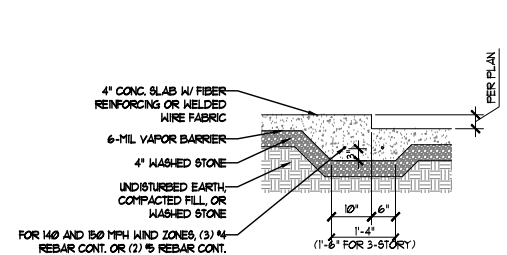
STRUCTURAL NOTE:  
 - REFER TO STANDARD STRUCTURAL NOTES PAGE FOR ADDITIONAL STRUCTURAL INFORMATION.

WIND ZONE	ANCHOR SPACING	ANCHOR EMBEDMENT
≤ 120 MPH	6'-0" O.C.	1'
130 MPH	4'-0" O.C.	5" INTO MASONRY OR 1" INTO CONCRETE
140 MPH	6'-0" O.C. W/ DOUBLE BALL PLATE AND 2" x 2" x 1/8" WASHERS	CONTINUOUS OR LAP SPliced TO FOOTING
150 MPH	6'-0" O.C. W/ DOUBLE BALL PLATE AND 2" x 2" x 1/8" WASHERS	CONTINUOUS OR LAP SPliced TO FOOTING

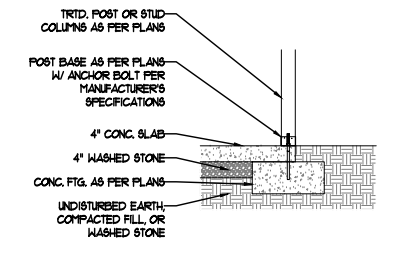
NOTE: FOR 140 AND 150 MPH WIND ZONE, 5/8" ANCHOR BOLTS AT 96" O.C. OR 3/8" ANCHOR BOLTS AT 42" O.C. MAY BE INSTALLED IN LIEU OF 1/2" ANCHOR BOLTS AT 12" O.C.



10 THICKENED SLAB DETAIL

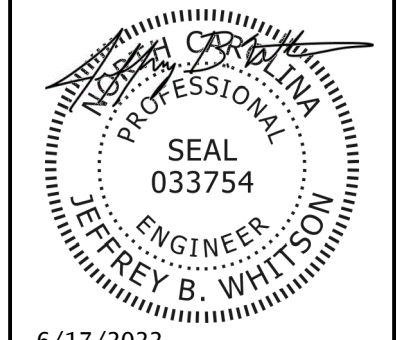


11 SLAB FLOOR ELEVATION CHANGE DETAIL



12 PORCH SLAB POST DETAIL

TYPICAL FOUNDATION DETAILS



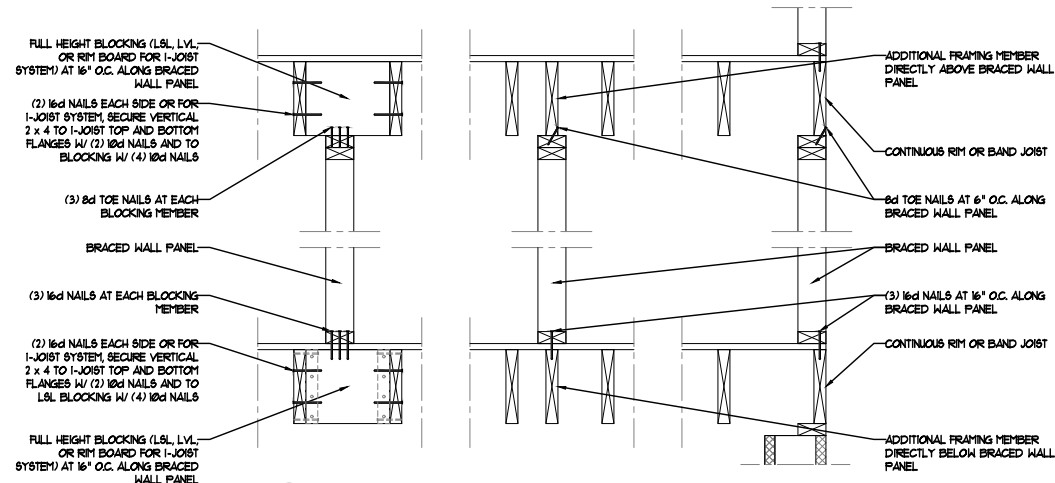
6/17/2022

MONOLITHIC SLAB DETAILS  
 MS-1  
 SHEET --- OF ---

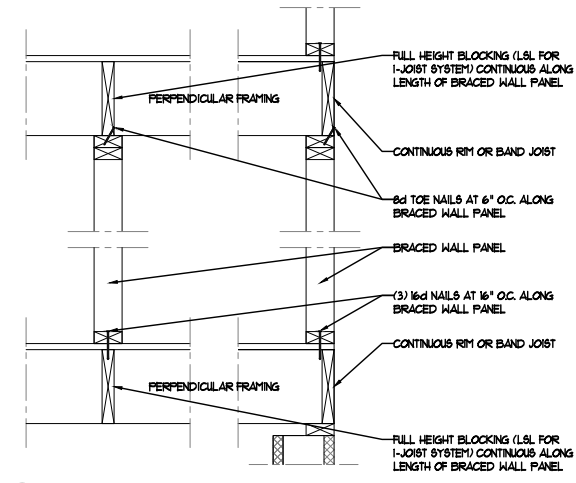


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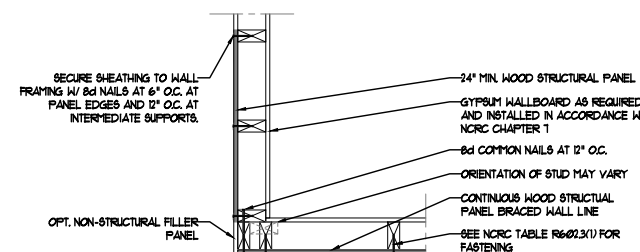
DATE: JULY 15, 2021  
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 REVIEWED BY: T5Z



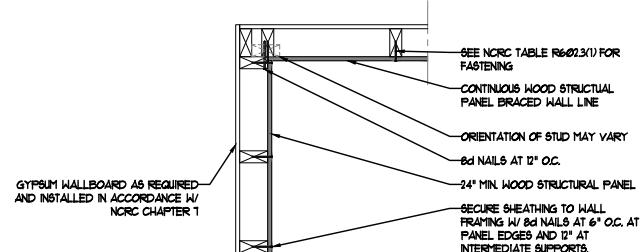
1 BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING



2 BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING



3 TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING

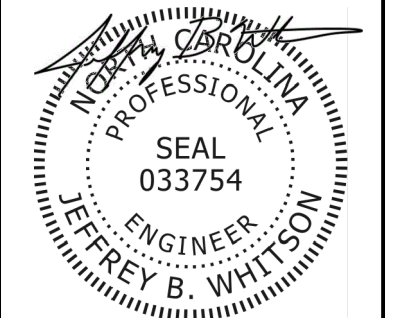


4 METHOD GB (1) AND GB (2) INTERSECTION DETAILS

BRACED WALL PANEL SCHEDULE			
ABBREVIATIONS	PANEL TYPE	MATERIAL	FASTENERS
WSP	INTERMITTENT WOOD STRUCTURAL PANEL	1/16" OSB/FLYHOOD (NO)	6d OR 8d COMMON NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 16 GA. X 1 3/4" STAPLES AT 3" O.C. AT PANEL EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS
GB (1)	INTERMITTENT GYPSUM BOARD (SHEATHING ON ONE FACE OF WALL)	1/2" GYPSUM	1 1/2" GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1 1/4" TYPE N DRYWALL SCREWS AT 1" O.C. AT PANEL EDGES INCLUDING TOP AND BOTTOM FLATES AND INTERMEDIATE SUPPORTS
GB (2)	INTERMITTENT GYPSUM BOARD (SHEATHING ON BOTH FACES OF WALL)	1/2" GYPSUM	1 1/2" GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1 1/4" TYPE N DRYWALL SCREWS AT 1" O.C. AT PANEL EDGES INCLUDING TOP AND BOTTOM FLATES AND INTERMEDIATE SUPPORTS
GB (3)	INTERMITTENT GYPSUM BOARD (SHEATHING ON BOTH FACES OF WALL)	1/2" GYPSUM	1 1/2" GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1 1/4" TYPE N DRYWALL SCREWS AT 4" O.C. AT PANEL EDGES INCLUDING TOP AND BOTTOM FLATES AND INTERMEDIATE SUPPORTS
LIB	LET-IN-BRACING	1 x 4 WOOD OR SIMPSON CS16 STRAP	WOOD: (2) 8d NAILS PER STUD INCLUDING TOP AND BOTTOM PLATE. METAL: (1) STRAP EACH DIRECTION, (2) 8d NAILS PER STUD INCLUDING TOP AND BOTTOM PLATE, (20) 16d NAILS MIN. PER STRAP
CS-WSP	CONTINUOUS SHEATHED WOOD STRUCTURAL PANEL	1/16" OSB/FLYHOOD (NO)	6d OR 8d COMMON NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 16 GA. X 1 3/4" STAPLES AT 3" O.C. AT PANEL EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS
CS-G	CONT. SHEATHED WOOD STRUCTURAL PANEL ADJACENT TO GARAGE	1/16" OSB/FLYHOOD (NO)	6d OR 8d COMMON NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 16 GA. X 1 3/4" STAPLES AT 3" O.C. AT PANEL EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS
CS-FF	CONTINUOUS PORTAL FRAME	1/16" OSB/FLYHOOD (NO)	SEE METHOD CS-FF ON PAGE BW-3
CS-EBW1	CONTINUOUS SHEATHED WOOD STRUCTURAL PANEL	1/16" OSB/FLYHOOD (NO)	6d OR 8d COMMON NAILS AT 4" O.C. AT PANEL EDGES AND 8" O.C. AT INTERMEDIATE SUPPORTS
CS-EBW2	CONTINUOUS SHEATHED WOOD STRUCTURAL PANEL	1/16" OSB/FLYHOOD (NO)	6d OR 8d COMMON NAILS AT 3" O.C. AT PANEL EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS

NOTES:  
 1) ALL BRACED WALL PANELS SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES.  
 2) PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER DETAIL VBW-1 AND 2/BW-1.  
 3) ALL EXTERIOR WALLS OF THE HOUSE ARE TO BE SHEATHED W/ 7/16" OSB OR 5/32" FLYHOOD SECURED PER NCRC TABLE R6-02.3(1). WALL CORNER SHEATHING IS TO BE SECURED AS PER DETAIL 3/BW-1.  
 4) GB (1) AND GB (2) WALL PANELS SHALL BE SECURED AS PER DETAIL 4/BW-1.  
 5) BRACED WALL PANELS ARE PROVIDED AS PER THE INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION, SECTION R6-02.10. PANEL LENGTHS SHOWN ON PLANS ARE THE MIN. LENGTH REQUIRED.  
 6) ALL METHODS SHALL HAVE A GYPSUM BOARD FINISH (OR EQUIVALENT) APPLIED TO THE INSIDE FACE OF THE BRACED WALL PANEL.

WALL BRACING DETAILS



6/17/2022

DETAILS

BW-1

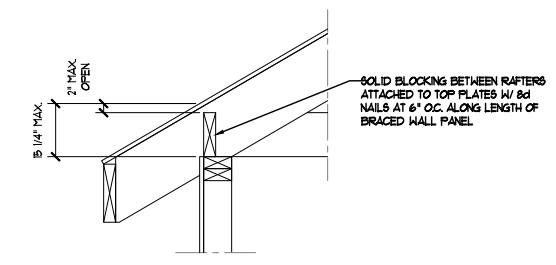
SHEET X OF X

ENGINEER'S SEAL IS VALID UP TO ONE YEAR OF SEAL DATE.

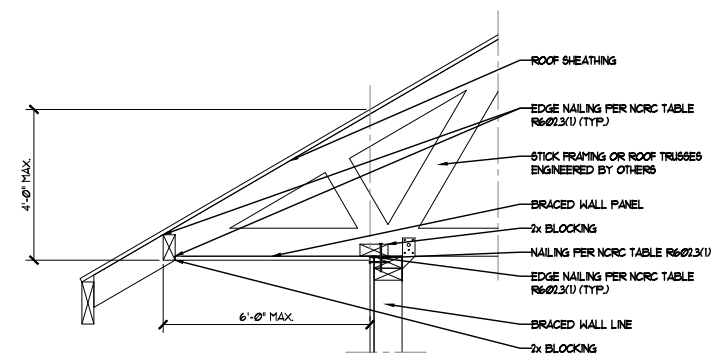


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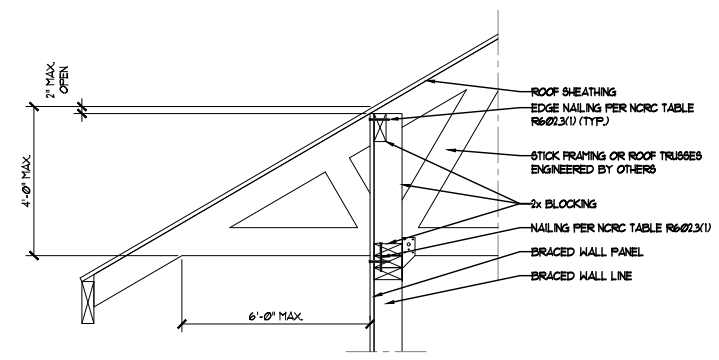
DATE: JULY 15, 2021  
 DRAIN BY: T5Z  
 ENGINEERED BY: T5Z  
 REVIEWED BY: T5Z



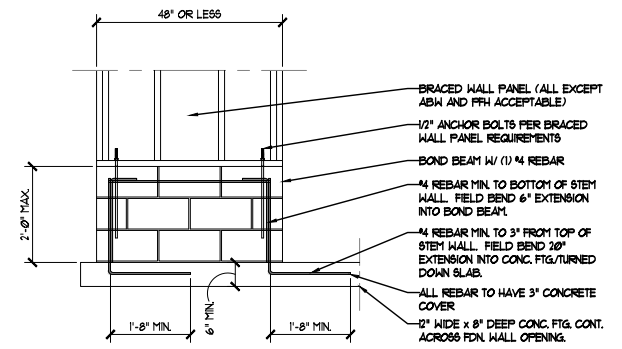
1 BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS



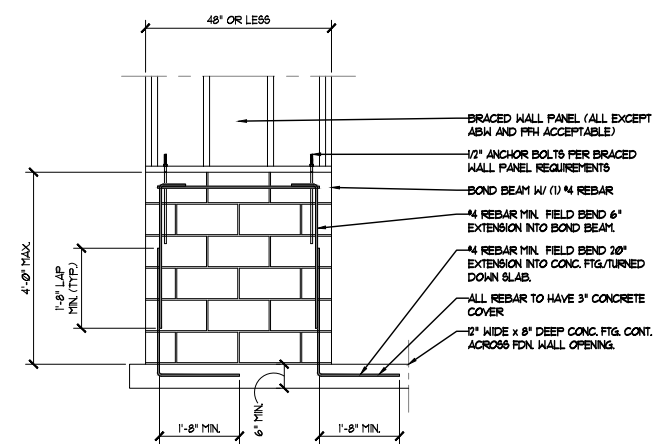
2 BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES  
 PROVIDE VENTING PER NRC SECTION R806 (NOT SHOWN)



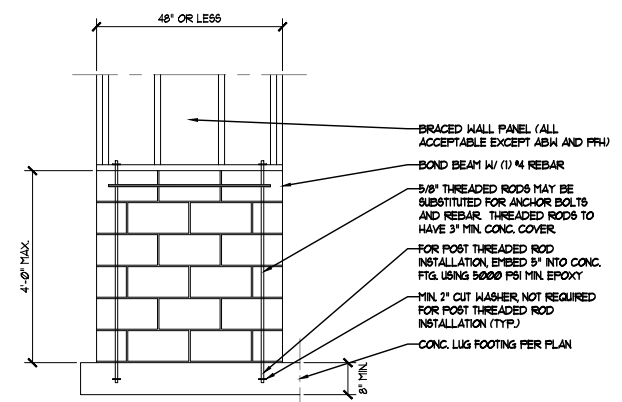
3 BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES  
 PROVIDE VENTING PER NRC SECTION R806 (NOT SHOWN)



SHORT STEM WALL REINFORCEMENT



TALL STEM WALL REINFORCEMENT



OPT. STEM WALL REINFORCEMENT CONFIGURATION

4 MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS

WALL BRACING DETAILS



6/17/2022

DETAILS

BW-2

SHEET X OF X

ENGINEER'S SEAL IS VALID UP TO ONE YEAR OF SEAL DATE.



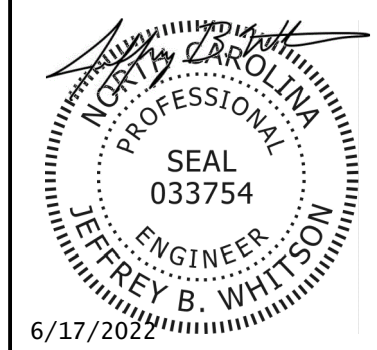




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DATE: JULY 15, 2021  
 SCALE:  
 DRAWN BY: T5Z  
 ENGINEERED BY: T5Z  
 REVIEWED BY: T5Z

STANDARD STRUCTURAL NOTES

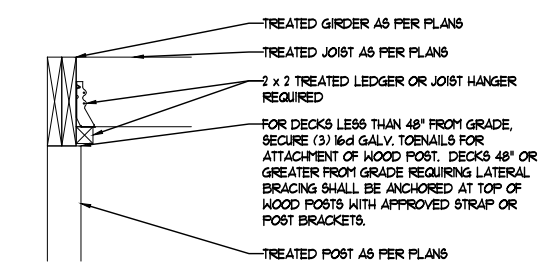


6/17/2022

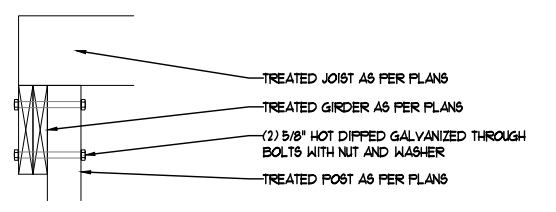
DECK DETAILS

SN-2

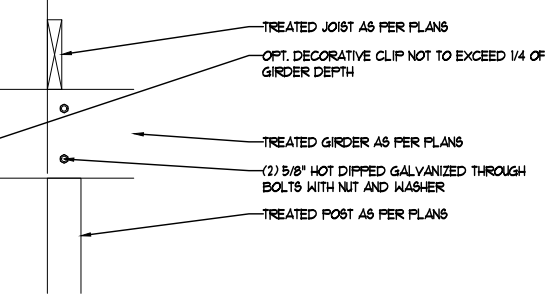
SHEET --- OF ---



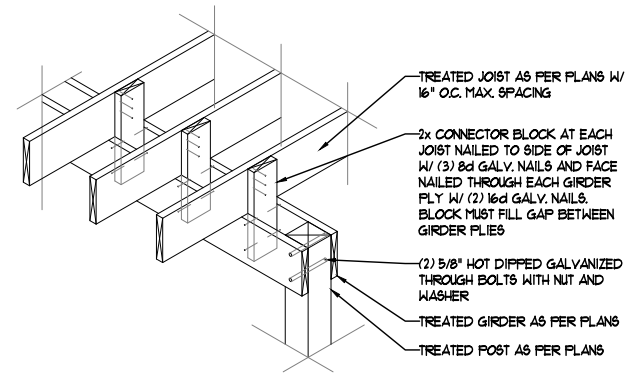
1 TOP MOUNT/FLUSH GIRDER DETAIL  
 (FIGURE A1105.1(1) OF THE 2018 NCR.C)



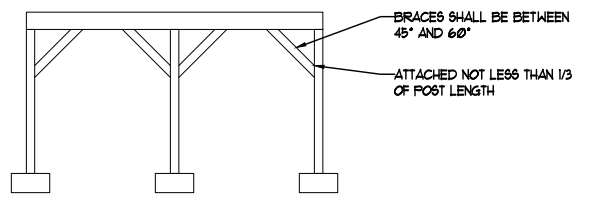
2 SIDE MOUNT DROPPED GIRDER DETAIL  
 (FIGURE A1105.1(2) OF THE 2018 NCR.C)



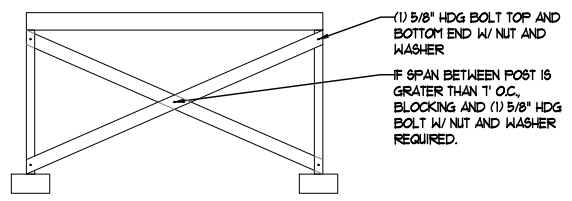
3 CANTILEVERED DROPPED GIRDER DETAIL  
 (FIGURE A1105.1(4) OF THE 2018 NCR.C)  
 -CANTILEVERED GIRDER LIMITED TO FLOOR LOADS ONLY. ROOF LOADS PROHIBITED ON CANTILEVERED GIRDER APPLICATION



4 SPLIT GIRDER DETAIL  
 (FIGURE A1105.1(3) OF THE 2018 NCR.C)  
 -SPLIT GIRDER LIMITED TO FLOOR LOADS ONLY AND CANTILEVER GIRDER ENDS ALLOWED PER FIGURE A1105.1(4)



5 WOOD KNEE BRACING DETAIL  
 (FIGURE A1109.1(2) OF THE 2018 NCR.C)  
 1) FREE STANDING DECKS REQUIRING BRACING SHALL BE INSTALLED IN BOTH DIRECTIONS OF EACH POST.  
 2) DECKS ATTACHED TO STRUCTURE REQUIRE DIAGONAL BRACING ONLY AT OUTSIDE GIRDER LINE PARALLEL WITH STRUCTURE.



6 DIAGONAL VERTICAL CROSS BRACING DETAIL  
 (FIGURE A1109.1(4) OF THE 2018 NCR.C)

**RAIL POSTS** - CANNOT EXCEED 8' O.C. SPACING AND SHALL BE ATTACHED W/ (2) 3/8" GALV. BOLTS W/ NUT AND WASHER TO OUTER BANDS.

**STAIR HANDRAIL** - HEIGHT BETWEEN 34"-38" IN ACCORDANCE W/ R311.1(1) AND R312.1. OPENINGS ON SIDE OF STAIRS REQUIRING GUARDS SHALL NOT ALLOW A SPHERE W/ 4 3/8" DIAMETER TO PASS IN ACCORDANCE W/ R312.13, EXCEPTION 2.

**STAIR TREADS AND RISERS** - PER R311.1(1) (3 1/4" MAX. RISER) AND R311.1(2) (9" MIN. TREAD DEPTH). STAIRWAYS 36" MIN. WIDTH PER R311.1(1) (RAIL PROJECTIONS ALLOWED).

**RISER OPENINGS** - STAIRS W/ A 30" OR MORE VERTICAL RISE MUST HAVE SOLID RISERS OR OPENING RESTRICTED TO PREVENT A 4" DIAMETER SPHERE FROM PASSING PER R311.1(1).

**GUARDS** - AT A 36" MIN. HEIGHT REQUIRED IN ACCORDANCE W/ R312.12 W/ 30" DROP AND OPENING LIMITS PER R312.13, TOP RAIL AND POST TO SUPPORT 200 LBS W/ INFILL TO MEET 50 LBS IN ACCORDANCE W/ TABLE R301.5 AND FOOTNOTES.

**DECKING** - PER A1101 FOR 2" SYP AND ATTACHED W/ (2) 8d GALV. NAILS AT EACH JOIST OR APPROVED SCREWS. OTHER MATERIALS PER MANUFACTURER'S INSTALLATION BASED UPON JOISTS O.C. SPACING. ALTERNATE MATERIAL ATTACHED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

DECKS ARE TO BE CONSTRUCTED AS PER APPENDIX M OF THE 2018 NORTH CAROLINA RESIDENTIAL CODE (NCR.C)

**DECK ATTACHMENT** - AS PER SECTION A1104 OF THE 2018 NCR.C, WHEN A DECK SHALL BE SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, SECURE DECK TO STRUCTURE AS PER TABLE A1104.1(1), TABLE A1104.1(2), METHOD 3 OR METHOD 4 BELOW:

**TABLE A1104.1(1)**  
 ALL STRUCTURES EXCEPT BRICK VENEER STRUCTURES

FASTENERS	8' MAX. JOIST SPAN <sup>a</sup>	16' MAX. JOIST SPAN <sup>a</sup>
5/8" HDG BOLTS W/ NUT AND WASHER <sup>b</sup>	1 @ 3'-6" O.C.	1 @ 1'-8" O.C.
AND	AND	AND
12d COMMON HDG NAILS <sup>c</sup>	2 @ 8" O.C.	3 @ 6" O.C.
OR		
SELF-DRILLING SCREW FASTENER <sup>d</sup>	12" O.C. STAGGERED	6" O.C. STAGGERED

a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOISTS SPAN IS ALLOWED.  
 b. MIN. EDGE DISTANCE FOR BOLTS IS 2 1/2".  
 c. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MIN. OF 1 1/2".  
 d. SELF-DRILLING SCREW FASTENER HAVING A MINIMUM SHANK DIAMETER OF 0.195" AND A LENGTH LONG ENOUGH TO PENETRATE THROUGH THE SUPPORTING STRUCTURE BAND. THE STRUCTURE BAND SHALL HAVE A MINIMUM DEPTH OF 1 1/8". SCREW SHALL BE EVALUATED BY AN APPROVED TESTING AGENCY FOR ALLOWABLE SHEAR LOAD FOR SYP TO SYP LUMBER OF 250 LBS. AND SHALL HAVE A CORROSION-RESISTANT FINISH EQUIVALENT TO HOT DIP GALVANIZED. MINIMUM EDGE DISTANCE FOR SCREWS IS 1 1/16". A MAXIMUM OF 1/2" THICK WOOD STRUCTURAL PANEL IS PERMITTED TO BE LOCATED BETWEEN THE DECK LEDGER AND THE STRUCTURE BAND.

**TABLE A1104.1(2)**  
 BRICK VENEER STRUCTURES

FASTENERS	8' MAX. JOIST SPAN <sup>a</sup>	16' MAX. JOIST SPAN <sup>a</sup>
5/8" HDG BOLTS W/ NUT AND WASHER <sup>b</sup>	1 @ 2'-4" O.C.	1 @ 1'-4" O.C.

a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOISTS SPAN IS ALLOWED.  
 b. MIN. EDGE DISTANCE FOR BOLTS IS 2 1/2".

**METHOD 3** IF THE DECK BAND IS SUPPORTED BY A MIN. OF 1/2" MASONRY LEDGE ALONG THE FOUNDATION WALL, SECURE DECK TO STRUCTURE W/ 5/8" HDG BOLTS W/ WASHERS SPACED AT 48" O.C.

**METHOD 4** JOIST HANGERS OR OTHER MEANS OF ATTACHMENT MAY BE CONNECTED TO HOUSE BAND AND SHALL BE PROPERLY FLASHED.

**DECK BRACING** - AS PER SECTION A1109 OF THE 2018 NCR.C, THE DECK SHALL BE LATERALLY BRACED AS PER ONE OF THE FOLLOWING:

1) WHEN THE DISTANCE FROM THE TOP OF THE DECK FLOOR TO THE FINISHED GRADE IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION A1104 LISTED ABOVE, LATERAL BRACING IS NOT REQUIRED. LATERAL BRACING IS NOT REQUIRED FOR FREE STANDING DECKS WITH A DECK FLOOR HEIGHT OF 30" OR LESS ABOVE FINISHED GRADE.

2) 4 x 4 TREATED WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND THE GIRDER/DOUBLE BAND W/ (1) 5/8" HDG BOLT WITH NUT AND WASHER AT BOTH ENDS OF THE BRACE PER DETAIL 5.

3) FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POST IN ACCORDANCE WITH TABLE A1109.13. DECKS ATTACHED TO STRUCTURE CAN ALSO BE BRACED ON EXTERIOR GIRDER LINE W/ EMBEDMENT OPTION.

**TABLE A1109.13**

POST SIZE	MAX. TRIIBUTARY AREA	MAX. POST HEIGHT <sup>a</sup>	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

a. FROM TOP OF FOOTING TO TOP OF DECKING

4) 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6'S SHALL BE ATTACHED TO THE POSTS W/ (1) 5/8" HDG BOLT W/ NUT AND WASHER AT EACH END OF EACH BRACING MEMBER PER DETAIL 6.

5) FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.