

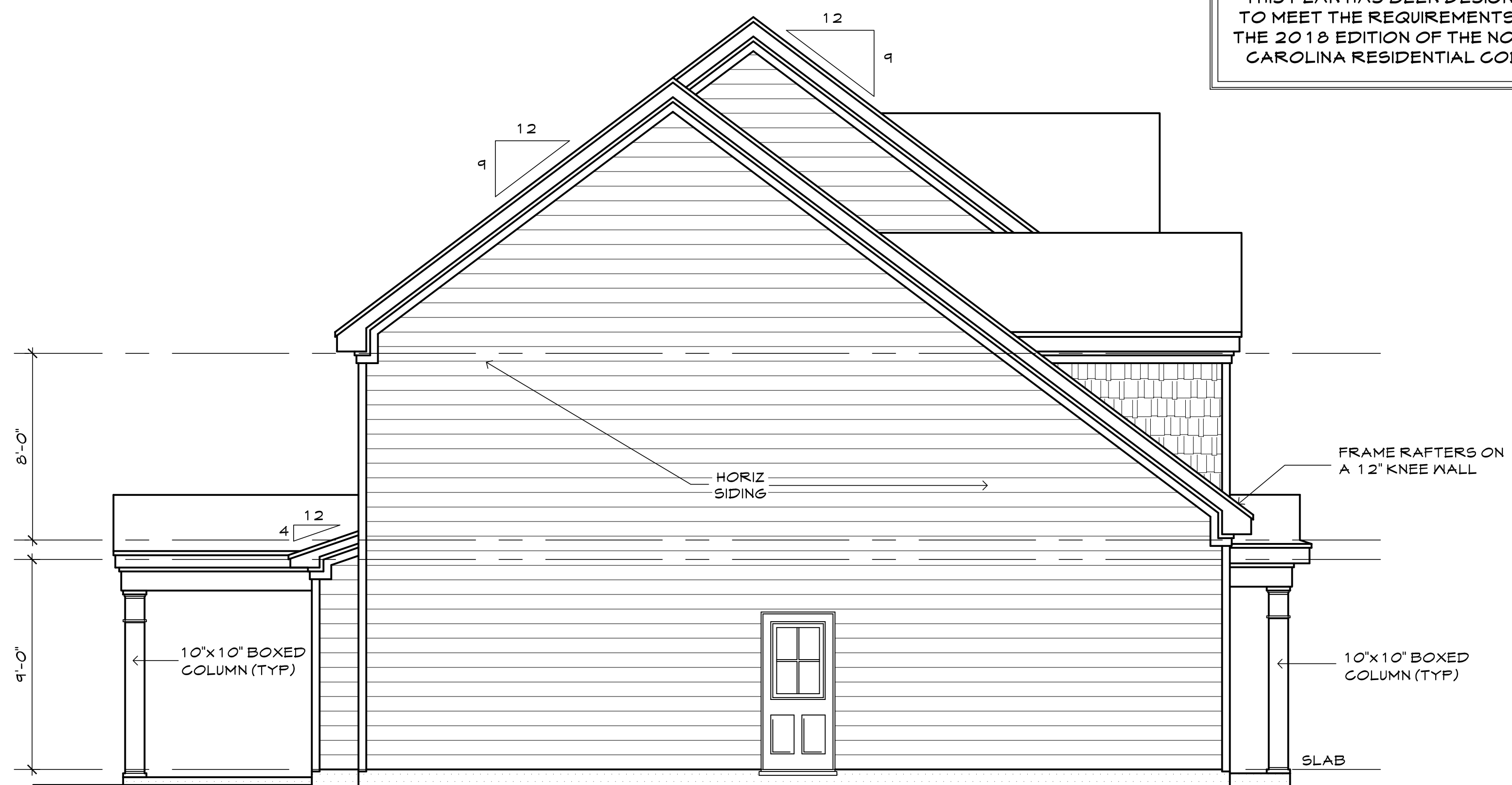


**WESTPARK DESIGNS**  
 104 PARKVINE CIRCLE  
 CARY, NORTH CAROLINA 27519  
 919-412-7074



NAME: **HORIZONS EAST LLC**  
 PROJECT: **THE JENNINGS**  
 SHEET: **1** OF: **4**  
 DATE: **8-4-20**  
 DRAWN: **GLS**  
 CHECKED:

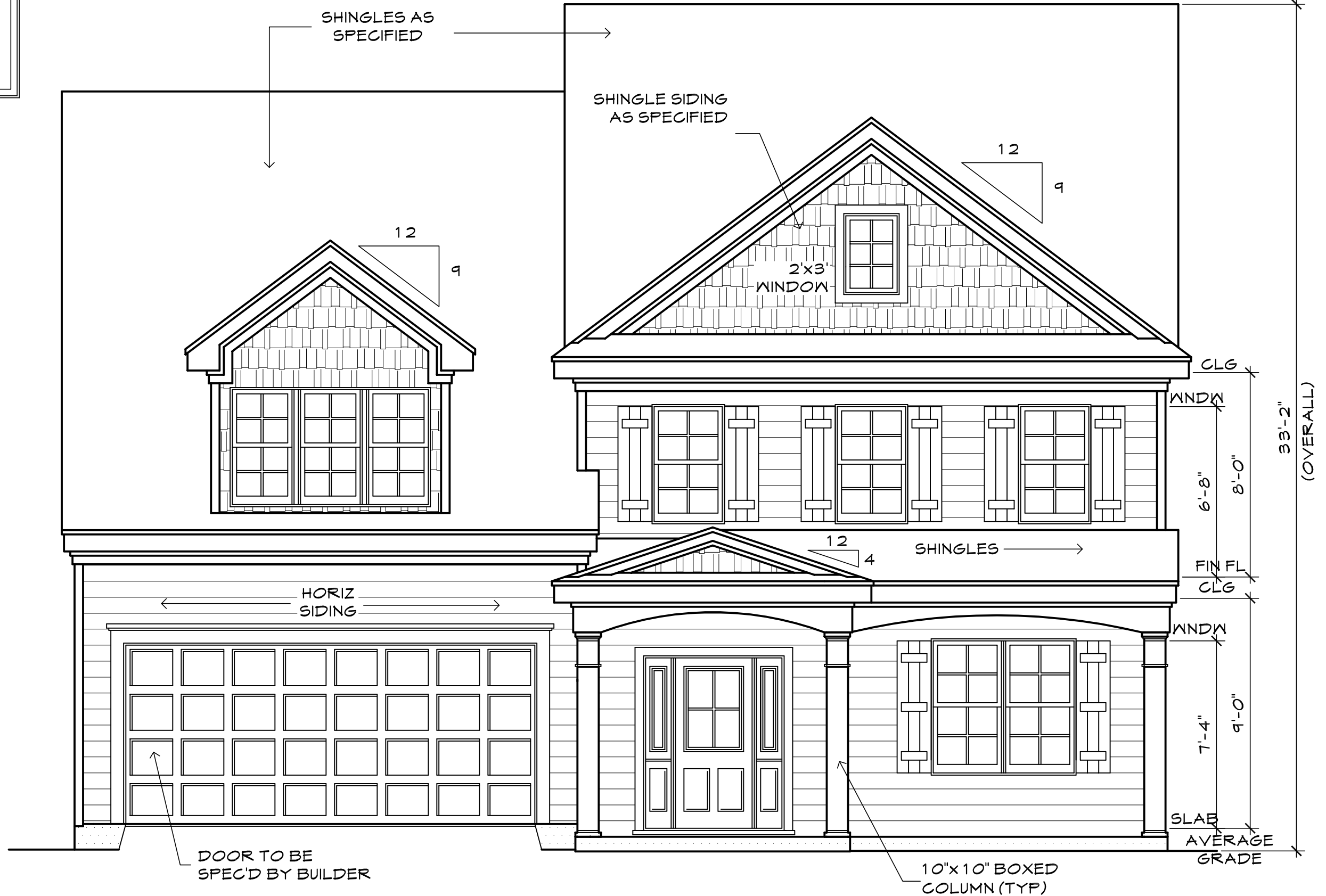
THIS PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE 2018 EDITION OF THE NORTH CAROLINA RESIDENTIAL CODE.



**LEFT SIDE ELEVATION**

SCALE: 1/4"=1'-0"

**NON-EXCLUSIVE LICENSE:**  
 THE PURCHASER OF THIS PLAN HAS BEEN GRANTED A NON-EXCLUSIVE, NON-TRANSFERABLE LICENSE TO USE THIS COPYRIGHTED PLAN TO BUILD ONE HOME. THESE PLANS MAY NOT BE REPRODUCED, WHOLE OR IN PART, OR RESOLD WITHOUT WRITTEN CONSENT FROM WESTPARK DESIGNS. ANY BREACH OF THESE TERMS SHALL ENTITLE WESTPARK DESIGNS TO PURSUE ANY AND ALL REMEDIES AVAILABLE BY LAW.



**FRONT ELEVATION**

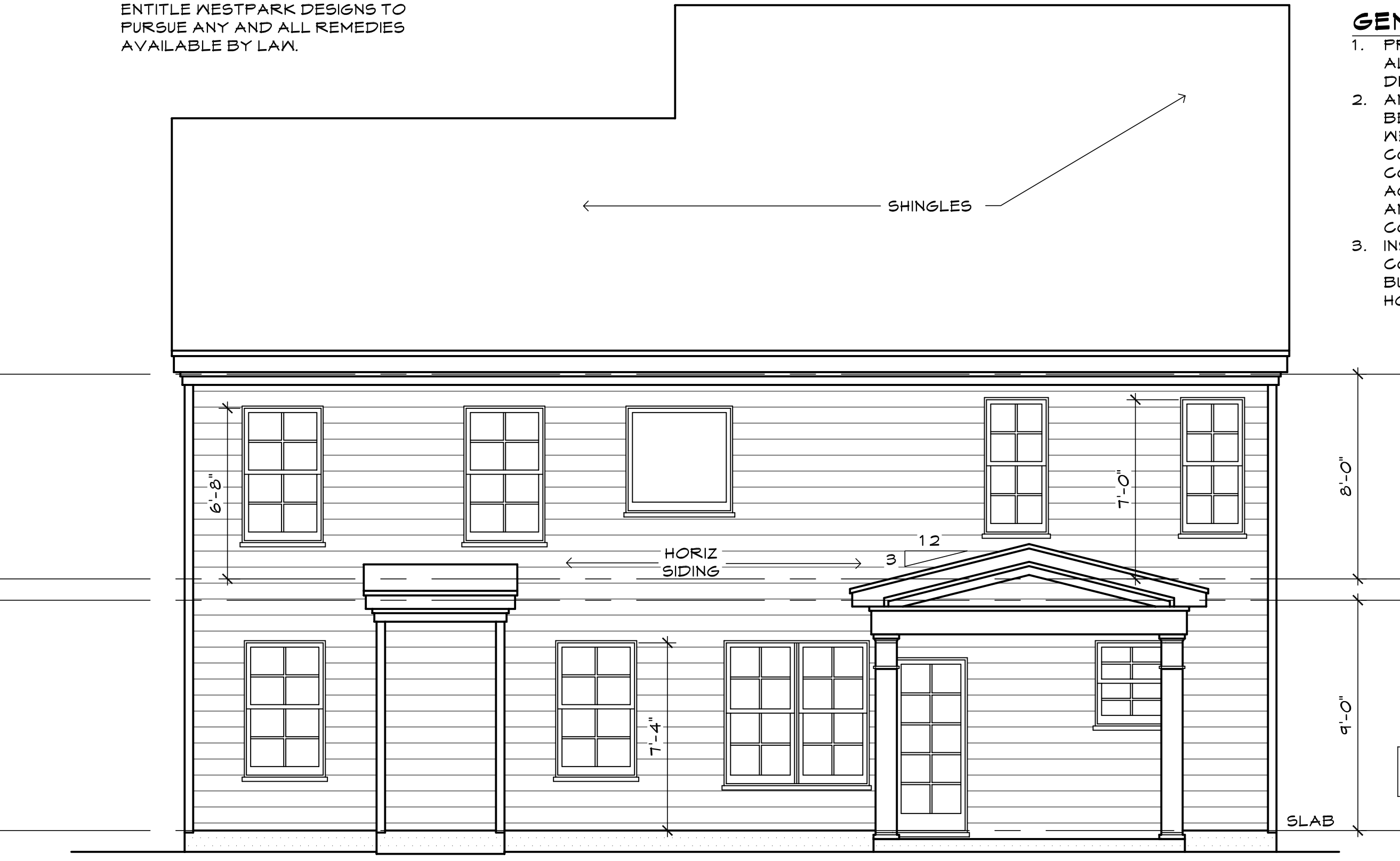
SCALE: 1/4"=1'-0"

**WESTPARK DESIGNS INC.:**  
 1. THESE PLANS ARE THE SOLE PROPERTY OF WESTPARK DESIGNS AND ARE COPYRIGHTED MATERIAL. THEY ARE NOT TO BE REPRODUCED, WHOLE OR IN PART, WITHOUT WRITTEN CONSENT FROM WESTPARK DESIGNS. ANY UNAUTHORIZED REPRODUCTION IS AN INFRINGEMENT OF THE COPYRIGHT LAW.  
 2. WESTPARK DESIGNS ASSUMES NO LIABILITY FOR: ALTERATIONS TO PLAN, FIELD MODIFICATIONS, STRUCTURAL COMPONENTS. THEY ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.  
 3. THE LIABILITY OF WESTPARK HOMES IN CONNECTION WITH THIS PLAN AND THE HOME CONSTRUCTED THEREFROM, IS LIMITED TO THE TOTAL LICENSE FEES PAID BY THE PURCHASER OF THIS PLAN.

**GENERAL NOTES:**  
 1. THESE PLANS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE 2018 RESIDENTIAL BUILDING CODE.  
 2. THESE PLANS ARE DESIGNED TO BE USED BY A LICENSED GENERAL CONTRACTOR.  
 3. DO NOT SCALE DRAWINGS! WRITTEN DIMENSIONS WILL HAVE PRECEDENCE OVER SCALED DIMENSIONS.  
 4. PLUMBING AND HVAC PLANS ARE TO BE HANDLED BY THE GENERAL CONTRACTOR UNLESS SPECIFIED OTHERWISE. EACH MUST COMPLY WITH ALL LOCAL BUILDING CODES.

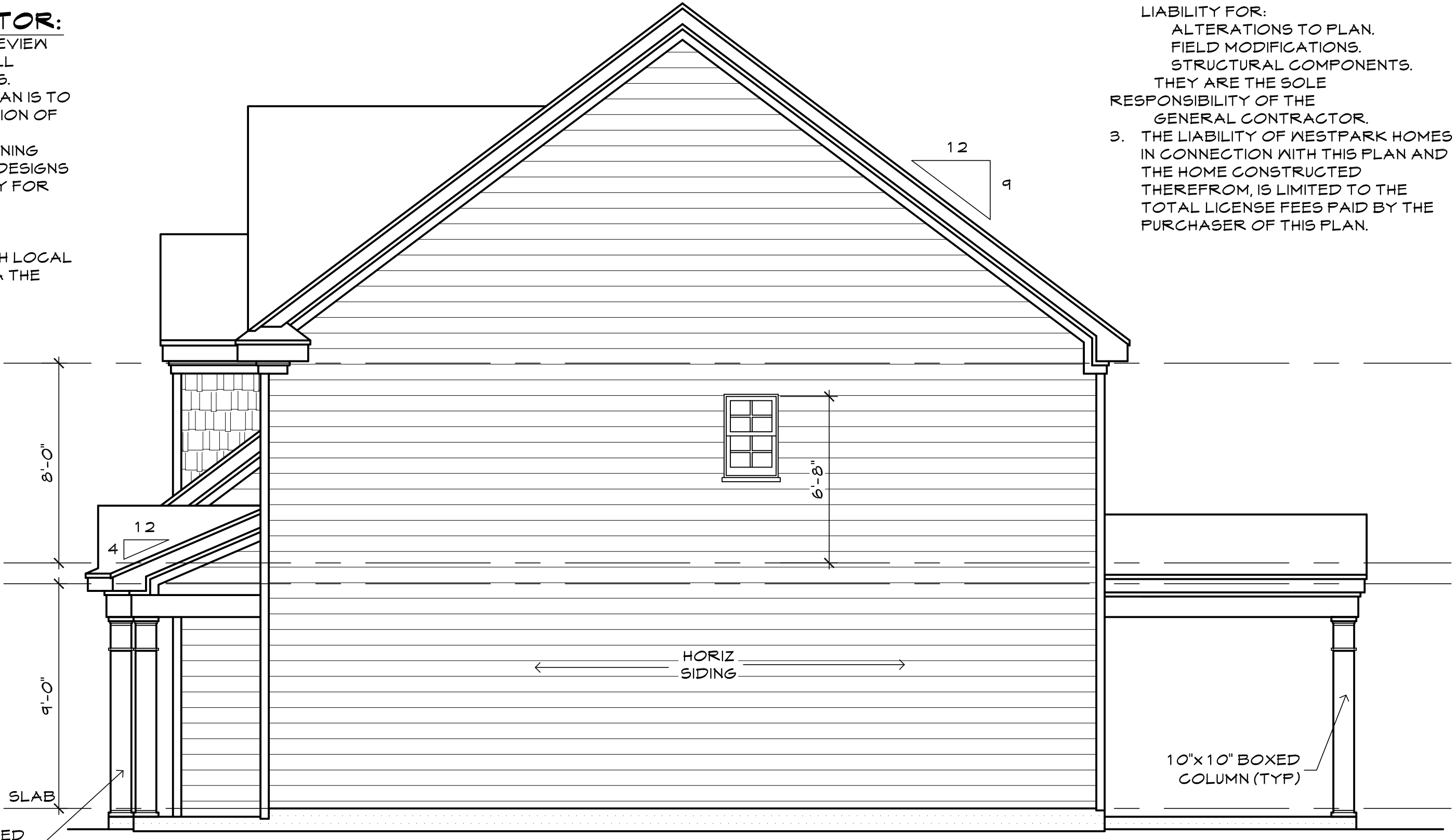
**GENERAL CONTRACTOR:**  
 1. PRIOR TO CONSTRUCTION, REVIEW ALL PLANS, VERIFYING ALL DIMENSIONS AND CONDITIONS.  
 2. ANY DISCREPANCY IN THE PLAN IS TO BE BROUGHT TO THE ATTENTION OF WESTPARK DESIGNS FOR CORRECTION BEFORE BEGINNING CONSTRUCTION. WESTPARK DESIGNS ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ONCE CONSTRUCTION HAS BEGUN.  
 3. INSURE ALL PHASES OF CONSTRUCTION COMPLY WITH LOCAL BUILDING CODES IN THE AREA THE HOME IS TO BE BUILT.

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**REAR ELEVATION**

SCALE: 1/4"=1'-0"



**RIGHT SIDE ELEVATION**

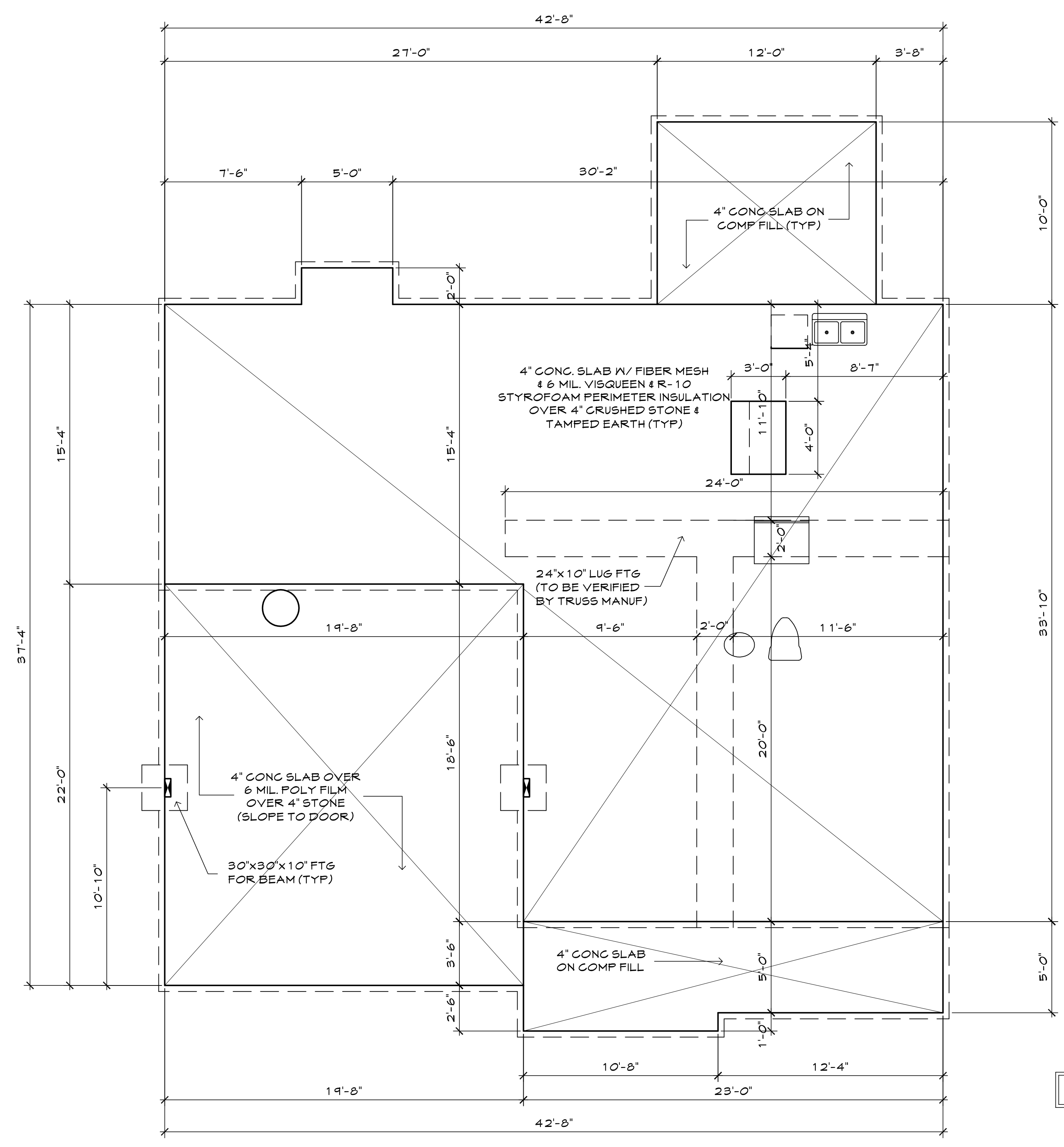
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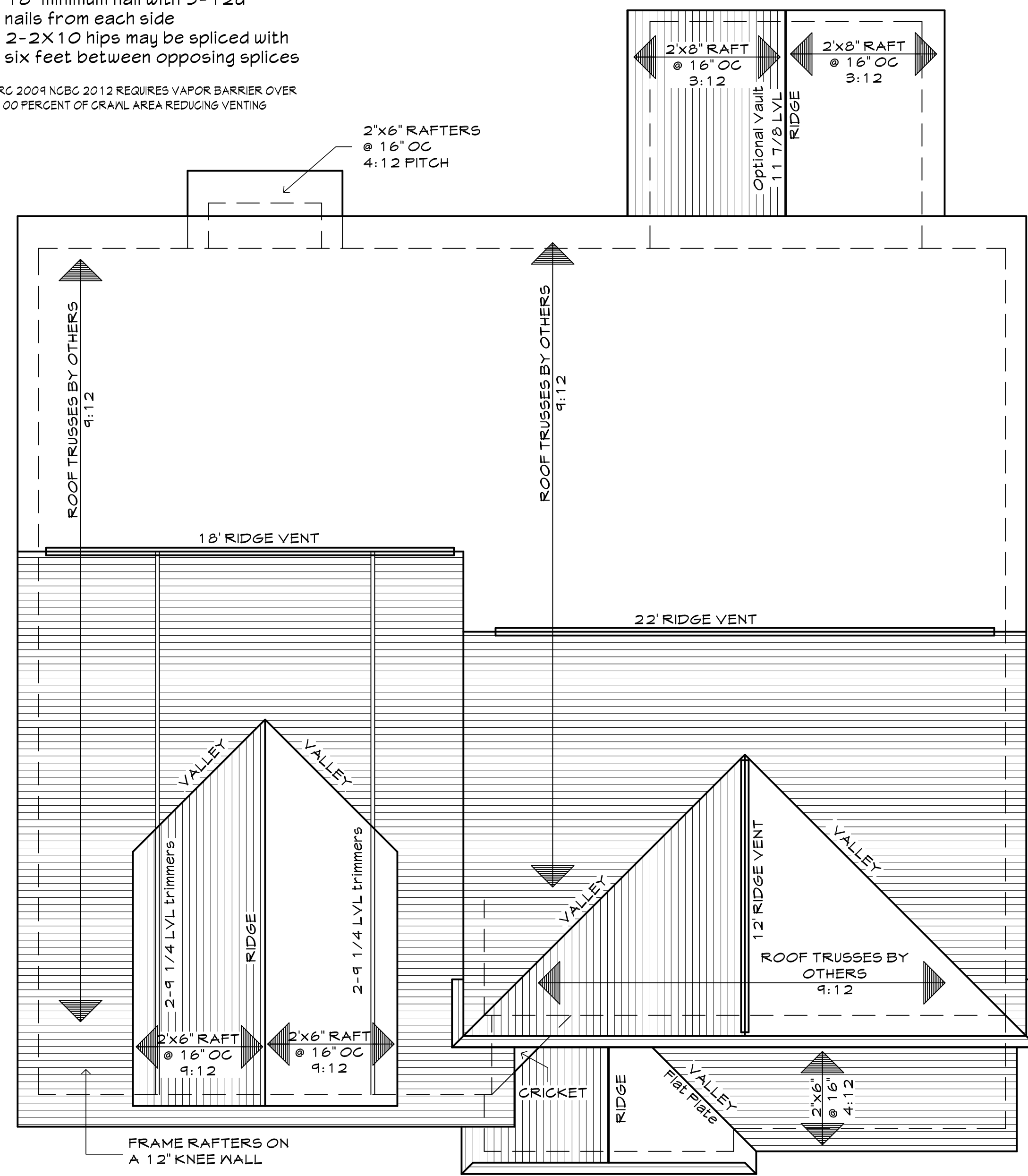


**FOUNDATION PLAN**  
 SCALE: 1/4" = 1'-0"

all rafters  
 2 x 8 @ 16 #2  
 spf or better  
 all ridges 2 x 10 u.o.  
 fur ridge as required to  
 provide full rafter contact  
 fur rafters as required to  
 meet insulation code  
 lap all rafters at kneewall splices  
 1 2" minimum nail with 5- 1 2d  
 nails from each side  
 2-2X10 hips may be spliced with  
 six feet between opposing splices

IRC 2009 NCBG 2012 REQUIRES VAPOR BARRIER OVER  
 100 PERCENT OF GRAVEL AREA REDUCING VENTING

Lower Roof Pitches  
 may require alternate  
 roof coverings, half laps  
 of 30 # felt or EPDM or "Ice Dam"



Lower Roof Pitches  
 may require alternate  
 roof coverings, half laps  
 of 30 # felt or EPDM or "Ice Dam"

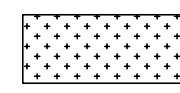
**ROOF PLAN**  
 SCALE: 1/4" = 1'-0"

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All stories to be sheathed with 7/16" OSB nailed @ six inches on center edges and ends with additional nailing of "braced" panels as noted below:

**ALL EXTERIOR BEARING AND NON LOAD BEARING WALLS**  
Four Foot Panel at Corners and Maximum 12' o.c.



Wall Bracing 7/16" OSB Lap OSB from top plate down full eight foot sheet prior to opening cut-out. Nail with 8d nails at THREE inches on center edges/ends six inches in field. Purlins at panel

Minimum Panel Width 48" u.n.o.

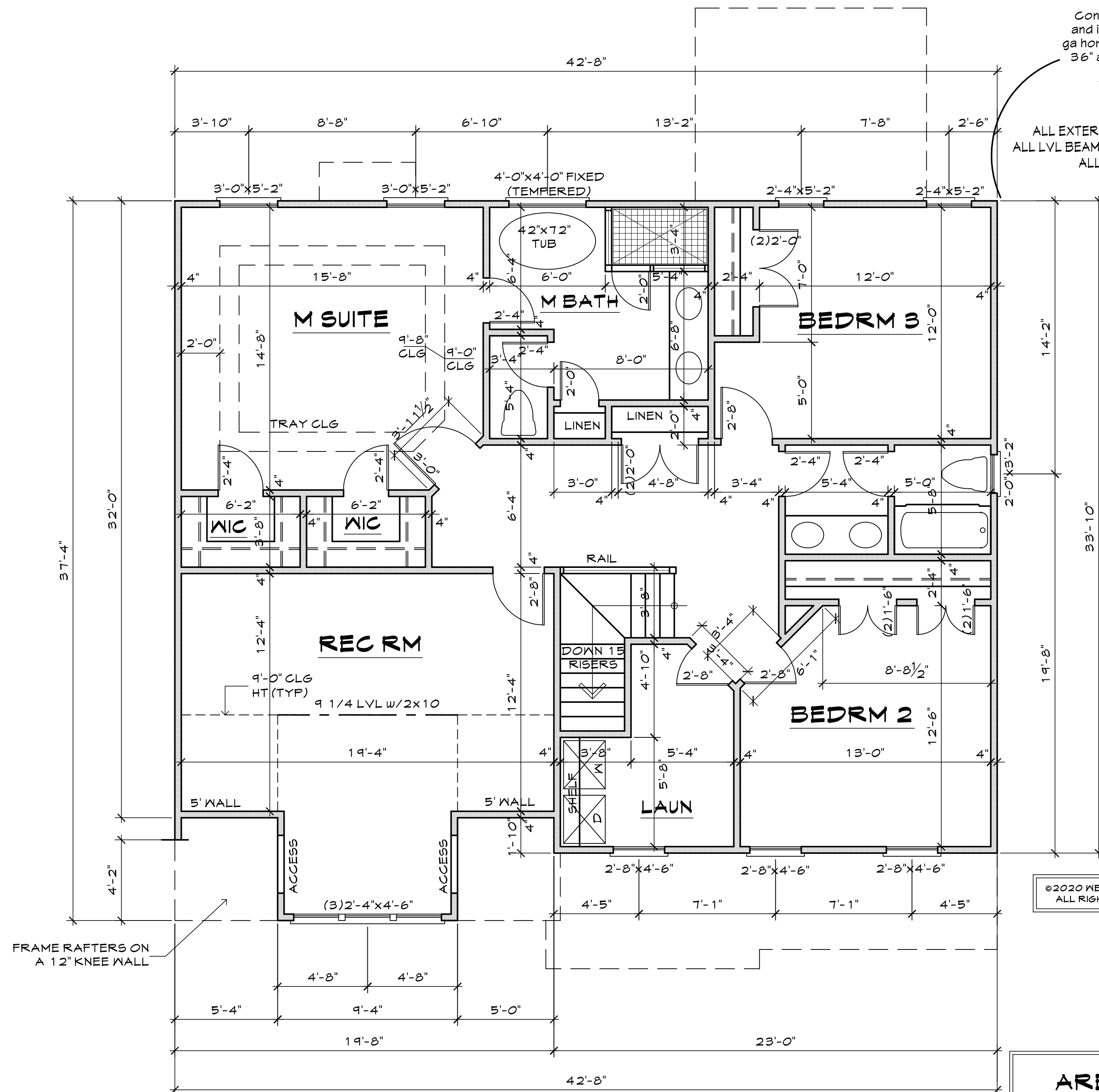
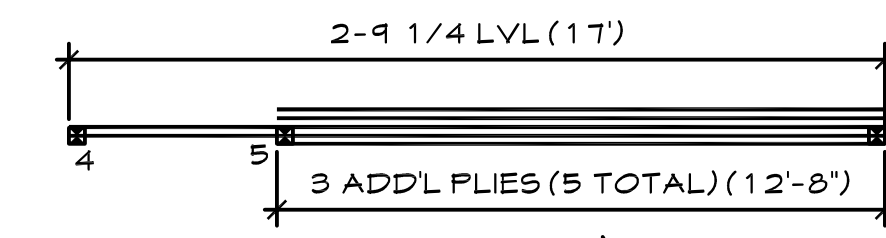
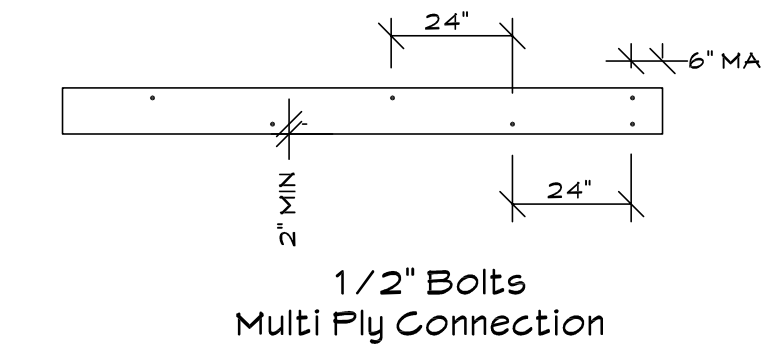
Design To IRC 2009 / NCBC 2012

ALL FLOOR JOISTS 2 X 10 @ 16

#2 SPF OR BETTER

ALL CEILING JOIST 2 X 8 @ 16 Up To 15'  
2 X 6 @ 16 Up To 11'

ALL EXTERIOR AND BEARING HEADER (2) 2'x10' u.n.o.  
ALL LVL BEAMS/HEADERS 3 STUD COLUMNS EACH END u.n.o.  
ALL FRAMING #2 SPF OR BETTER u.n.o.



**SECOND FLOOR PLAN**

SCALE: 1/4" = 1'-0"

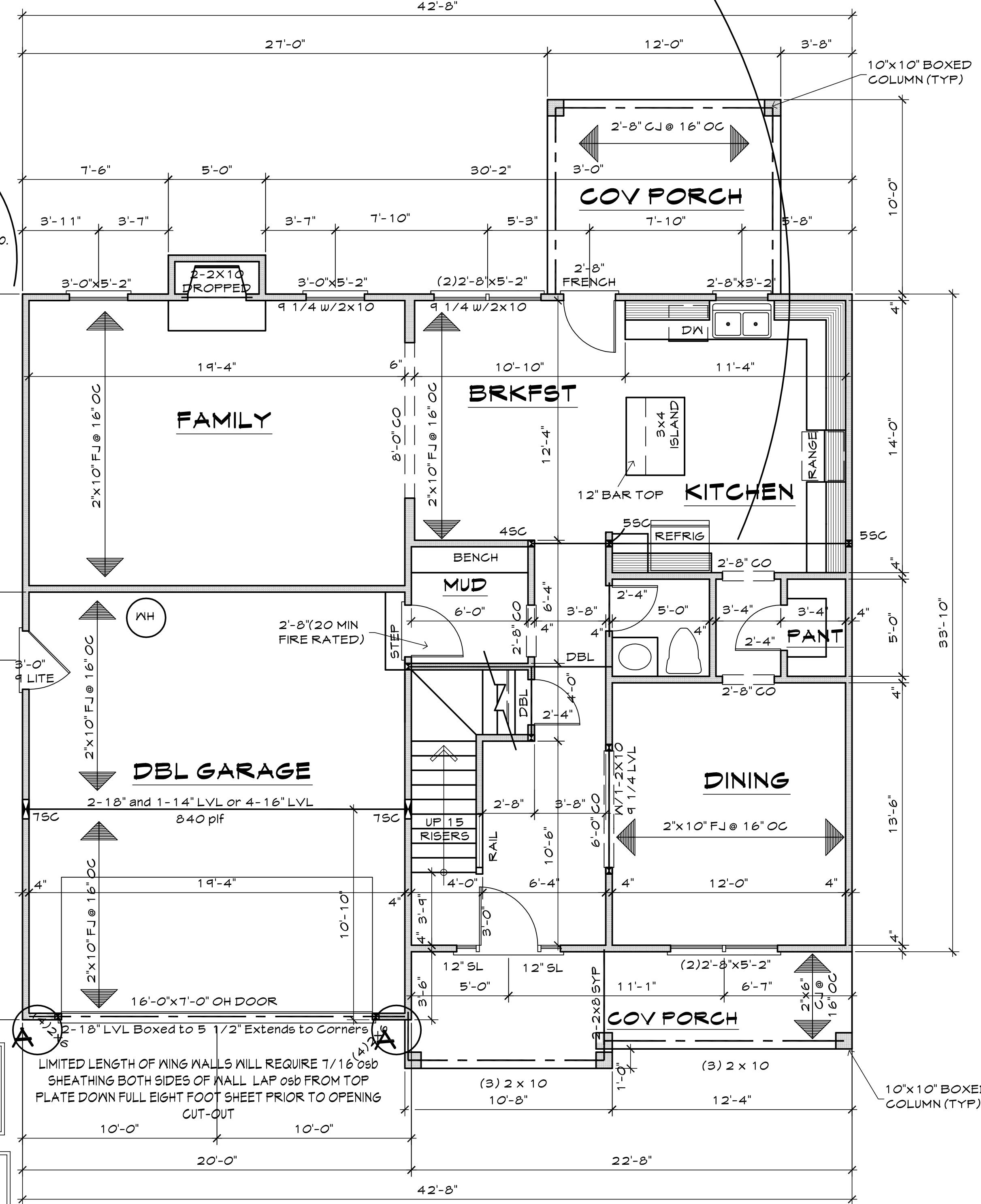
8'-0" CLG HEIGHT THIS FLOOR

Continue Bands to Corners and interlock strap with 18 ga horizontal strap extending 36" around corner each way  
ALL FLOOR JOISTS 2 X 10 @ 16  
#2 SPF OR BETTER  
ALL CEILING JOIST 2 X 8 @ 16  
ALL EXTERIOR AND BEARING HEADER (2) 2'x10' u.n.o.  
ALL LVL BEAMS/HEADERS 3 STUD COLUMNS EACH END u.n.o.  
ALL FRAMING #2 SPF OR BETTER u.n.o.

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**NOTE:**  
GARAGE CEILINGS TO HAVE 5/8" TYPE-X GYPSUM BOARD OR EQUIVALENT (TYP)

AREA BREAKDOWN	
1st FLOOR	1079 sq ft
2nd FLOOR	1457 sq ft
TOTAL	2536 sq ft
GARAGE	433 sq ft
COV PORCHES	244 sq ft



**FIRST FLOOR PLAN**

SCALE: 1/4" = 1'-0"

9'-0" CLG HEIGHT THIS FLOOR



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**THESE PLANS ARE DESIGNED TO  
THE 2018 NORTH CAROLINA  
RESIDENTIAL BUILDING CODE**

**FOUNDATION VENT CALCULATION**  
(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

REQUIRED:

\_\_\_\_\_ N/A \_\_\_\_\_ SQ. FT. OF CRAWL SPACE DIVIDED BY 150 EQUALS  
\_\_\_\_\_ N/A \_\_\_\_\_ SQ. FT. OF MINIMUM NET AREA. (REQUIRED)

SUPPLIED: \_\_\_\_\_ PROVIDED 8"x16" VENTS @ 0.44 SQ. FT. EACH  
EQUALS \_\_\_\_\_ SQ. FT.

NOTES:

- ONE VENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING.
- POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN.
- THE NET AREA OF THE VENTILATED OPENINGS MAY BE REDUCED TO 1/1500 SQ. FT. OF CRAWL SPACE IF THE VENTS ARE PLACED AS TO PROVIDE CROSS-VENTILATION AND AN APPROVED VAPOR RETARDER COVERS THE CRAWL SPACE OR MECHANICAL VENTILATION IS PROVIDED.
- ENTIRE CRAWL SPACE TO BE COVERED WITH APPROVED VAPOR BARRIER (REQUIRED).

**MINIMUM VALUES FOR ENERGY COMPLIANCE**

MAX GLAZING U-FACTOR = 0.40  
CEILINGS R-38  
WALLS R-15  
FLOORS R-19  
ZONE 7

**MEAN ROOF HEIGHT CALCULATION**

\_\_\_\_\_ 19'-4" \_\_\_\_\_ EAVE HT. + \_\_\_\_\_ 33'-2" \_\_\_\_\_ OVERALL HT. = \_\_\_\_\_ 52'-6" \_\_\_\_\_ TOTAL  
\_\_\_\_\_ 52'-6" \_\_\_\_\_ TOTAL / 2 = \_\_\_\_\_ 26'-3" \_\_\_\_\_ MEAN ROOF HT.

NOTES:

- DISTANCES INDICATED ARE FROM FINISHED GRADE AND ASSUME A FLAT LOT WITH MINIMUM GRADE REQUIREMENTS.
- DESIGN PRESSURE = \_\_\_\_\_ 16.5, 21.0 \_\_\_\_\_ PSF

**COMPONENT & CLADDING DESIGNED FOR  
THE FOLLOWING LOADS**

	MEAN ROOF HEIGHT			
	UP TO 30'-0"	30'-1" TO 35'-0"	35'-1" TO 40'-0"	40'-1" TO 45'-0"
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -20.2
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3	20.2, -21.8
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0

SEE NC BUILDING CODE FOR LOCATION OF ZONES  
  
PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING  
TOWARDS AND AWAY FROM THE BUILDING SURFACES

**ATTIC VENTILATION CALCULATION**  
(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

REQUIRED:

\_\_\_\_\_ 1513 \_\_\_\_\_ SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES  
\_\_\_\_\_ 1008 \_\_\_\_\_ SQ. FT. OF HIGH VENTILATION

( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ X \_\_\_\_\_ LOUVERED VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
\_\_\_\_\_ 52 \_\_\_\_\_ LINEAR FT. OF RIDGE VENT AT 18 SQ. IN/FT. DIVIDED  
BY 144 SQ. IN./SQ. FT. EQUALS \_\_\_\_\_ 6.50 \_\_\_\_\_ SQ. FT. OF FREE AREA.

NOTES:

- EAVES TO HAVE 2" CONTINUOUS EAVE/SOFFIT VENT.
- IF ROOF VENTING IS INADEQUATE, SUPPLEMENT WITH POWER ROOF VENTILATORS.
- VENTILATION REQUIREMENT MAY BE REDUCED TO 1 SF/300 SF PROVIDED AT LEAST 50% AND NOT MORE THAN 80% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED, AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS, AND WITH THE BALANCE OF THE VENTILATION TO BE PROVIDED BY THE EAVE AND CORNICE VENTS.

**ATTIC VENTILATION CALCULATION**  
(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

REQUIRED:

\_\_\_\_\_ SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES  
\_\_\_\_\_ SQ. FT. OF HIGH VENTILATION

( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ FT. BASE GABLE VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
( ) \_\_\_\_\_ X \_\_\_\_\_ LOUVERED VENT(S) EQUALS \_\_\_\_\_ SQ. FT.  
\_\_\_\_\_ LINEAR FT. OF RIDGE VENT AT 18 SQ. IN/FT. DIVIDED  
BY 144 SQ. IN./SQ. FT. EQUALS \_\_\_\_\_ SQ. FT. OF FREE AREA.

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• THIS CALCULATION SHEET IS TO BE USED ONLY IN CONJUNCTION WITH PLANS CREATED BY WESTPARK DESIGNS.  
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# CONSTRUCTION NOTES

## DESIGN LOADS

FLOOR LIVE LOAD (SLEEPING)	30 PSF
FLOOR LIVE LOAD (ALL OTHERS):	40 PSF
DECKS:	40 PSF
BALCONIES:	60 PSF
ATTIC DEAD LOAD (NO STORAGE):	10 PSF
ATTIC LIVE LOAD (STORAGE):	20 PSF
ATTIC W/STAIRS (POSS. FINISHED)	40 PSF
HOUSE DESIGNED FOR MPH 3 SEC GUST (115 MPH FASTEST WIND) EXP. B	

## CUMULATIVE INSULATION VALUES

CEILING:	R-38
WALLS:	R-15
FLOORS:	R-19
BASEMENT WALLS:	R-7
CRAWL SPACE WALLS:	R-8
SLAB PERIMETER @ 24" DEEP:	R-4

## GLAZING

- ALL HABITABLE ROOMS SHALL HAVE A GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA.
- WINDOWS SHALL HAVE A MINIMUM DESIGN REQUIREMENT OF 25 HDPI AND U-0.55.
- VERIFY WINDOW EGRESS WITH WINDOW MANUFACTURER.

## EMERGENCY ESCAPE

- OPENINGS PROVIDE AS MEANS OF ESCAPE CANNOT HAVE A SILL HEIGHT OF MORE THAN 44" ABOVE THE FLOOR.
- ESCAPE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 4 sq ft. THE MINIMUM CLEAR OPENING HEIGHT IS 22" AND THE WIDTH IS 20".
- ESCAPE OPENINGS SHALL HAVE A TOTAL GLASS AREA OF NOT LESS THAN 5 sq ft FOR A GROUND WINDOW AND 5.7 sq ft FOR AN UPPER STORY WINDOW.
- REQUIRED EXIT DOORS SHALL BE NO LESS THAN 3'-0"x6'-8".

## GARAGE

- DOOR FROM GARAGE TO HOUSE MUST BE 1 3/4" THICK SOLID WOOD OR SOLID OR HONEYCOMBED CORE STEEL DOORS OR 20 MIN. FIRE RATED.
- GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYPSUM WALLBOARD APPLIED TO THE GARAGE SIDE.

## STAIRWAYS

- STAIRWAYS SHALL BE A MINIMUM 3'-0" WIDE.
- HANDRAILS SHALL NOT PROJECT MORE THAN 4.5" ON EITHER SIDE.
- MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL SHALL NOT BE LESS THAN 31.5" WHERE THE HANDRAIL IS INSTALLED ON ONE SIDE AND 27" WHERE HANDRAILS ARE ON BOTH SIDES.
- STAIRS NOT REQUIRED FOR EGRESS MAY BE AS NARROW AS 26".
- MAXIMUM RISER HEIGHT SHALL BE 8 1/4" AND THE MINIMUM TREAD DEPTH SHALL BE 9".
- NOSING SHALL BE 3/4" MINIMUM AND 1 1/4" MAXIMUM.
- MINIMUM HEADROOM IN ALL AREAS OF THE STAIRWELL SHALL NOT BE LESS THAN 6'-8".
- WINDERS MUST, AT A POINT NOT MORE THAN 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER, BE LESS THAN 4" AND THE MINIMUM WIDTH OF ANY TREAD IS NOT LESS THAN 4".
- SPIRAL STAIRS MUST BE 26" WIDE MINIMUM AND THE TREADS MUST BE 7 1/2" AT 12" FROM THE NARROW EDGE. ALL TREADS MUST BE IDENTICAL WITH A MAXIMUM RISE OF 4 1/2". MINIMUM HEADROOM OF 6'-8" REQUIRED.
- CIRCULAR STAIRS MUST, AT A POINT NOT MORE THAN 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER, BE LESS THAN 4" AND THE MINIMUM WIDTH OF ANY TREAD IS NOT LESS THAN 6".

## HANDRAIL AND GUARDS

- HANDRAILS SHALL HAVE A MINIMUM HEIGHT OF 34" AND A MAXIMUM HEIGHT OF 38".
- PORCHES, BALCONIES OR RAISED FLOORS OVER 30" ABOVE THE FLOOR OR GRADE SHALL HAVE GUARD RAILS NO LESS THAN 36" HIGH.
- STAIRS THAT HAVE A RISE OF 30" ABOVE THE FLOOR SHALL HAVE HANDRAILS OF 34" HIGH.
- GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOORS, BALCONIES AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF AN OBJECT 4" OR MORE IN DIAMETER.

## FOUNDATION NOTES

- CRAWL SPACE IS TO BE LEVEL & CLEAN OF CONSTRUCTION DEBRIS, VEGETATION AND ANY ORGANIC MATERIAL.
- ONE VENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING.
- POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN.
- APPROVED VAPOR RETARDER TO COVER 100% OF CRAWL SPACE.
- MECHANICAL VENTILATION IS PROVIDED.

## FOOTINGS

- FOOTING PROJECTIONS SHALL BE AT LEAST 2" AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL W/ MASONRY UNITS WITH FULL MORTAR JOINTS. BOTTOM SURFACE OF FOOTINGS MAY SLOPE NO MORE THAN 10%. FOOTINGS SHALL BE STEPPED TO CHANGE THE ELEVATION OF THE TOP SURFACE OR WHERE THE SLOPE OF THE BOTTOM OF THE FOOTING WILL EXCEED 10%.
- FINISHED GRADE OF THE UNDER FLOOR SURFACE MAY BE LOCATED AT THE BOTTOM OF THE FOOTINGS.
- MINIMUM 8" WALL FOOTING TO BE NO LESS THAN 16"x8".
- MINIMUM CONCRETE FOOTING STRENGTH = 3000 psi.

## DRAINAGE

- INSTALL AROUND FOUNDATION, DRAIN TILES, GRAVEL OR CRUSHED STONE DRAINS, PERFORATED PIPES OR OTHER APPROVED SYSTEM AS REQUIRED BY GRADE.
- FOUNDATION DRAINAGE MAY BE OMITTED WHEN THE INTERIOR GRADE IS LESS THAN 12" BELOW THE EXTERIOR GRADE.
- GRADE LOT SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS AT A MINIMUM OF 6" WITHIN THE FIRST 10'.

## WATERPROOFING

- FOUNDATION WALLS, WHERE THE OUTSIDE GRADE IS HIGHER THAN THE INSIDE GRADE, SHALL BE DAMPROOFED FROM THE TOP OF THE FOOTING TO BE FINISHED GRADE. USE CODE APPROVED METHOD.

## ANCHORAGE

- THE WOOD SOLE PLATE AT EXTERIOR WALLS ON MONOLITHIC SLABS SHALL BE ANCHORED TO THE FOUNDATION W/ ANCHOR BOLTS SPACED A MAXIMUM OF 6'-0" ON CENTER AND LOCATED WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. BOLTS SHALL BE AT LEAST 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE.
- BOLTS MAY BE REPLACED BY ANCHOR STRAPS, SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE.
- INTERIOR BEARING WALL SOLE PLATES ON MONOLITHIC SLABS SHALL BE ANCHORED W/ APPROVED ANCHORS.

## FOUNDATION WALLS

- VERTICAL REINFORCEMENT OF MASONRY WALLS SHALL BE TIED TO THE HORIZONTAL REINFORCEMENT OF THE FOOTINGS.
- FOUNDATION WALLS ARE TO BE 8" CONC. BLOCK OR 8" BRICK & BLOCK ON CONTINUOUS CONCRETE FOOTINGS.
- FOUNDATION WALLS ARE TO HAVE A SOLID 8" MASONRY CAP.
- WALL HEIGHT ABOVE FINISHED GRADE SHALL BE 4" WHERE MASONRY VENEER IS USED AND 6" ELSEWHERE.
- WALL SUPPORTING OVER 4" OF UNBALANCED BACKFILL MUST BE BRACED TO PREVENT DAMAGE BY THE BACKFILL.
- CAVITY WALL OR MASONRY VENEER CONSTRUCTION MAY BE SUPPORTED ON AN 8" FOUNDATION WALL, PROVIDED THE WALL IS CORBELED WITH SOLID MASONRY TO THE WIDTH OF THE WALL SYSTEM ABOVE. THE TOTAL HORIZONTAL PROJECTION OF THE CORBEL SHALL NOT EXCEED 2" WITH INDIVIDUAL CORBELS PROJECTING NOT MORE THAN 1/2 THE THICKNESS OF THE UNIT OR 1/2 THE HEIGHT OF THE UNIT. THE TOP COURSE OF ALL CORBELS SHALL BE A HEADER COURSE.
- VENTS ARE INTENDED TO BE 16"x8" ALUMINUM.

## PIERS

- MASONRY PIER HEIGHT SHALL NOT EXCEED 10 TIMES THEIR LEAST DIMENSION.
- WHEN STRUCTURAL CLAY OR HOLLOW CONCRETE MASONRY UNITS ARE USED TO SUPPORT BEAMS & GIRDERS, THE CELLULAR SPACES MUST BE FILLED SOLIDLY WITH CONCRETE OR TYPE 'M' OR 'S' MORTAR.
- UNFILLED UNITS MAY BE USED IF THE HEIGHT IS NOT MORE THAN 4 TIMES THE LEAST DIMENSION.
- HOLLOW PIERS SHALL BE CAPPED WITH 4" OF SOLID MASONRY OR CONCRETE, OR SHALL HAVE CAVITIES OF THE TOP COURSE FILLED WITH CONCRETE.
- PIERS INDICATED ON PLAN ARE TYPICALLY 16"x16" ON 24"x24"x8" FOOTINGS.
- TIE ALL HALF PIERS INTO WALLS.

## CAVITY ACCESS

- MINIMUM CRAWL SPACE ACCESS 18"(W)x24"(H) W/ DBL. BAND ABOVE PLACED AT BEST LOCATION WITH REFERENCE TO GRADE.
- ACCESS MAY BE INCREASED IF MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS. SEE NC MECHANICAL CODE FOR REQUIREMENTS.
- ATTIC ACCESS SHALL BE 22"x30" MINIMUM.

## WOOD WALL CONSTRUCTION

- ALL STUDS ARE TO BE #3 GRADE STANDARD OR STUD GRADE LUMBER. #2 GRADE RECOMMENDED BUT NOT REQUIRED.
- ALL INTERIOR LOAD-BEARING WALLS SHALL BE CONSTRUCTED, FRAMED & FIREBLOCKED AS SPECIFIED FOR EXTERIOR WALLS.
- WALLS ARE 2x4 STUDS @ 16" O.C.
- ALL OPEN AREA, 2 STORY WALLS ARE TO BE BALLOON FRAMED, 2"x6" STUDS @ 12" O.C.
- DRAFTSTOPPING AND FIREBLOCKING REQUIRED AS PER CODE.
- WINDOWS SHOULD BE RATED FOR 25 PSI.

## GARAGE DOOR WALL CONSTRUCTION

ONLY FOR GARAGE DOOR WALLS THAT DO NOT MEET BRACING REQUIREMENTS OF THE 2012 RESIDENTIAL BUILDING CODE:

- PLACE (2) 1/2" DIA. ANCHOR BOLTS AT THE OUTSIDE QUARTER OF THESE PANELS. EXTEND #4 STEEL REINFORCING VERTICALLY, LAPPING THE ANCHOR BOLT A MINIMUM OF 6" AN EXTENDING TO THE FOOTING WITH A 4" MINIMUM HORIZONTAL LEG INTO THE FOOTING. THE FOOTING MUST BE REINFORCED WITH (1) #4 BAR TOP AND BOTTOM IN THIS AREA. SECURE WALL TO ANCHOR BOLTS WITH SIMPSON STRONG TIE LTT 131, HTT 16, HTT 22, MTT 28B, OR TENSION TIE WITH 1800# MINIMUM CAPACITY.
- FULLY FACE GARAGE WALL WITH 3/8" OSB OR 1/2" CDX, NAILED PER TABLE R602.3(1) AND BLOCKED AT ALL WOOD STRUCTURAL PANEL SHEATHING EDGES.

## BRICK VENEER

- MASONRY VENEER SHALL BE ANCHORED TO SUPPORTING WALLS WITH CORROSION RESISTANT METAL TIES.
- SHEET METAL TIES SHALL BE NO LESS THAN #22 U.S. GAUGE BY 3/8" CORRUGATED STRAND WIRE TIES SHALL BE NO LESS THAN #9 U.S. GAUGE AND HAVE A HOOD EMBEDDED IN THE MORTAR JOINT. ALL TIES SHALL BE SPACED NO MORE THAN 24" O.C.
- VENEER SHALL BE SEPARATED FROM SHEATHING BY A 1" AIR SPACE.
- FLASHING OF 6 MIL. POLY OR OTHER CORROSION RESISTANT MATERIAL SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB.
- KEEPHOLES SHALL BE PROVIDED AT A MAXIMUM SPACING OF 48" O.C. AND SHALL NOT BE LESS THAN 3/8" IN DIAMETER.

## CONCRETE SLAB FLOORS

- CONCRETE SLAB ON GROUND FLOORS SHALL BE A MINIMUM OF 3 1/2" THICK.
- FILL MATERIAL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB.
- FILL SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL AND 8" FOR EARTH.
- GARAGE SLABS SHALL BE 4" CONC. W/ 6x6 W/M OR FIBERMESH, WITH VAPOR BARRIER, OVER 4" OF CRUSHED STONE OF GRAVEL ON TAMPED EARTH. (W/M OF FIBERMESH RECOMMENDED BUT NOT REQ'D)
- GARAGE SLAB SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRYWAY.
- BASEMENT SLABS: SAME AS GARAGE SLABS BUT WITH PERIMETER INSULATION PER CODE.
- ELEVATED GARAGE FLOOR SHALL BE CAPABLE OF SUPPORTING A 2000# LOAD OVER A 20 SQUARE INCH AREA WITH A LIVE LOAD OF 50 PSF.
- EXPANSION JOINT REQUIRED WHERE ENCLOSED SLAB MEETS FOUNDATION WALL.

## FLOOR PLAN NOTES

- ALL JOIST SPANS ARE CALCULATED USING #2 GRADE SPRUCE PINE FIR.
- JOIST SIZES ARE SHOWN AS MINIMUM TO MEET STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR PASSAGES.
- PROVIDE DOUBLE FLOOR JOISTS AT ALL NON LOAD BEARING PARTITION WALLS RUNNING PARALLEL TO FLOOR JOIST. ALSO UNDER ALL BOOKCASES, CABINETS, TUBS AND WASHING MACHINES. (RECOMMENDED BUT NOT REQUIRED)
- FLOOR JOISTS MUST BE BEAR 1.5" MIN. ON WOOD OR METAL AND 3" MIN. ON MASONRY OR CONCRETE.
- PROVIDE 1"x4" CROSS-BRACING OR SOLID BLOCKING BETWEEN FLOOR JOISTS AT 6'-0" O.C. MAX. (RECOMMENDED BUT NOT REQ'D)
- ALL EXTERIOR AND LOAD BEARING HEADERS ARE TO BE (2) 2"x10".
- MINIMUM LVL DESIGN STRENGTH: E=2.0 x 2 MILLION PSI, FB=2800 PSI, FX=285 PSI.
- ALL LVL BEAMS AND HEADERS TO HAVE 3 STUDS EACH END.
- LOAD BEARING HEADER JACKS MUST REST ON DOUBLE JOISTS. SUPPLY EXTRA JOISTS AS REQUIRED.
- DRAFTSTOPPING AND FIREBLOCKING AS REQUIRED PER CODE.
- DESIGNS FOR WOOD FLOOR TRUSSES MUST BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.

## ROOF NOTES

- RAFTER SIZES ARE SHOWN AT MINIMUM STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR PASSAGES.
- RAFTER SPANS ARE CALCULATED ON #2 GRADE SPRUCE PINE FIR.
- RAFTERS SHALL BE FRAMED TO RIDGE BOARD OR TO EACH OTHER WITH A GUSSET PLATE.
- RIDGE BOARDS SHALL BE AT LEAST 1" NOMINAL THICKNESS AND LESS IN DEPTH THAN THE CUT END OF THE RAFTER.
- OPPOSING RAFTERS AT THE RIDGE MUST ALIGN WITHIN THE THICKNESS OF THE RIDGE.
- IF CLG JOISTS ARE NOT PARALLEL TO THE RAFTERS, SUBFLOORING OR METAL TIES SHALL BE ATTACHED TO RAFTER ENDS TO SUPPLY A CONTINUOUS TIE ACROSS THE BUILDING OR RAFTERS SHALL BE ATTACHED TO 1"x4" CROSSTIES.
- ATTACH 1"x6" OR 2"x4" COLLAR TIES IN THE UPPER THIRD OF THE ROOF TO EVERY THIRD PAIR OF RAFTERS, NOT TO EXCEED 4'-0" O.C.
- ALL DORMERS SHALL HAVE DOUBLE HEADERS AND TRIMMERS.
- TRUSS ROOF DRAWINGS SHALL BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.
- SHINGLED ROOFS WITH PITCHES 2:12 TO 4:12 SHALL HAVE DOUBLE UNDERLAYMENT.
- 1) A CRICKET OR SADDLE IS REQUIRED FOR CHIMNEYS OVER 30" WIDE. THE COVERING SHALL BE METAL OR THE SAME MATERIAL AS THE ROOF COVERING.

## DECK NOTES

- WHEN THE DECK IS ATTACHED TO THE STRUCTURE, THE STRUCTURE SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE.
- THE DECK AND STRUCTURE BANDS SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER, EXCEPT ON BRICK VENEER STRUCTURES AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED.
- SIDING SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND.
- IF ATTACHED TO BRICK STRUCTURE, NEITHER THE FLASHING NOR A TREATED BAND FOR THE STRUCTURE IS REQUIRED. THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK VENEER.
- GIRDERS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE SIDES OF THE POSTS WITH (2) 3/8" HOT DIPPED GALVANIZED BOLTS.
- FLOOR DECKING SHALL BE #2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. MINIMUM FLOOR DECKING THICKNESS FOR JOISTS AT 16" O.C. IS 1" T&G.
- DECKS MAY NOT BE ATTACHED TO CANTILEVERED FLOOR SYSTEMS.
- ALL JOIST SPANS ARE CALCULATED USING #2 GRADE SPRUCE PINE FIR.
- JOIST SIZES ARE SHOWN AT MINIMUM TO MEET STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED.
- DECKS OVER 4'-0" ABOVE GRADE SHALL BE BRACED AS PER CODE APPENDIX M.

WESTPARK DESIGNS

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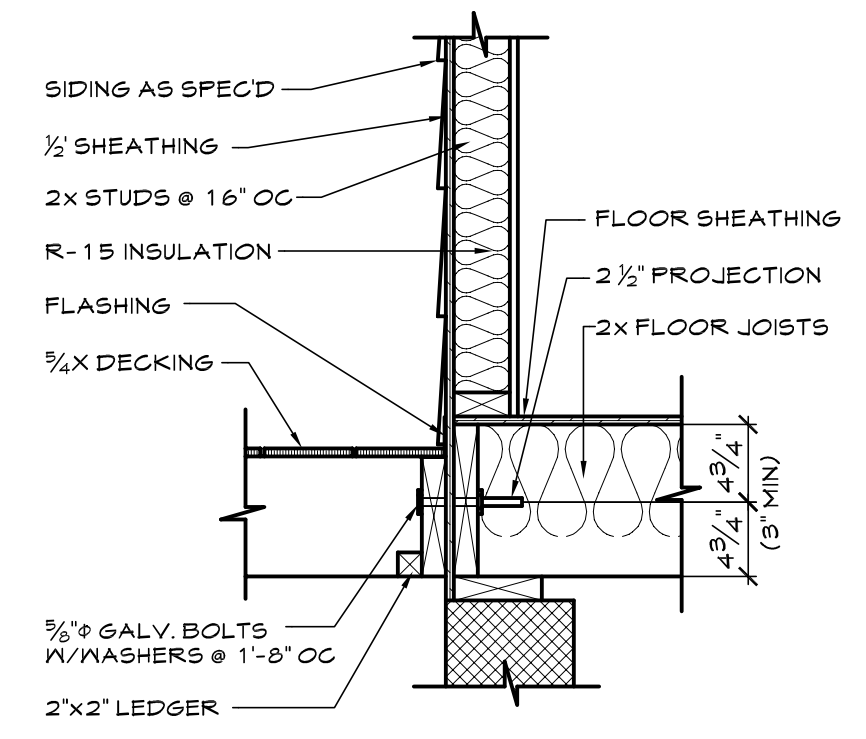
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PROJECT: DETAIL SHEETS

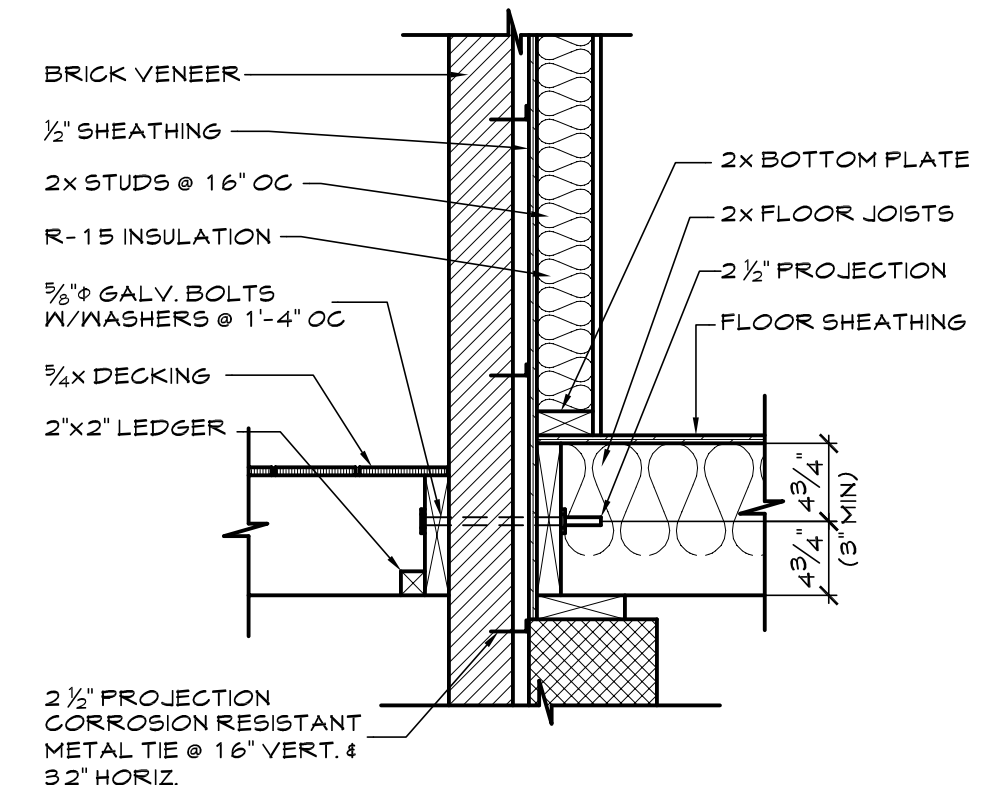
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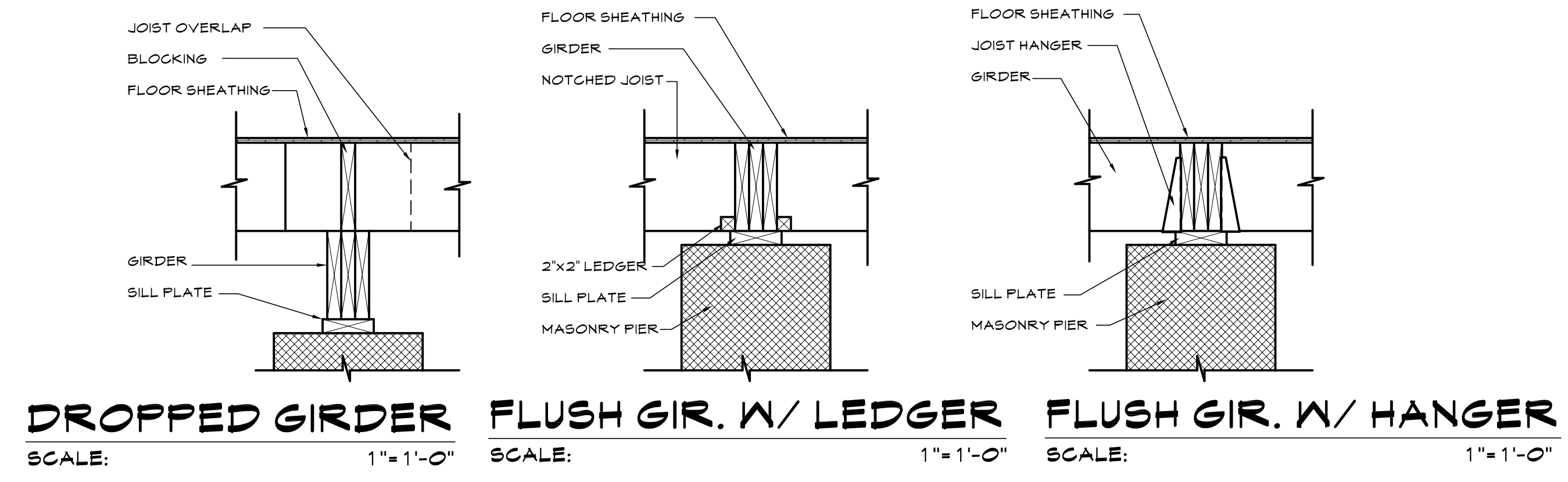
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**DECK ATTACHMENT (SIDING)**  
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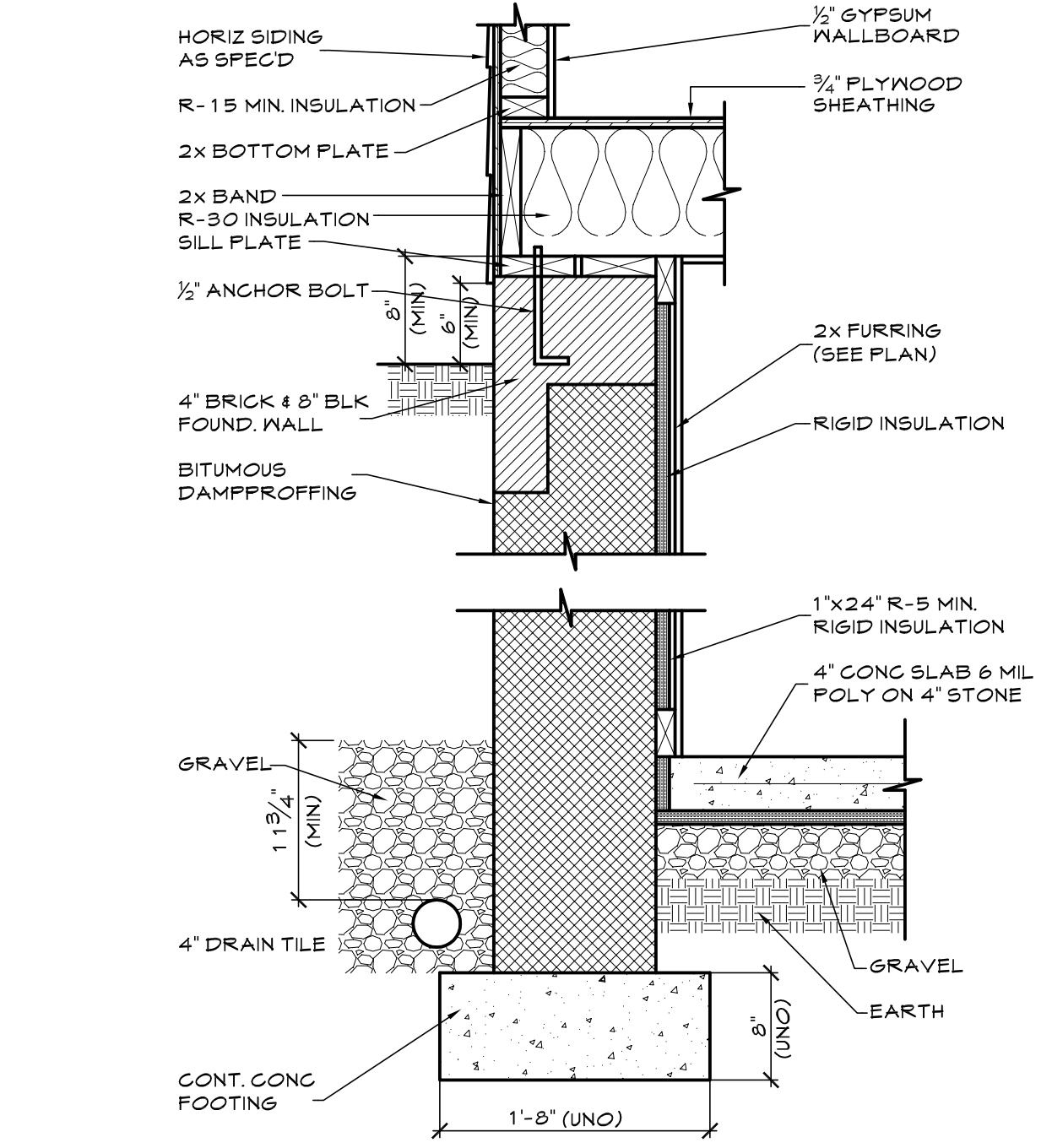


**DECK ATTACHMENT (BRICK)**  
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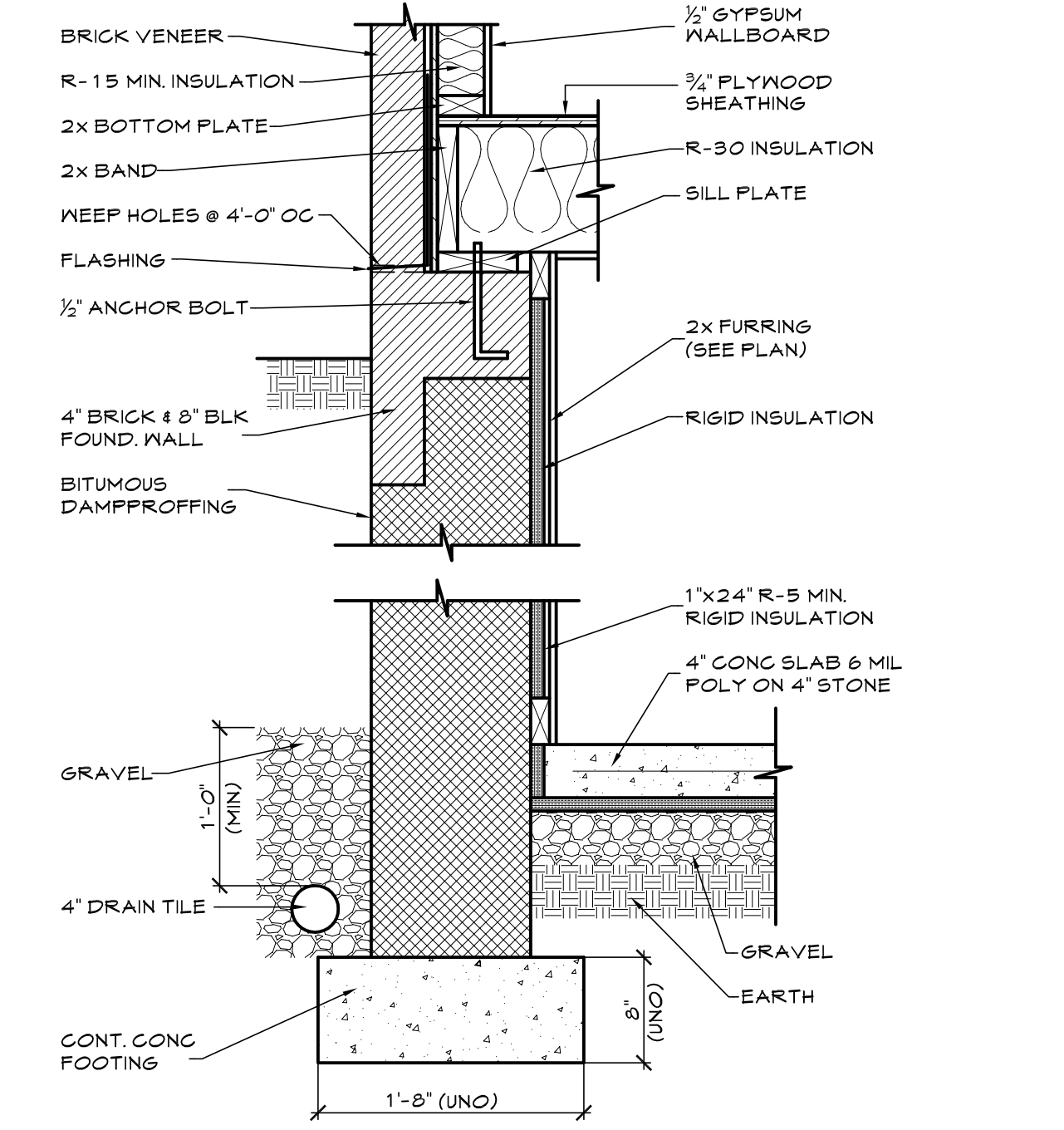


**DROPPED GIRDER** SCALE: 1"=1'-0"  
**FLUSH GIR. W/ LEDGER** SCALE: 1"=1'-0"  
**FLUSH GIR. W/ HANGER** SCALE: 1"=1'-0"

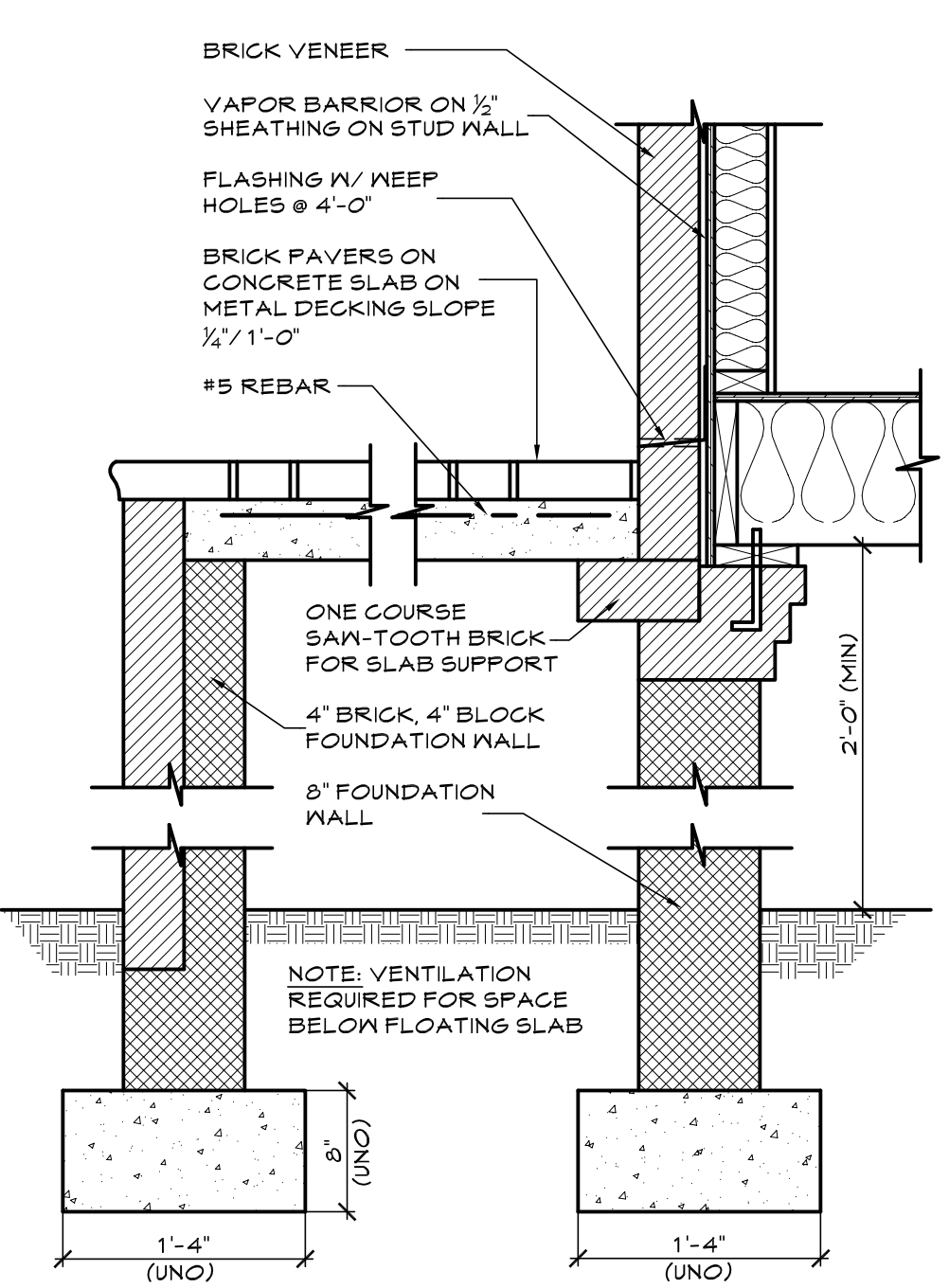
**ANCHOR BOLT NOTE**  
1/2" DIA. x 10" ANCHOR BOLTS  
W/ 7" MIN. EMBEDMENT @ 6'-0" OC  
& 12" FROM EACH CORNER



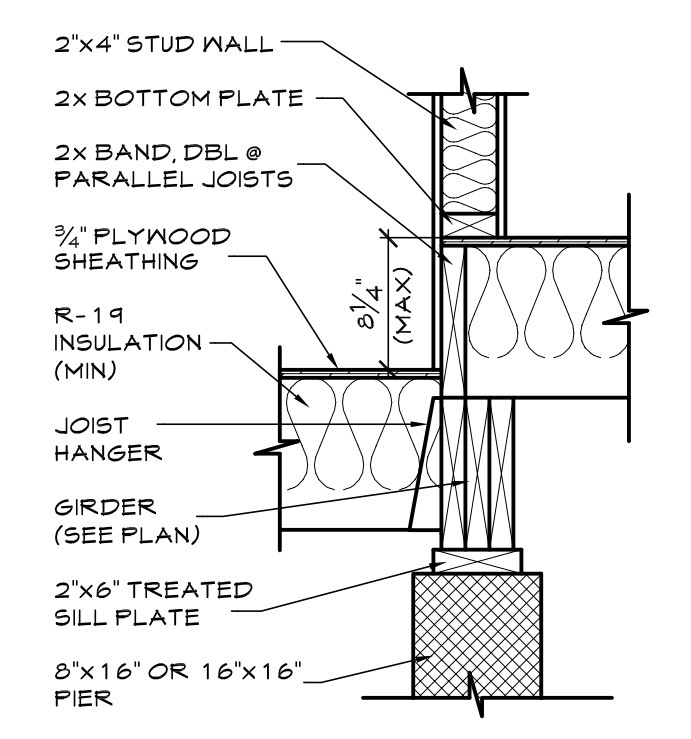
**BASEMENT W/ DRAIN TILE**  
SCALE: 1"=1'-0"



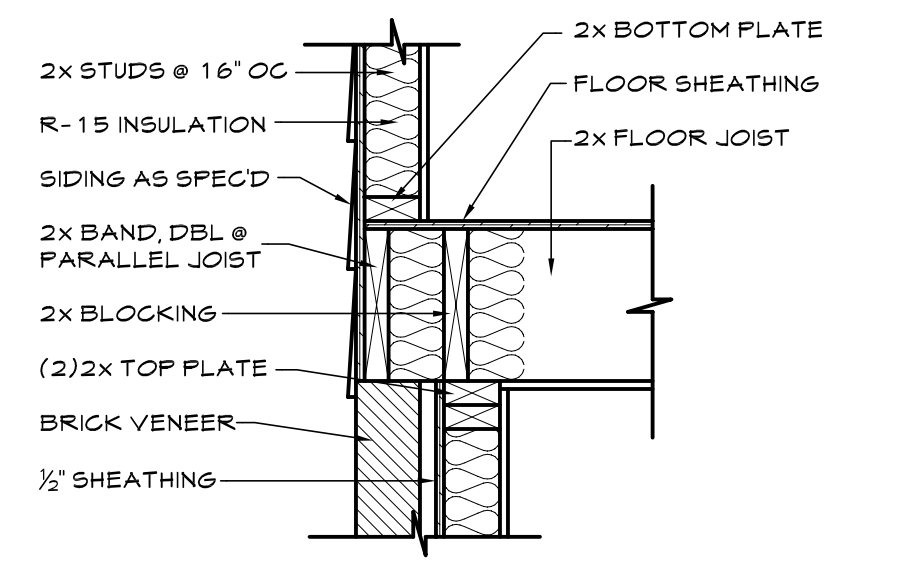
**BASEMENT W/ BRICK VENEER**  
SCALE: 1"=1'-0"



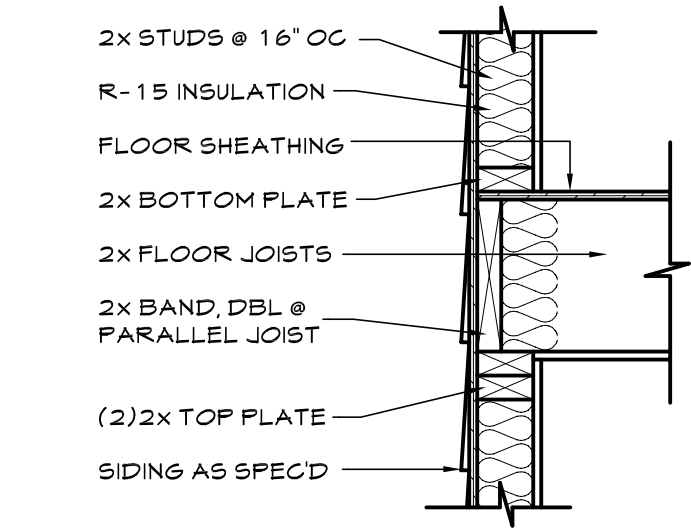
**FLOATING SLAB DETAIL**  
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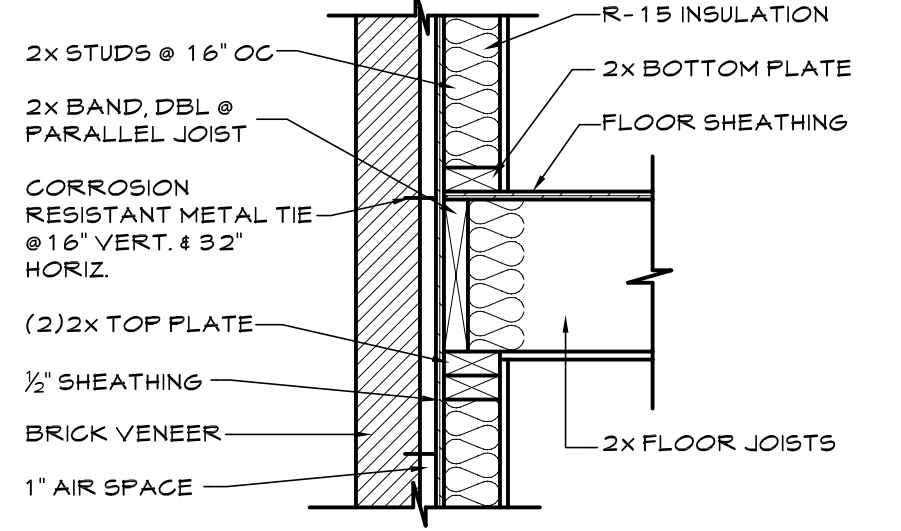
**SUNKEN FLOOR**  
SCALE: 1"=1'-0"



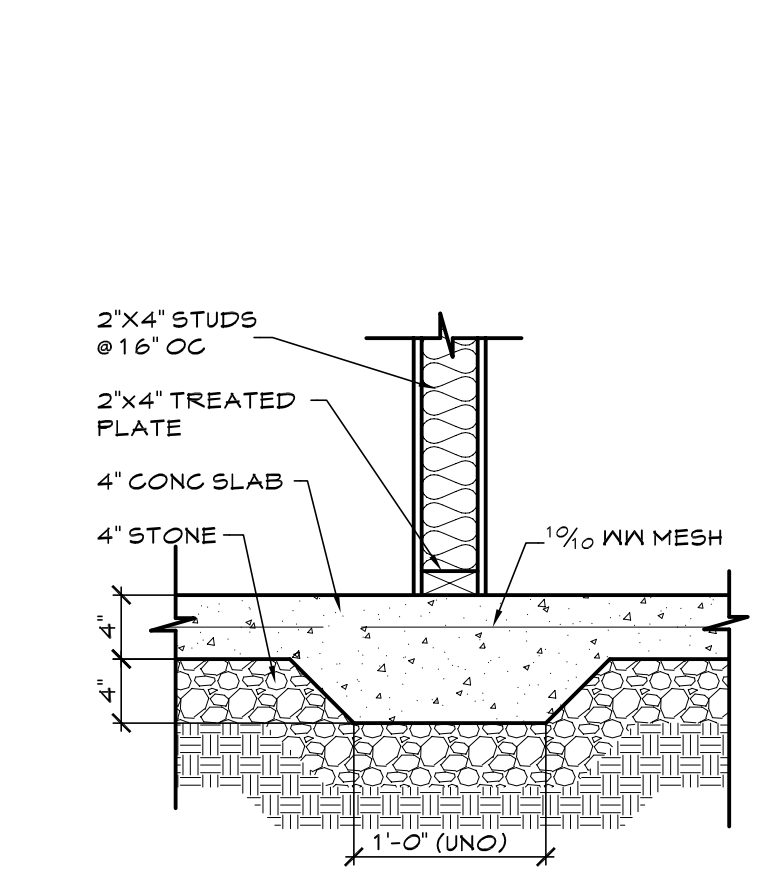
**CANTILEVER @ BRICK**  
SCALE: 1"=1'-0"



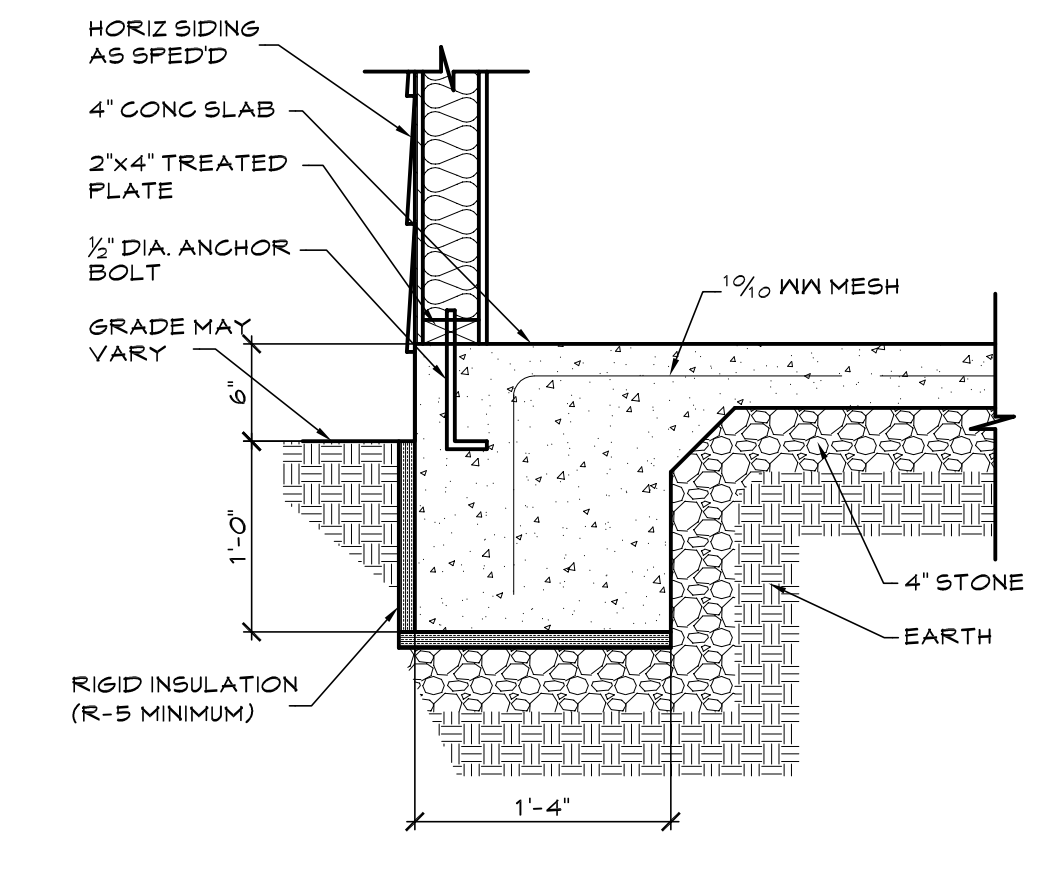
**FLOOR FRAMING**  
SCALE: 1"=1'-0"



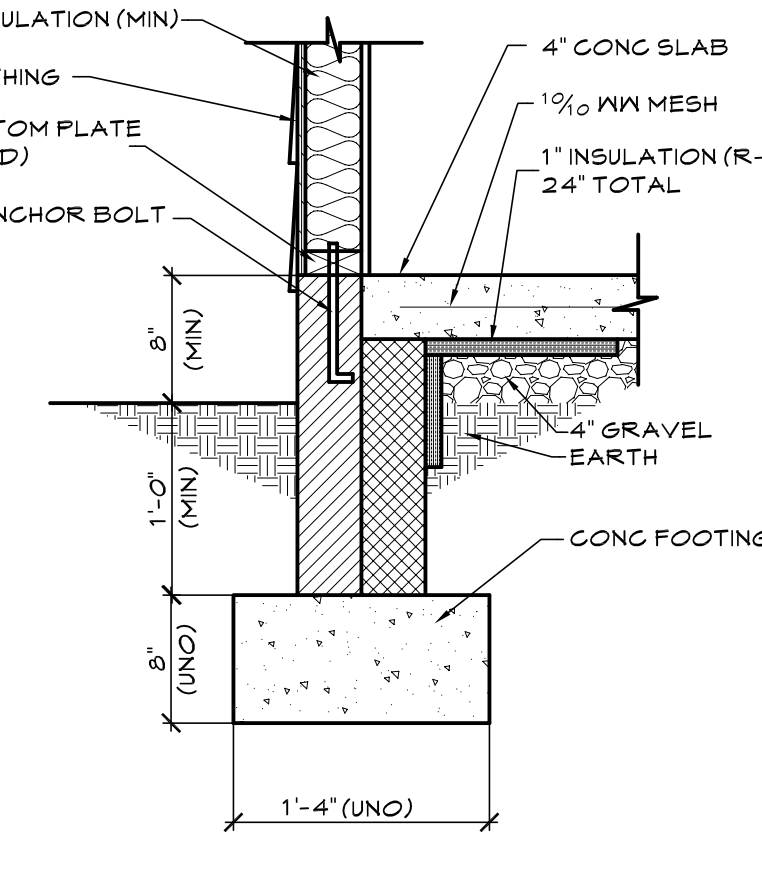
**FL FRAMING W/ BRICK**  
SCALE: 1"=1'-0"



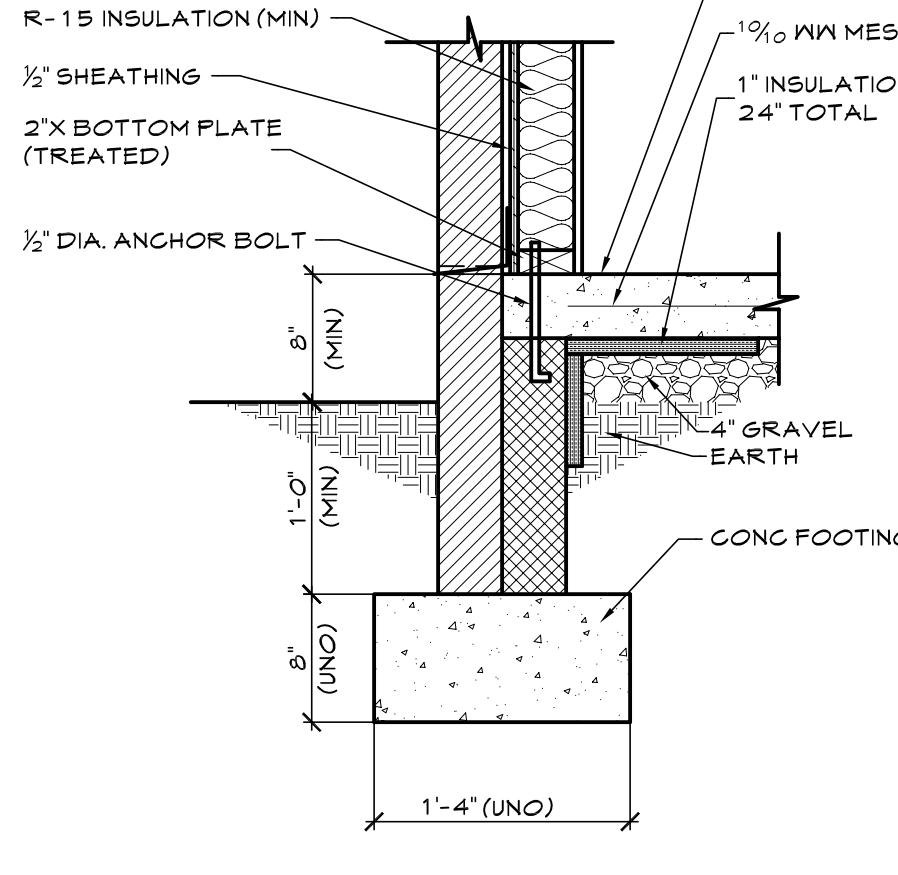
**LUG FOOTING**  
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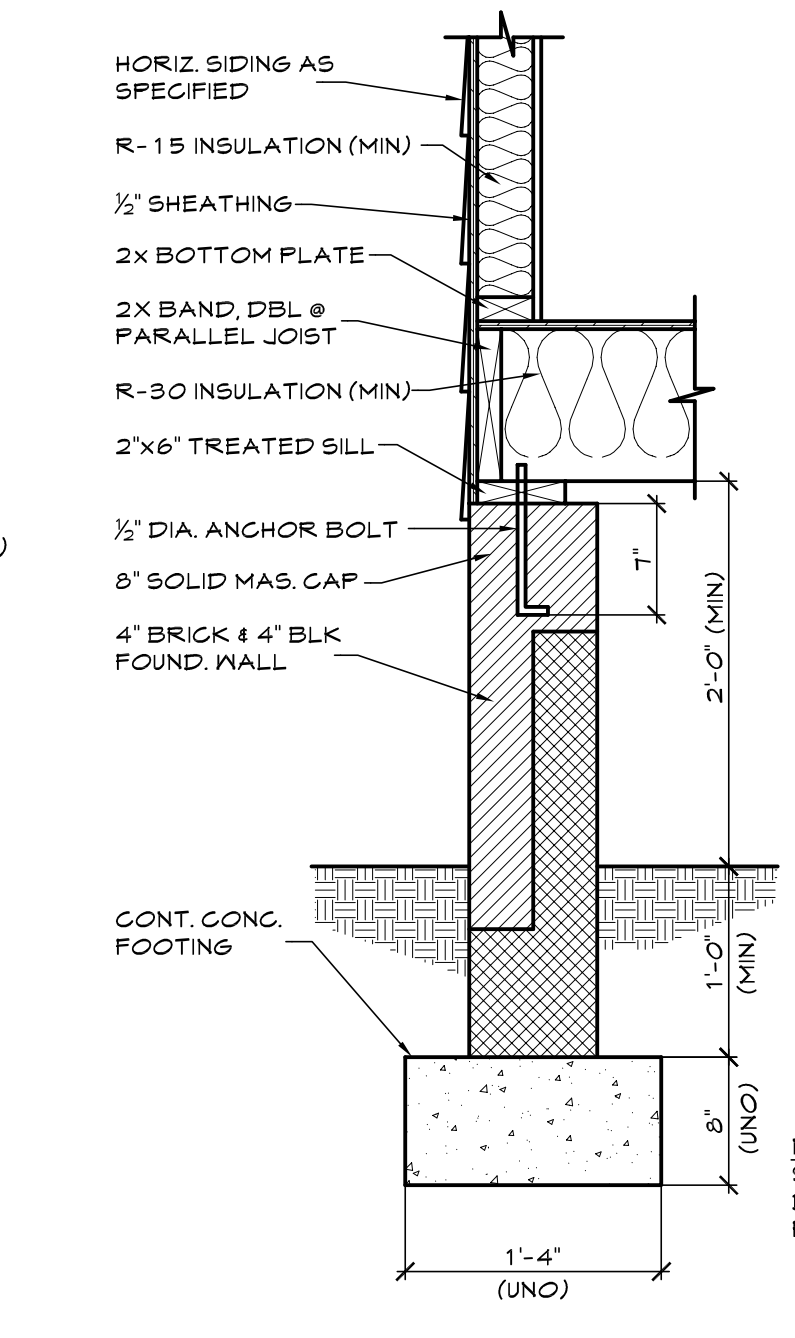
**MONOLITHIC SLAB**  
SCALE: 1"=1'-0"



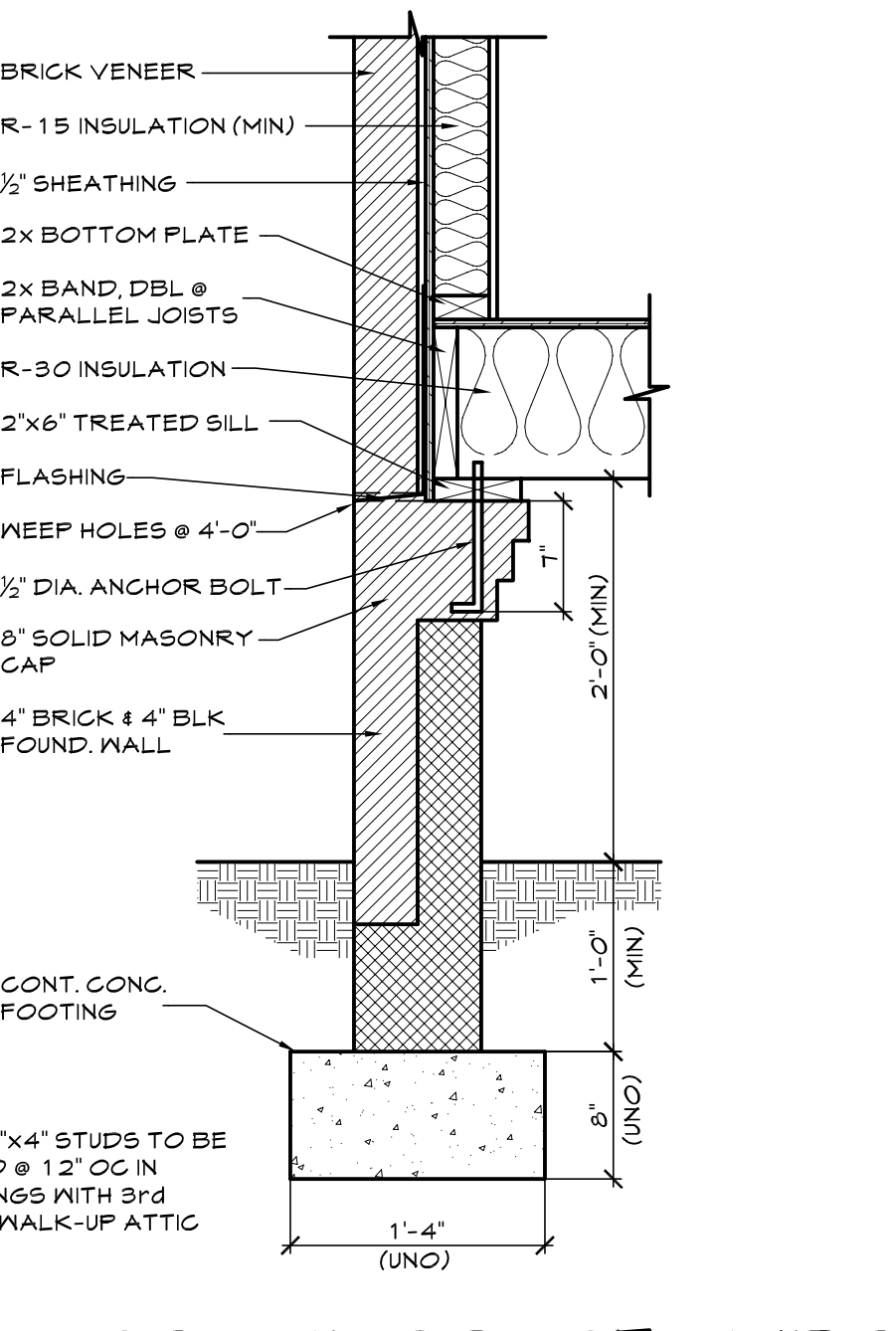
**SLAB W/ SIDING**  
SCALE: 1"=1'-0"



**SLAB W/ BRICK**  
SCALE: 1"=1'-0"



**CRAWL SPACE W/ SIDING**  
SCALE: 1"=1'-0"



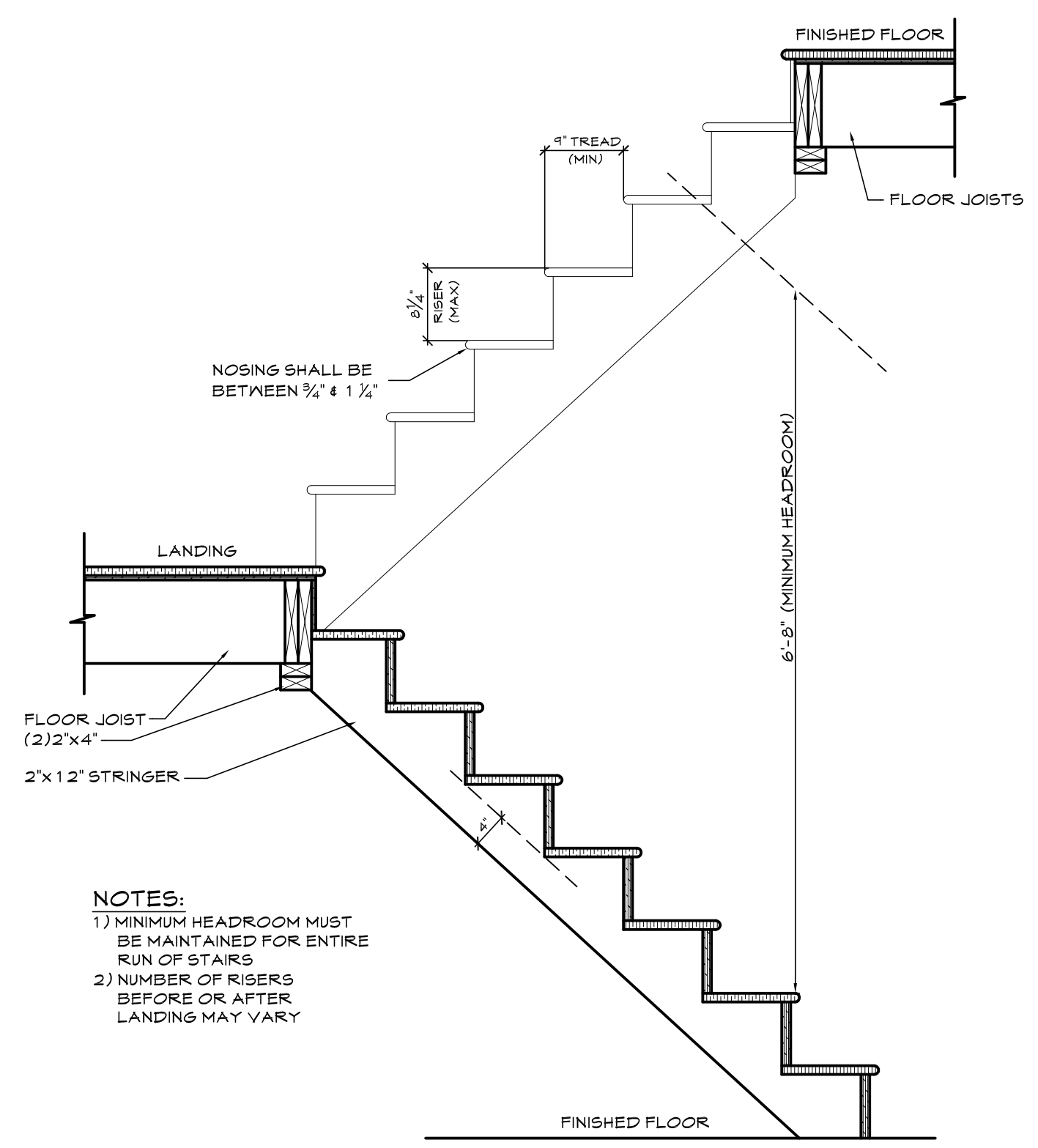
**CRAWL SPACE W/ BRICK**  
SCALE: 1"=1'-0"

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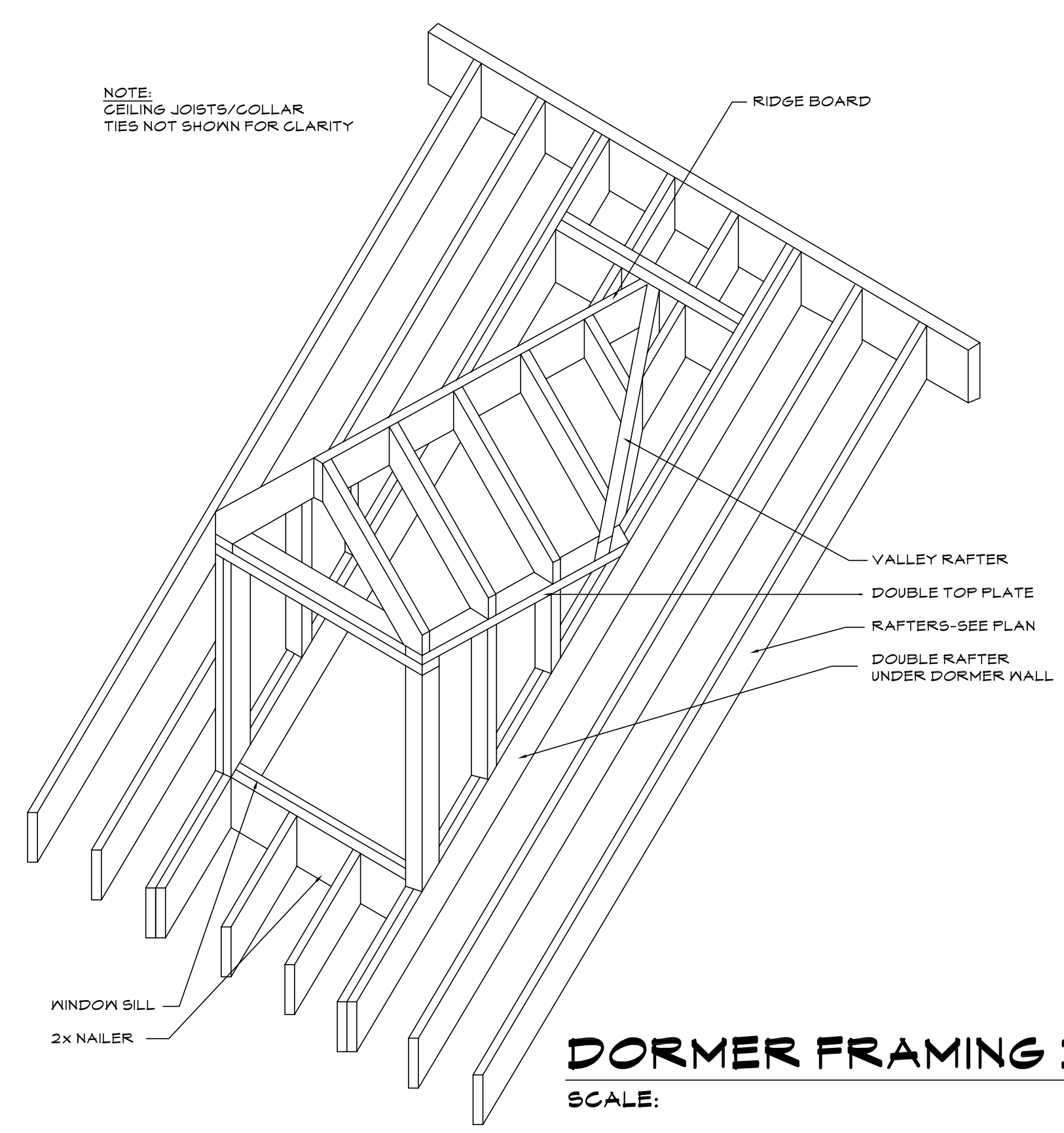
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DATE: **1-7-19**

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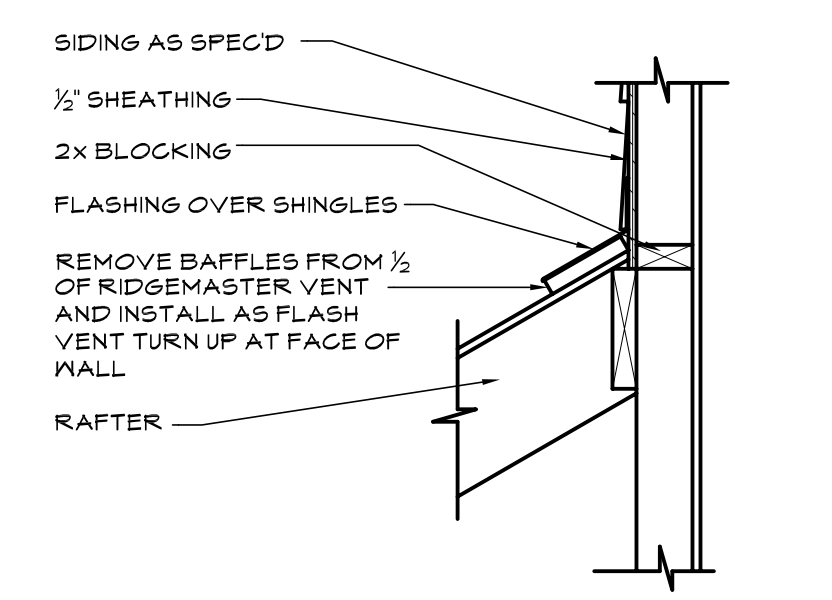
**NOTES:**  
 1) MINIMUM HEADROOM MUST BE MAINTAINED FOR ENTIRE RUN OF STAIRS  
 2) NUMBER OF RISERS BEFORE OR AFTER LANDING MAY VARY

**STAIR SECTION**  
 SCALE: 3/4" = 1'-0"

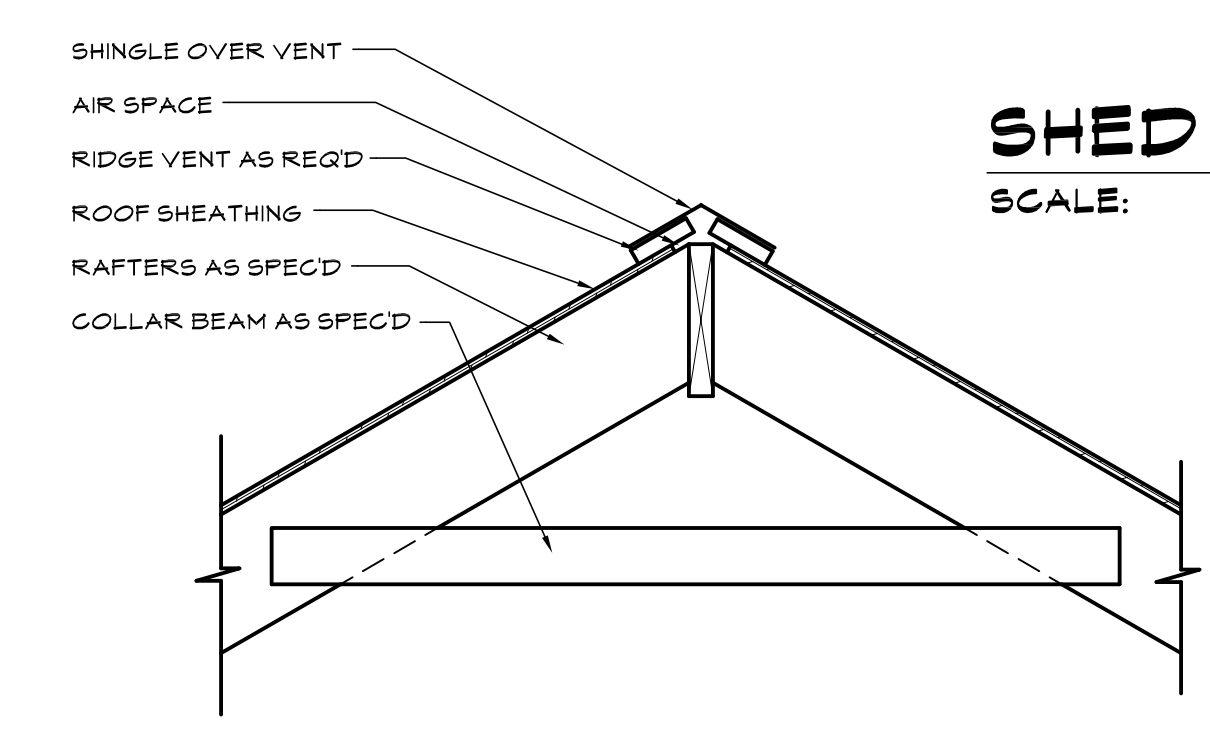


**DORMER FRAMING DETAIL**  
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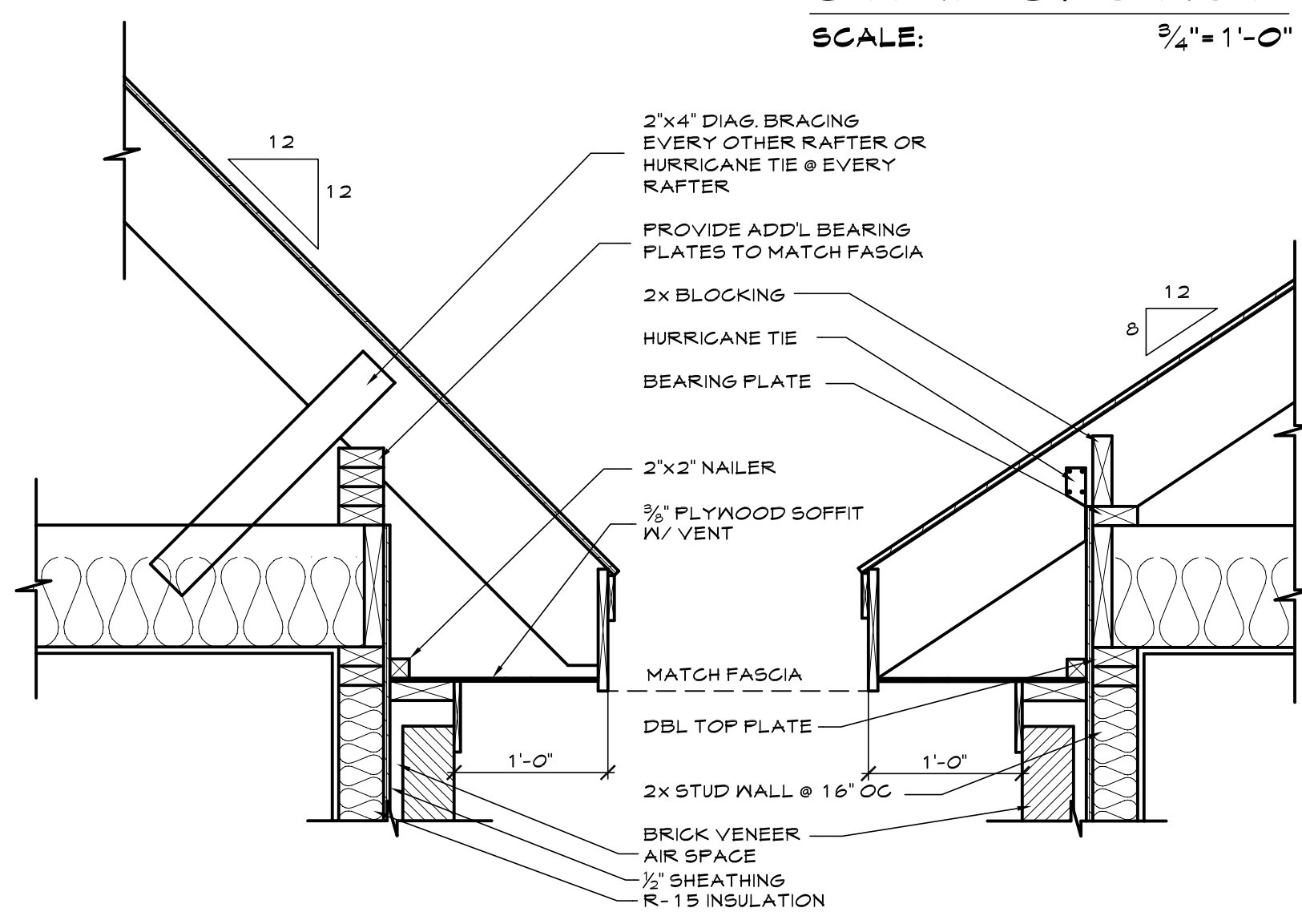
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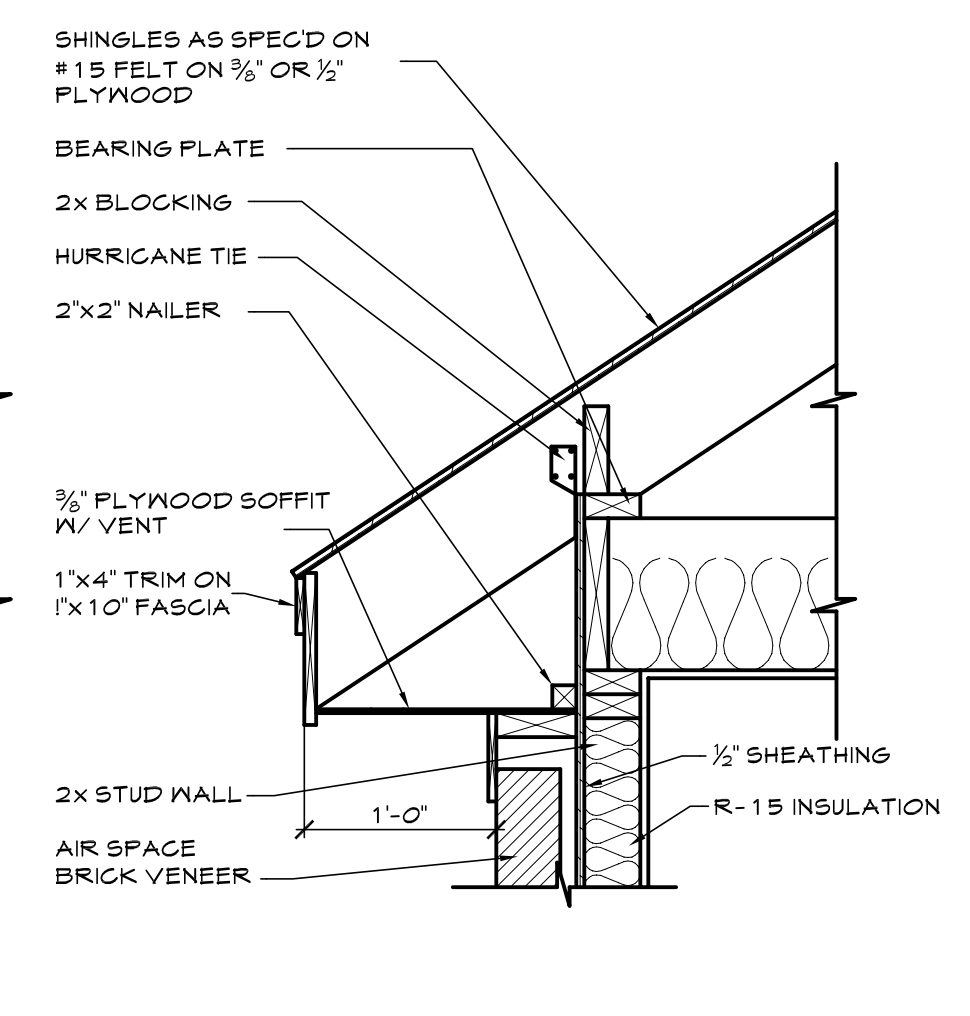
**SHED ROOF @ WALL**  
 SCALE: 1" = 1'-0"



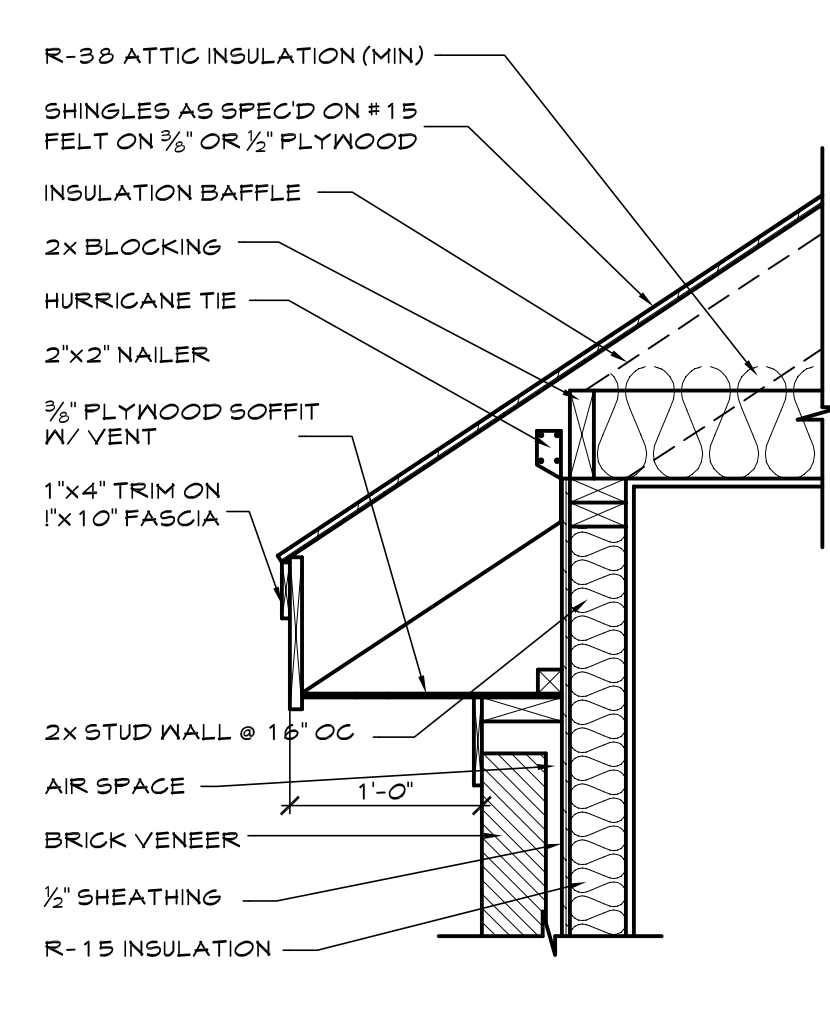
**COLLAR BEAM DETAIL**  
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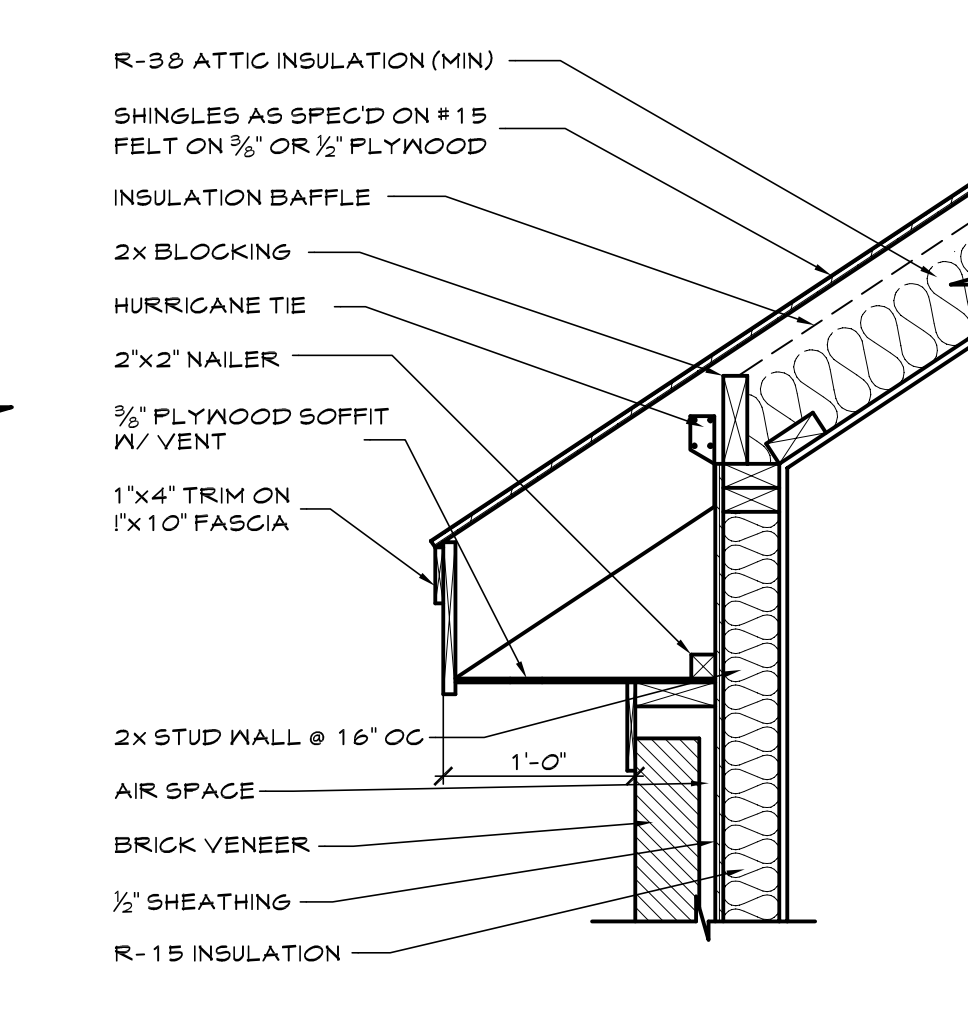
**MATCH FASCIA W/ BRICK**  
 SCALE: 1" = 1'-0"



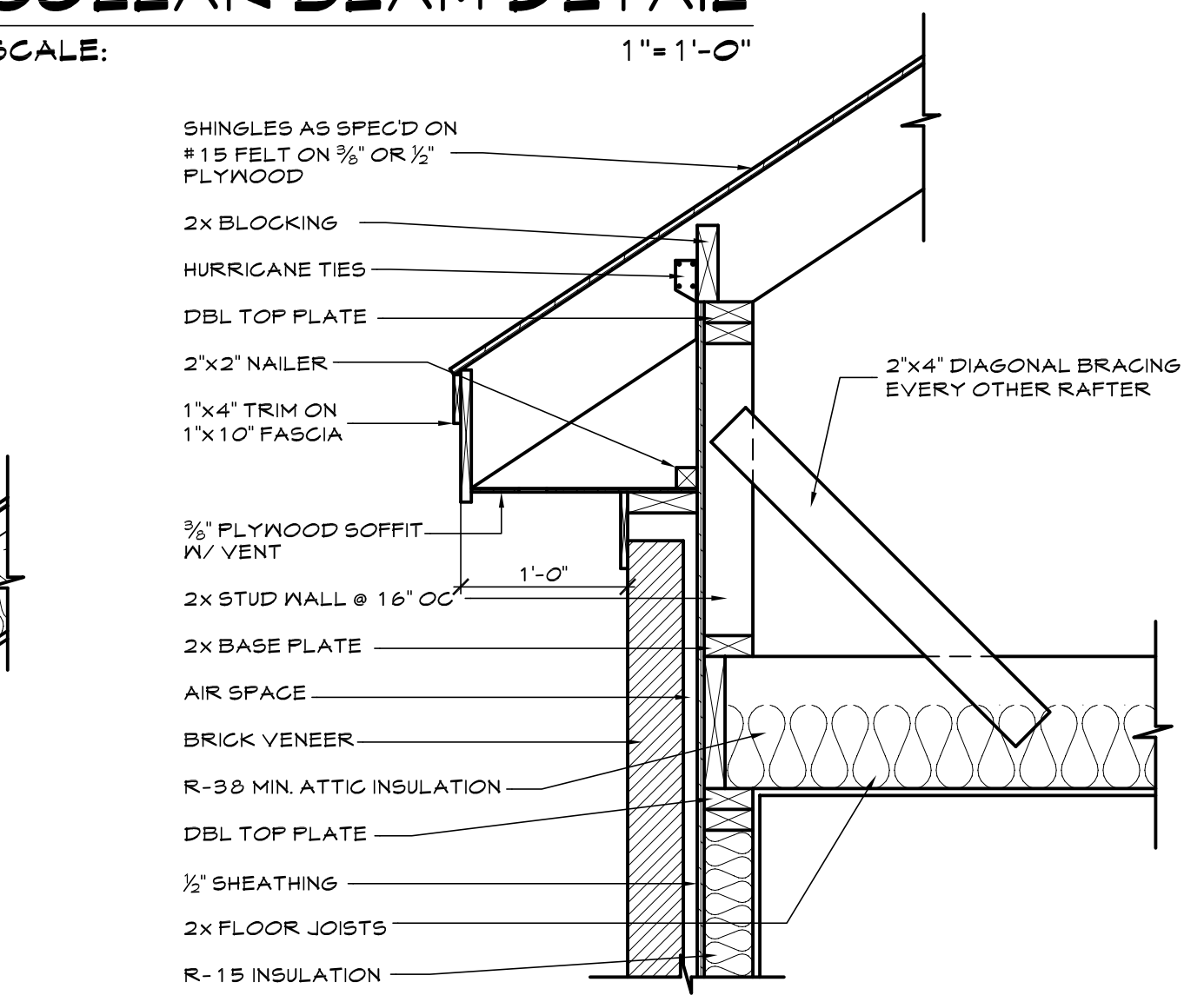
**RAFTERS ON JOISTS W/ BRICK**  
 SCALE: 1" = 1'-0"



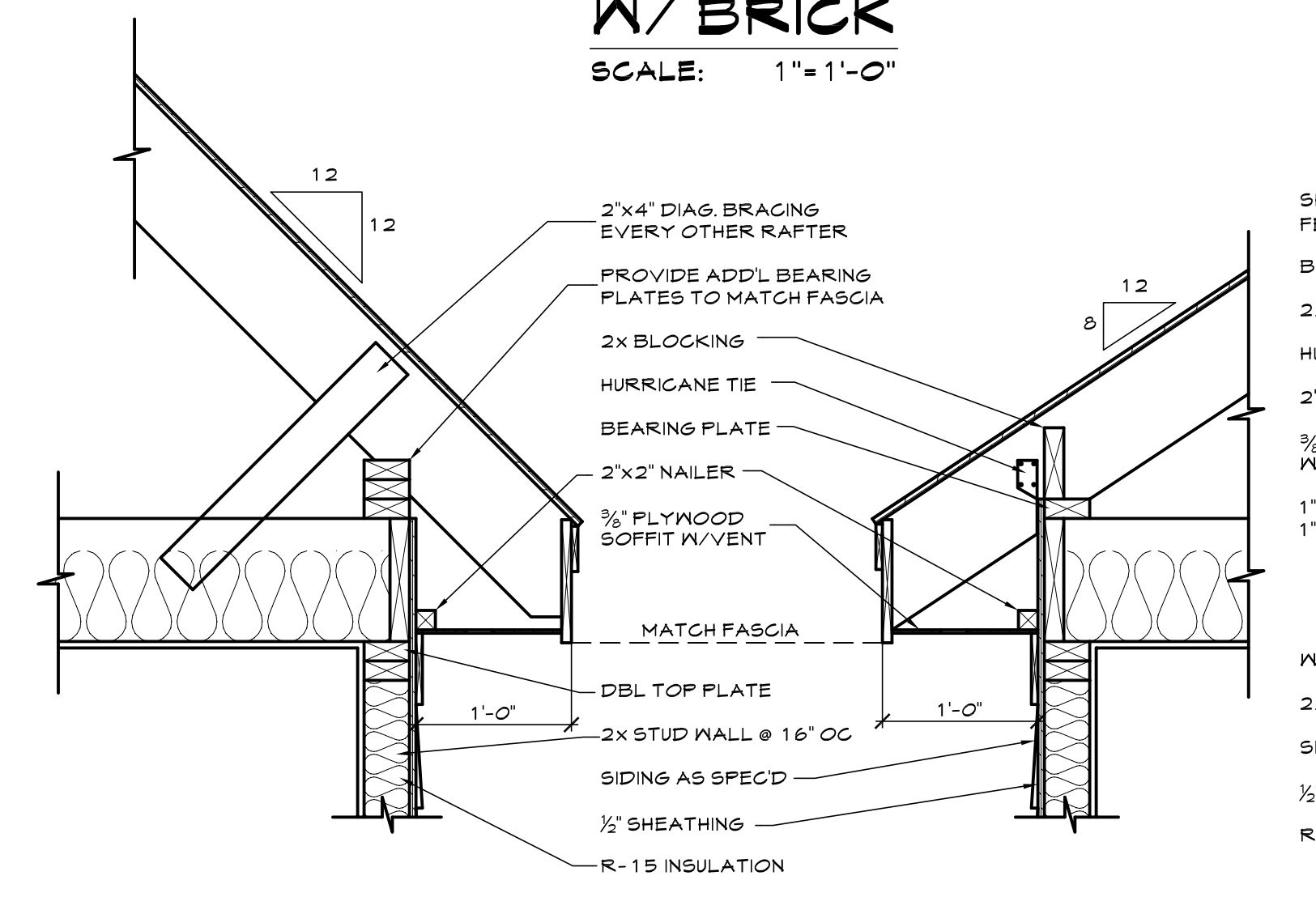
**RAFTERS ON TOP PLATE W/ BRICK**  
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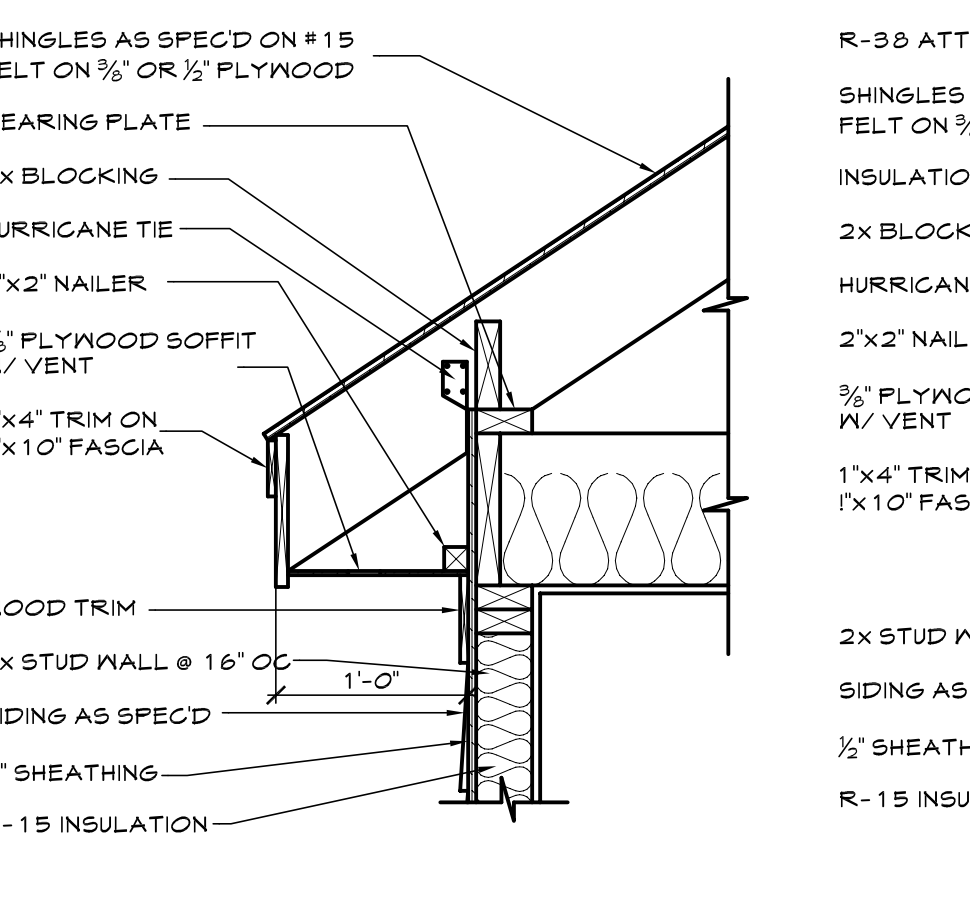
**RAFTERS W/ SLOPE CLG W/ BRICK**  
 SCALE: 1" = 1'-0"



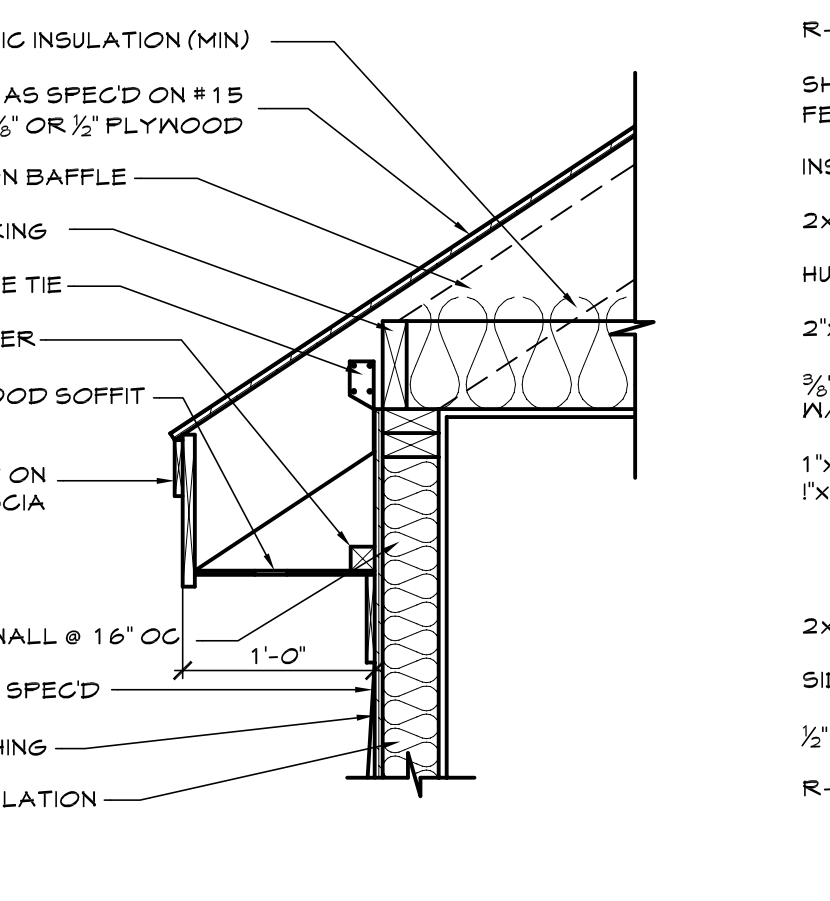
**RAFTERS ON KNEE WALL W/ BRICK**  
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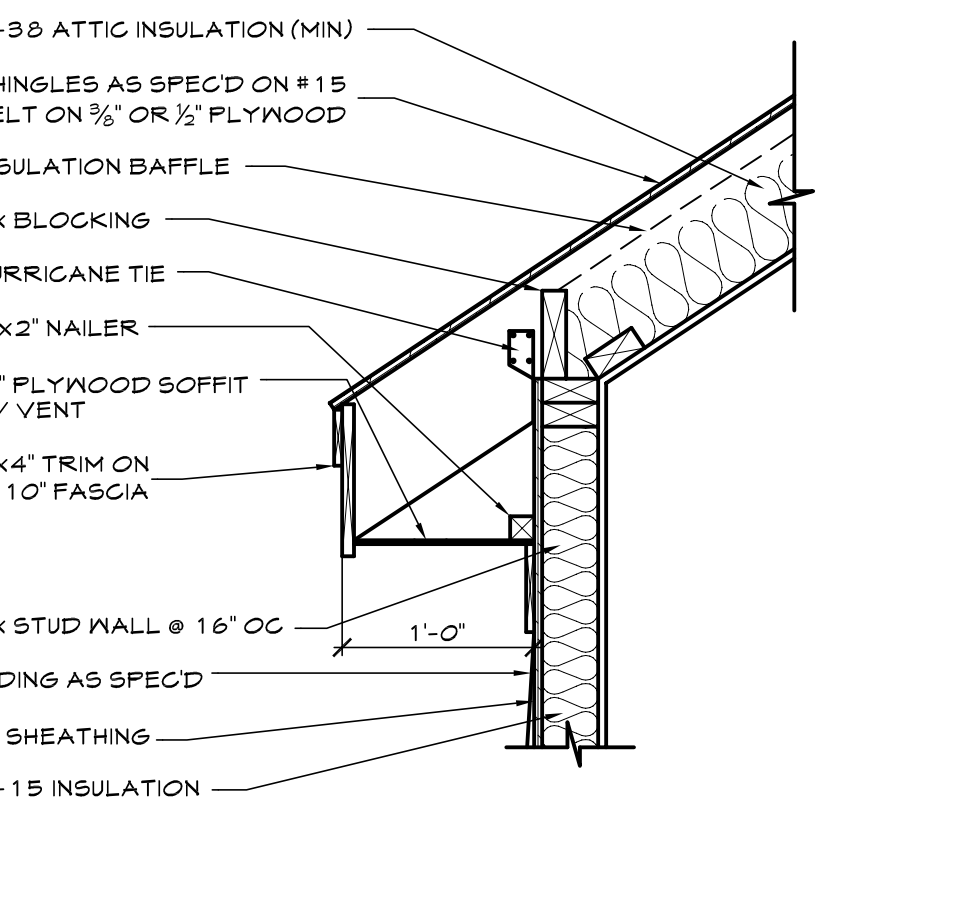
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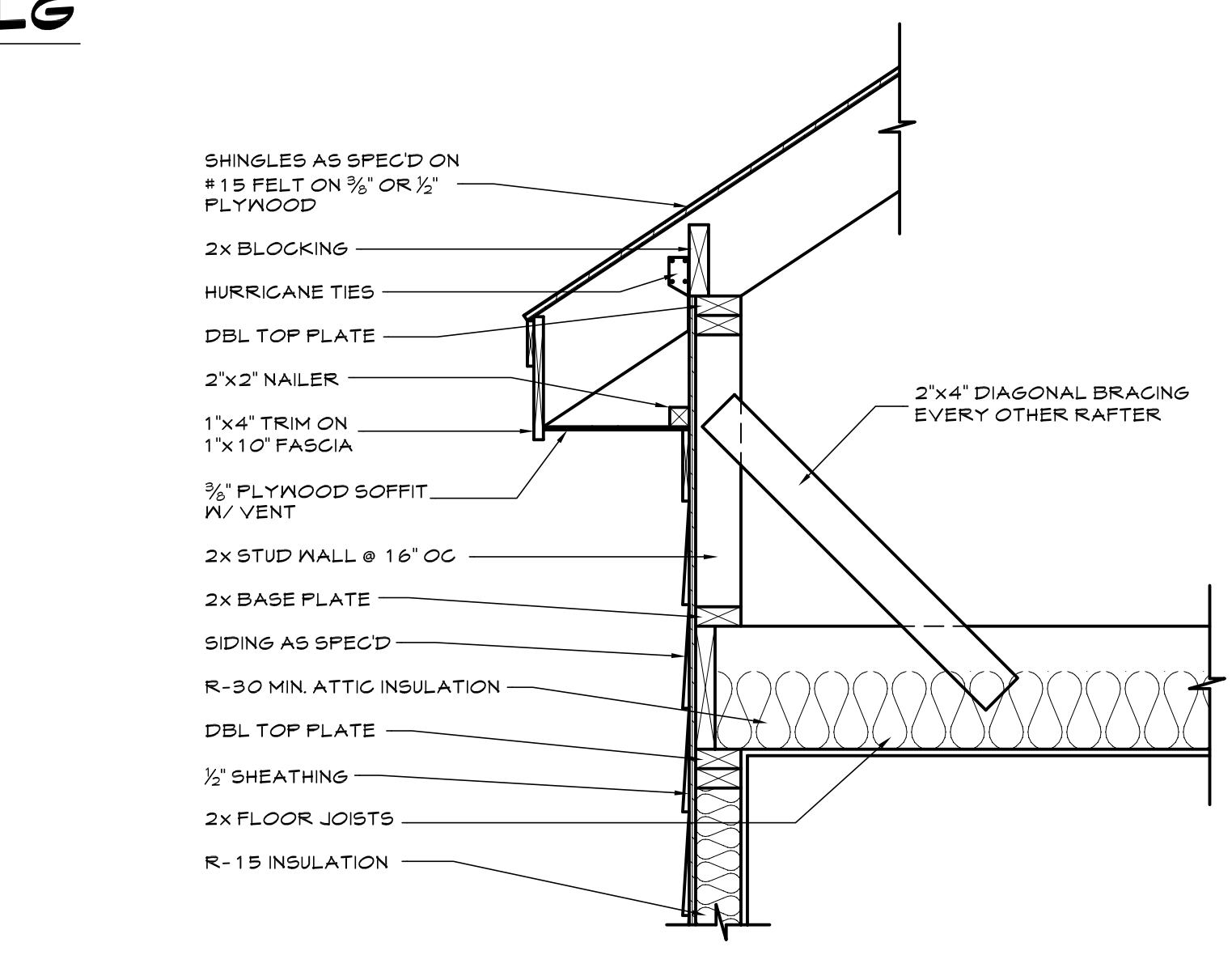
**RAFTERS ON JOISTS W/ SIDING**  
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**RAFTERS ON TOP PLATE W/ SIDING**  
 SCALE: 1" = 1'-0"



**RAFTERS W/ SLOPE CLG W/ SIDING**  
 SCALE: 1" = 1'-0"



**RAFTERS ON KNEE WALL W/ SIDING**  
 SCALE: 1" = 1'-0"

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CHECKED:	DATE: 1-7-19	OF: D-3

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