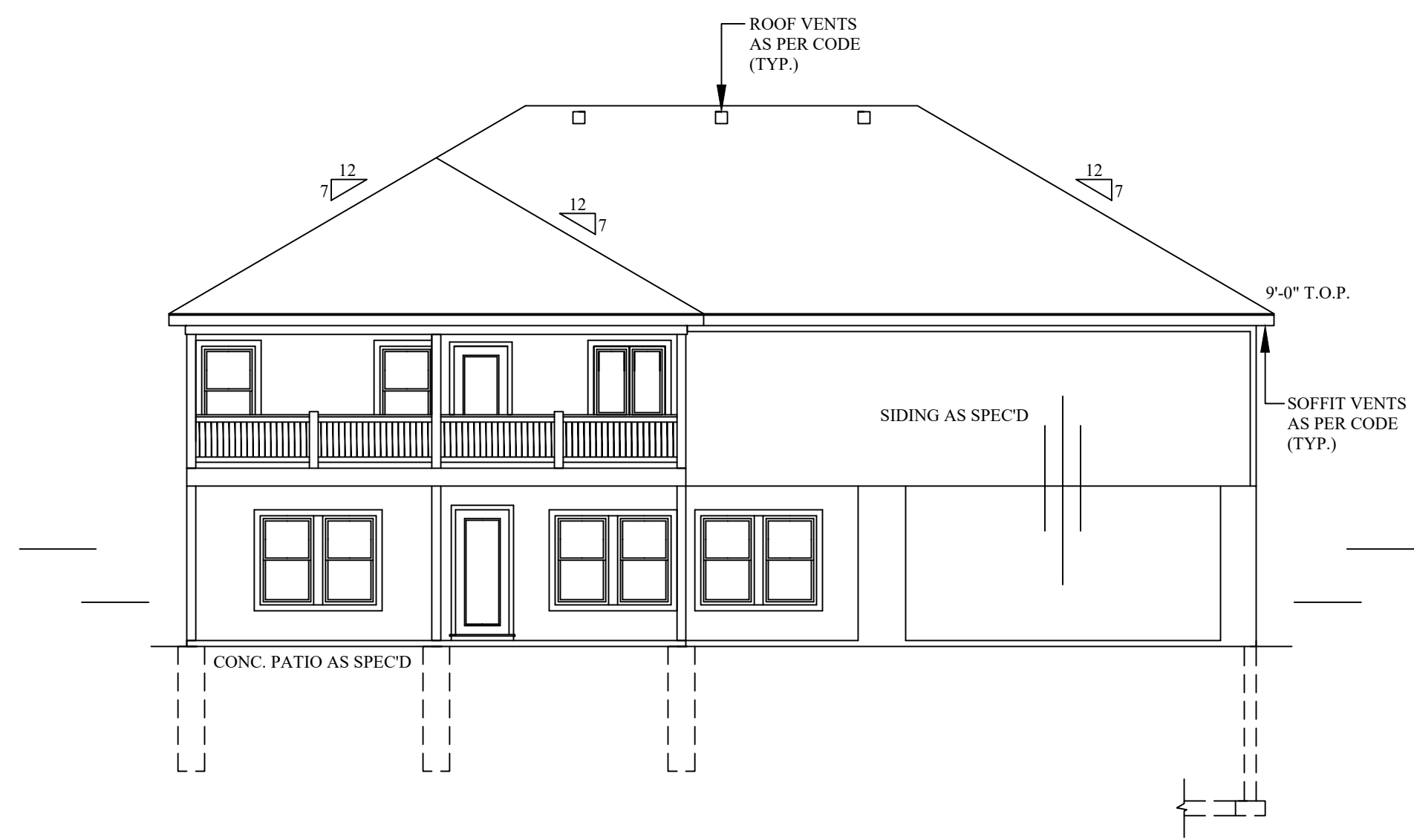
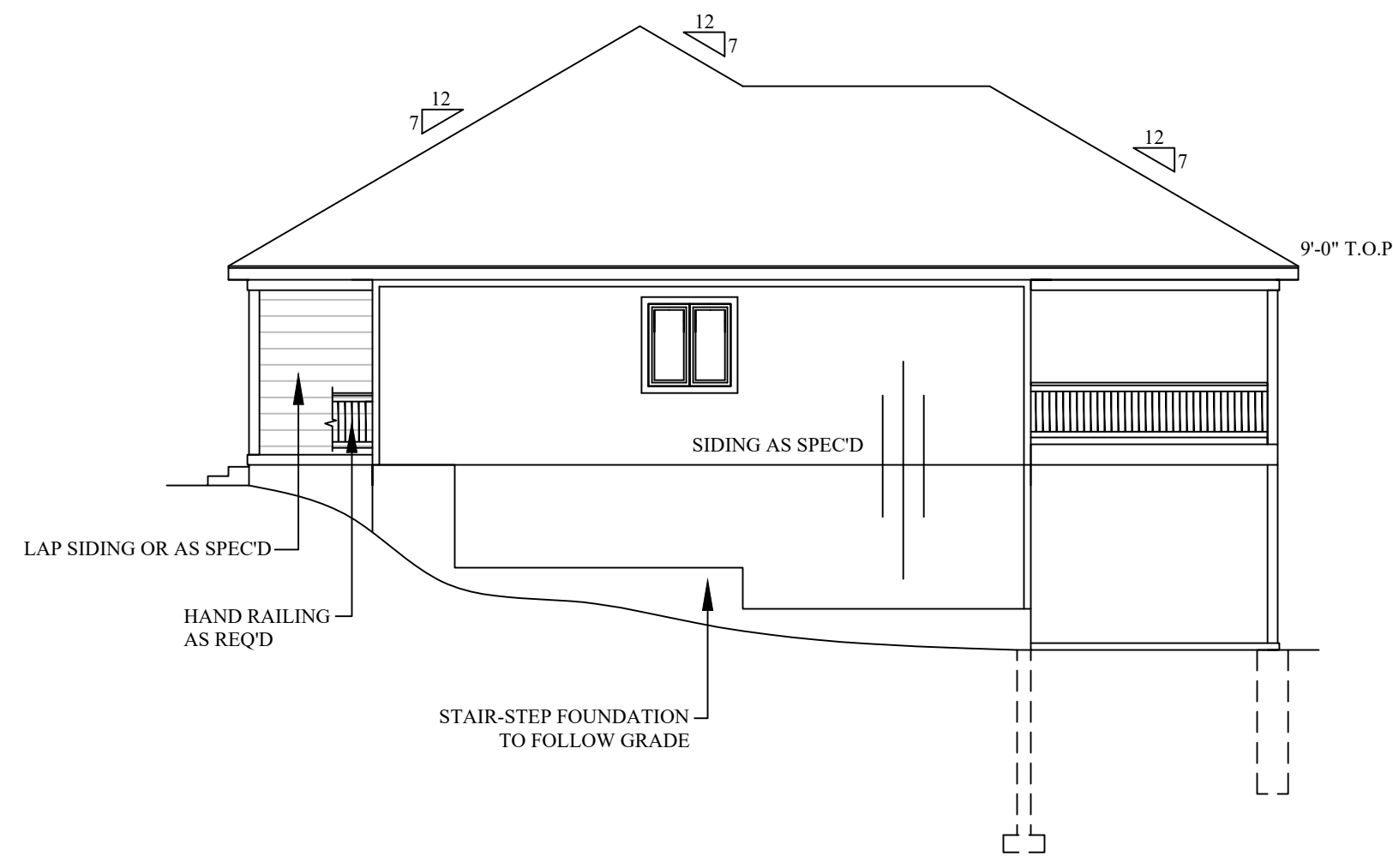


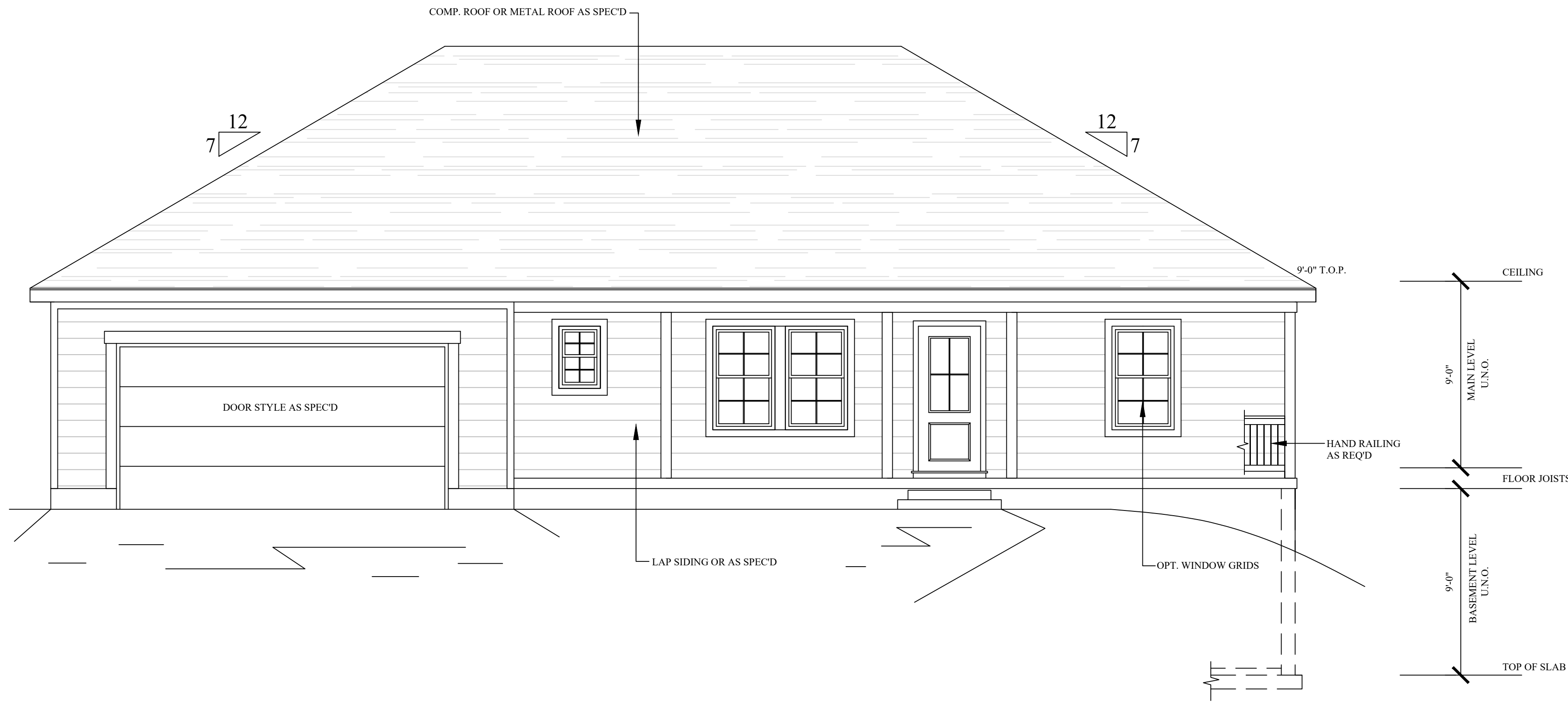
LEFT ELEVATION
1/8" = 1'-0"



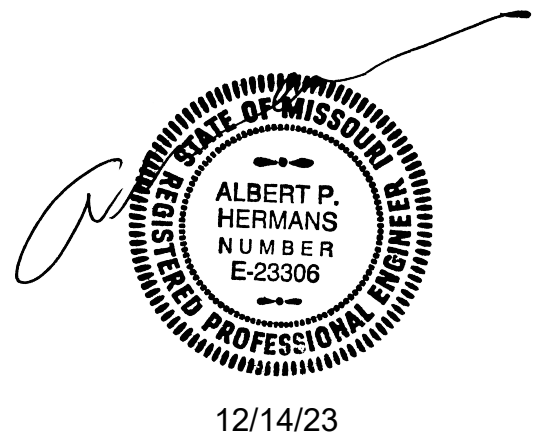
REAR ELEVATION
1/8" = 1'-0"



RIGHT ELEVATION
1/8" = 1'-0"



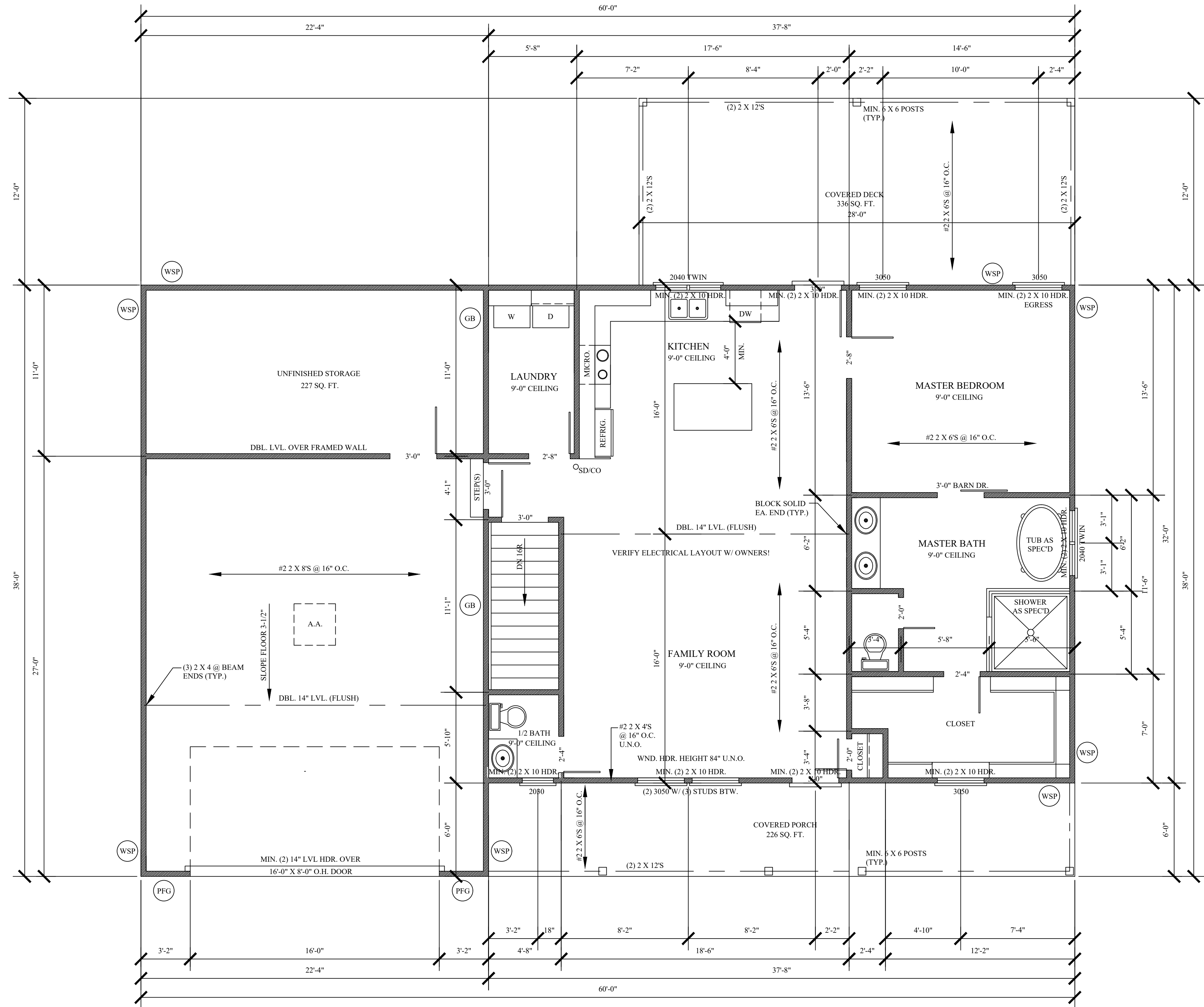
FRONT ELEVATION
1/4" = 1'-0"



NOTE: DESIGN AND CONSTRUCTION SHALL CONFORM TO 2018 IRC.
ASSUMED SOIL BEARINGS PRESSURE = 1500 PSF.

CONTRACTOR TO CHECK AND VERIFY ALL
DIMENSIONS AND JOB SITE CONDITIONS
PRIOR TO CONSTRUCTION.

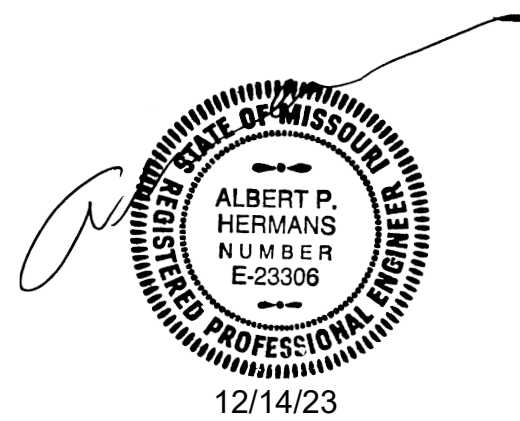
NOTE: THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THIS STRUCTURE IS BUILT IN STRICT
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ALL CONSTRUCTION TO MEET 2018 IRC AND LOCAL BUILDING PRACTICES.
ANY DEVIATION FROM PLANS MUST BE APPROVED BY OWNER PRIOR TO EXECUTION.
FOLEY CAD SERVICES OR AFFILIATES OR ASSIGNS SHALL NOT BE LIABLE FOR STRUCTURAL DESIGN OR FUNCTION OF THESE HOUSE PLANS.



- GB = GYPSUM BOARD
PFG = PORTAL FRAME GARAGE
WSP = WOOD STRUCTURAL PANEL

MAIN LEVEL

1/4" = 1'-0" 1216 SQ. FT.



CONTRACTOR TO CHECK AND VERIFY ALL
DIMENSIONS AND JOB SITE CONDITIONS
PRIOR TO CONSTRUCTION.

NOTE: THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THIS STRUCTURE IS BUILT IN STRICT
COMPLIANCE WITH ALL GOVERNING CODES (COUNTY, STATE & FED.).
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FOLEY CAD SERVICES, LLC

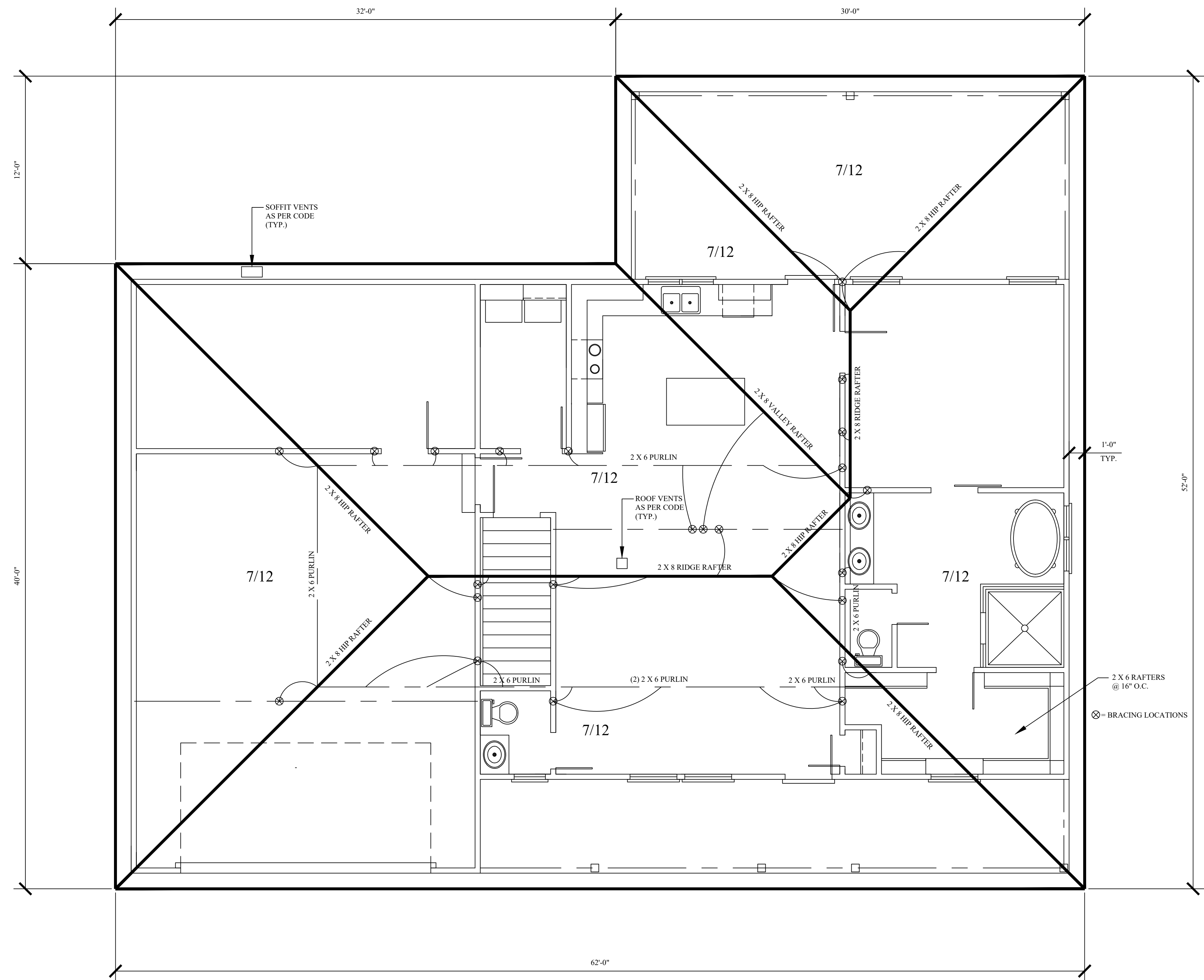
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NOT A REGISTERED ARCHITECT

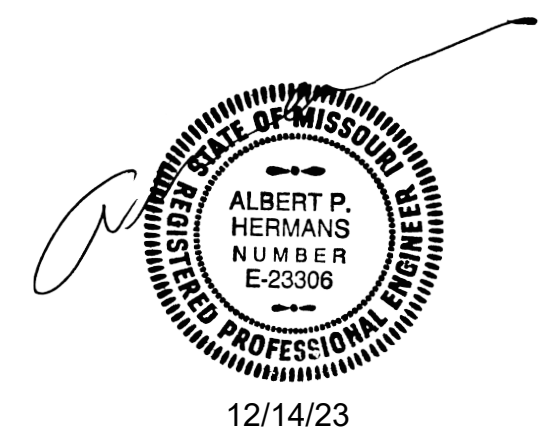
PLAN: MEDLIN

DATE: 12/14/2023

PAGE: 3 OF 4

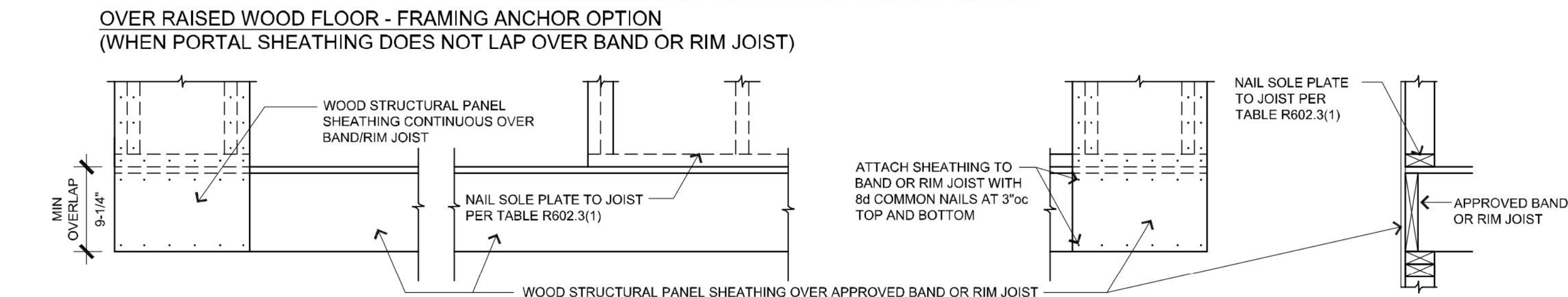
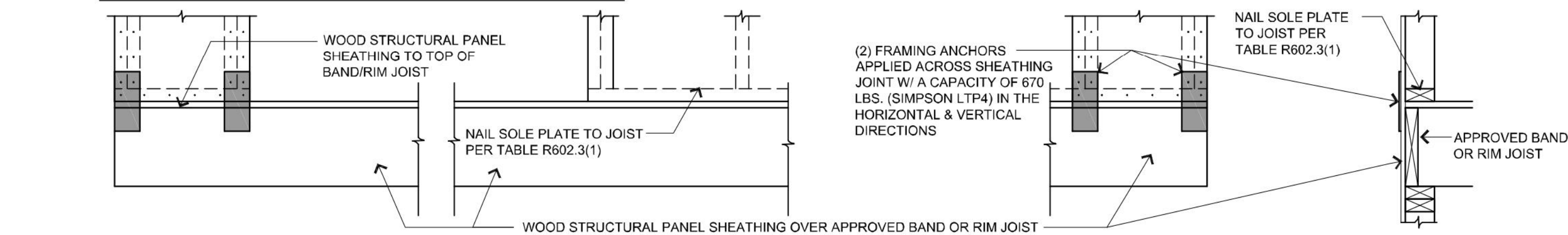
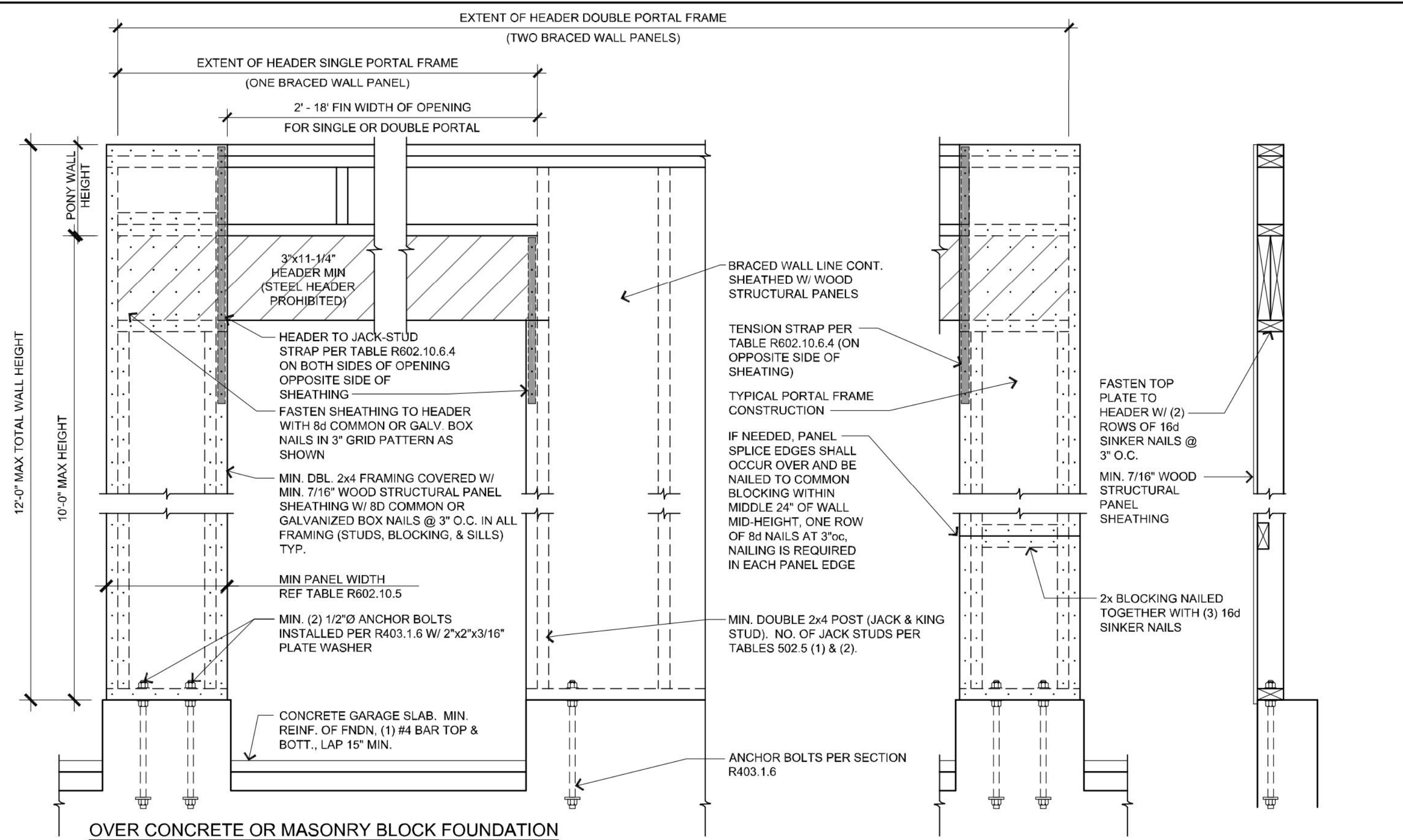


ROOF PLAN
1/4" = 1'-0"



CONTRACTOR TO CHECK AND VERIFY ALL
DIMENSIONS AND JOB SITE CONDITIONS
PRIOR TO CONSTRUCTION.

NOTE: THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THIS STRUCTURE IS BUILT IN STRICT
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4 INTERIOR BRACED WALL (LIB)

SCALE: N.T.S.

TABLE R602.10.5 - MINIMUM LENGTH OF BRACED WALL PANELS

METHOD		WALL LENGTH PER PORTAL HEADER HEIGHT		
		8 FEET	9 FEET	10 FEET
PFH	SUPPORTING ROOF ONLY	16"	16"	16"
	SUPPORTING ONE STORY AND ROOF	24"	24"	24"
PFG		24"	27"	30"
CS-PF	SEISMIC DESIGN CATEGORY A, B, C	16"	18"	20"
	SEISMIC DESIGN CATEGORY D ₁ , D ₂ , D ₃	16"	18"	20"

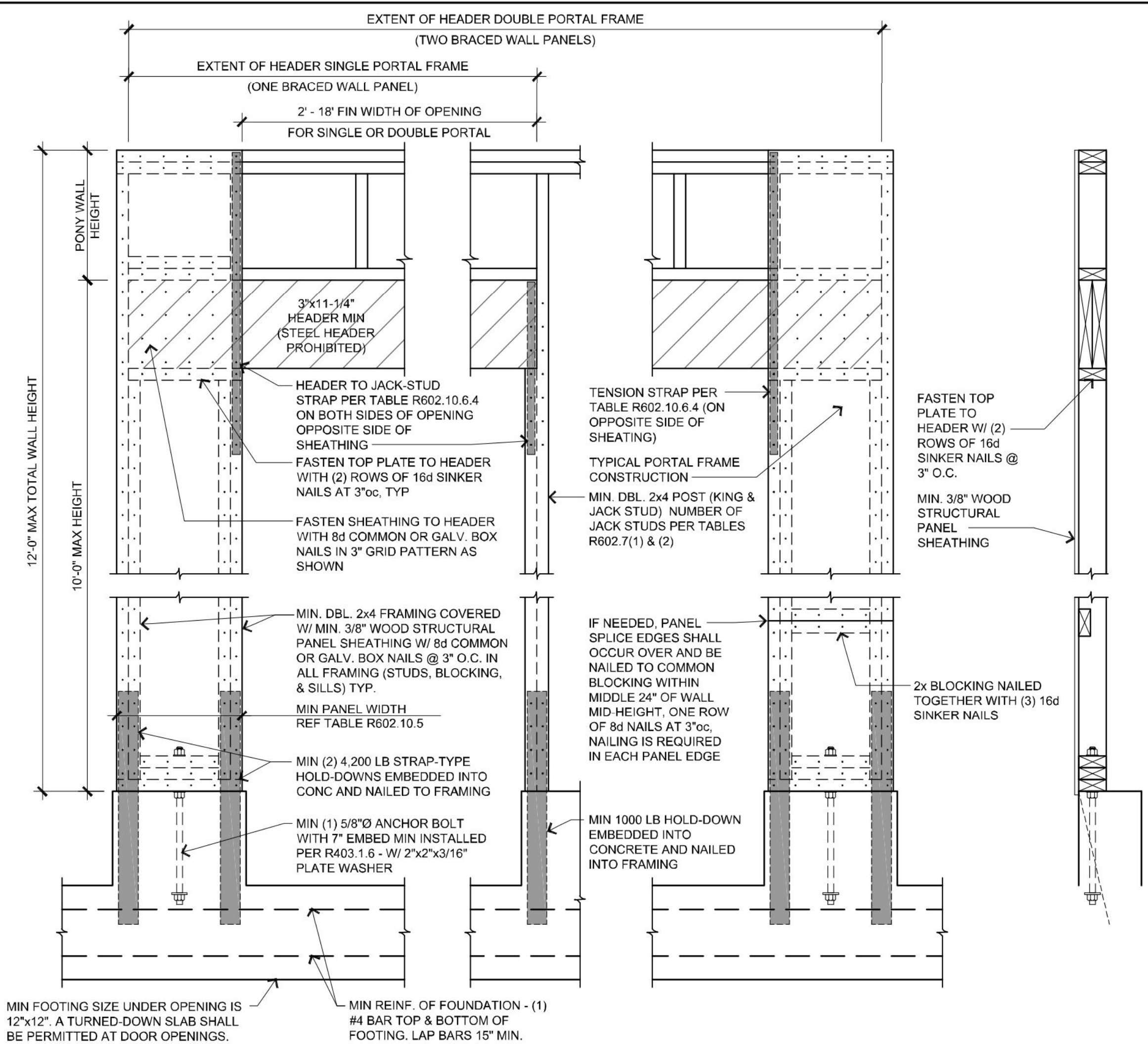
(c) MAXIMUM HEADER HEIGHT FOR PFH IS 10 FEET IN ACCORDANCE WITH R602.10.6.2, BUT WALL HEIGHT MAY BE INCREASED TO 12 FEET WITH APPROVAL OF THE ADEQ.

(d) MAXIMUM HEADER HEIGHT FOR PFG IS 10 FEET IN ACCORDANCE WITH R602.10.6.3, BUT WALL HEIGHT MAY BE INCREASED TO 12 FEET WITH APPROVAL OF THE ADEQ.

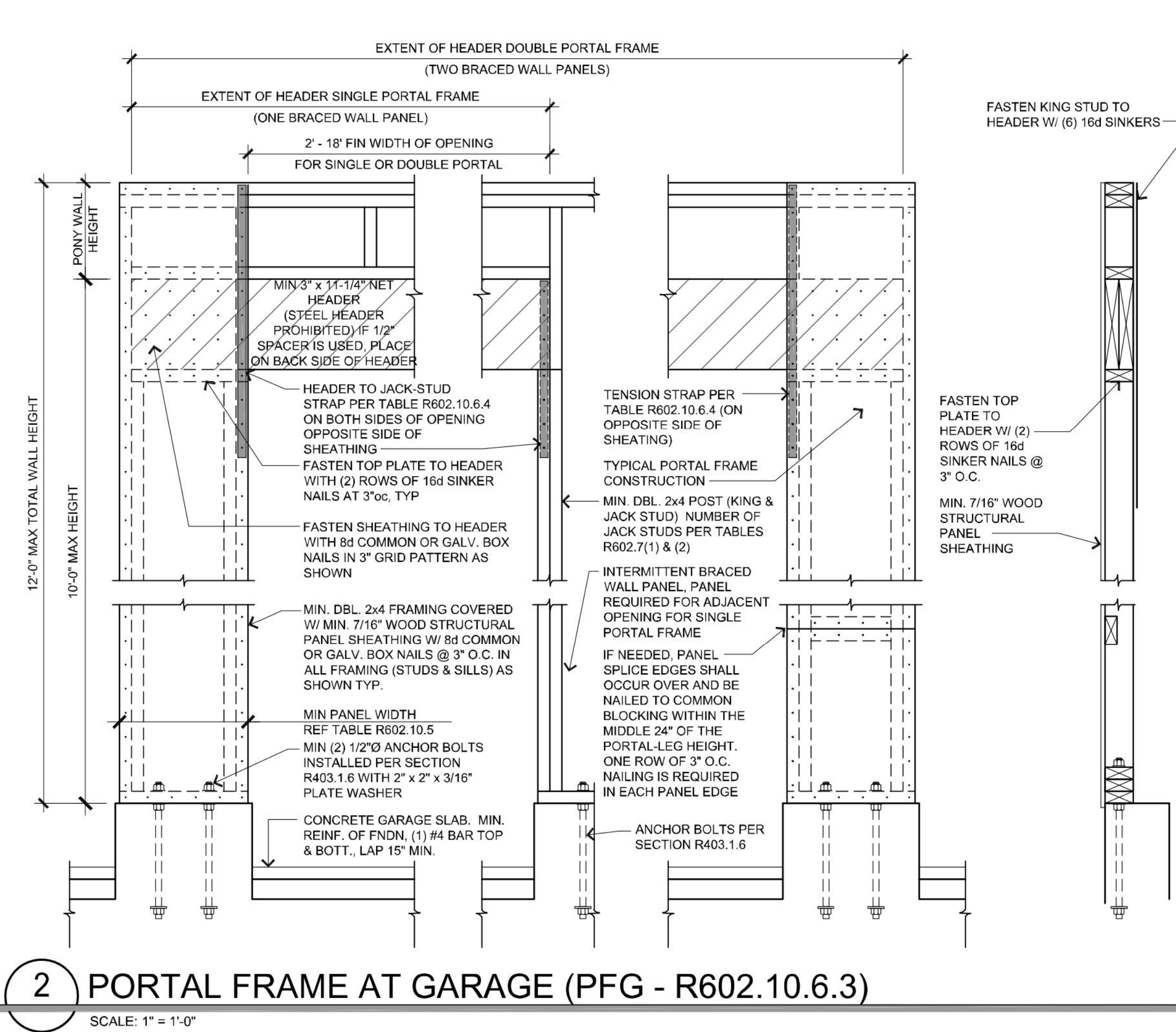
(e) MAXIMUM HEADER HEIGHT FOR CS-PF IS 10 FEET IN ACCORDANCE WITH R602.10.4, BUT WALL HEIGHT MAY BE INCREASED TO 12 FEET WITH APPROVAL OF THE ADEQ.

INTERIOR BRACED WALL SCHEDULE

SIMPSON MODEL NO.	STRAP LENGTH	WALL DIM'S HEIGHT x WIDTH	ANGLE FROM HORIZONTAL	FASTENERS	
				PLATES	EA STUD
WB106	9'-5 5/8"	8'-0" x 5'-0"	60°	(2) 16d	(1) 8d
WB126	11'-4 3/8"	8'-0" x 8'-0"	45°	(2) 16d	(1) 8d
WB106C	9'-6"	8'-0" x 5'-0"	60°	(2) 16d	(1) 8d
WB126C	11'-4 13/16"	8'-0" x 8'-0"	45°	(2) 16d	(1) 8d
WB143C	14'-3"	10'-0" x 10'-0"	45°	(2) 16d	(1) 8d



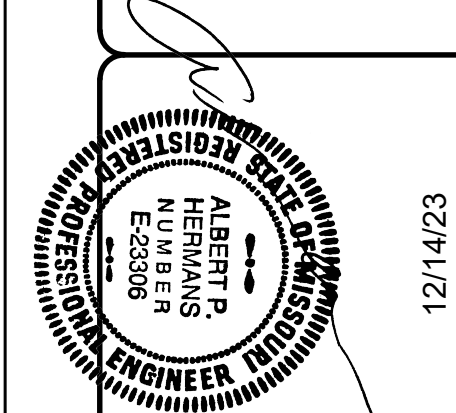
1 PFH-PORTAL FRAME WITH HOLD-DOWNS (R602.10.6.2) SCALE: 1" = 1'-0"



2 PORTAL FRAME AT GARAGE (PFG - R602.10.6.3) SCALE: 1" = 1'-0"

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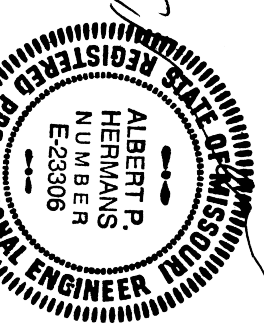
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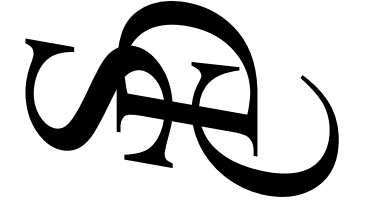
ENGINEERING, INC.
Consulting Structural and Civil Engineers
5907 Raytown Trafficway
Raytown, Missouri 64133
816-356-1445

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DWG. 5



12/14/23



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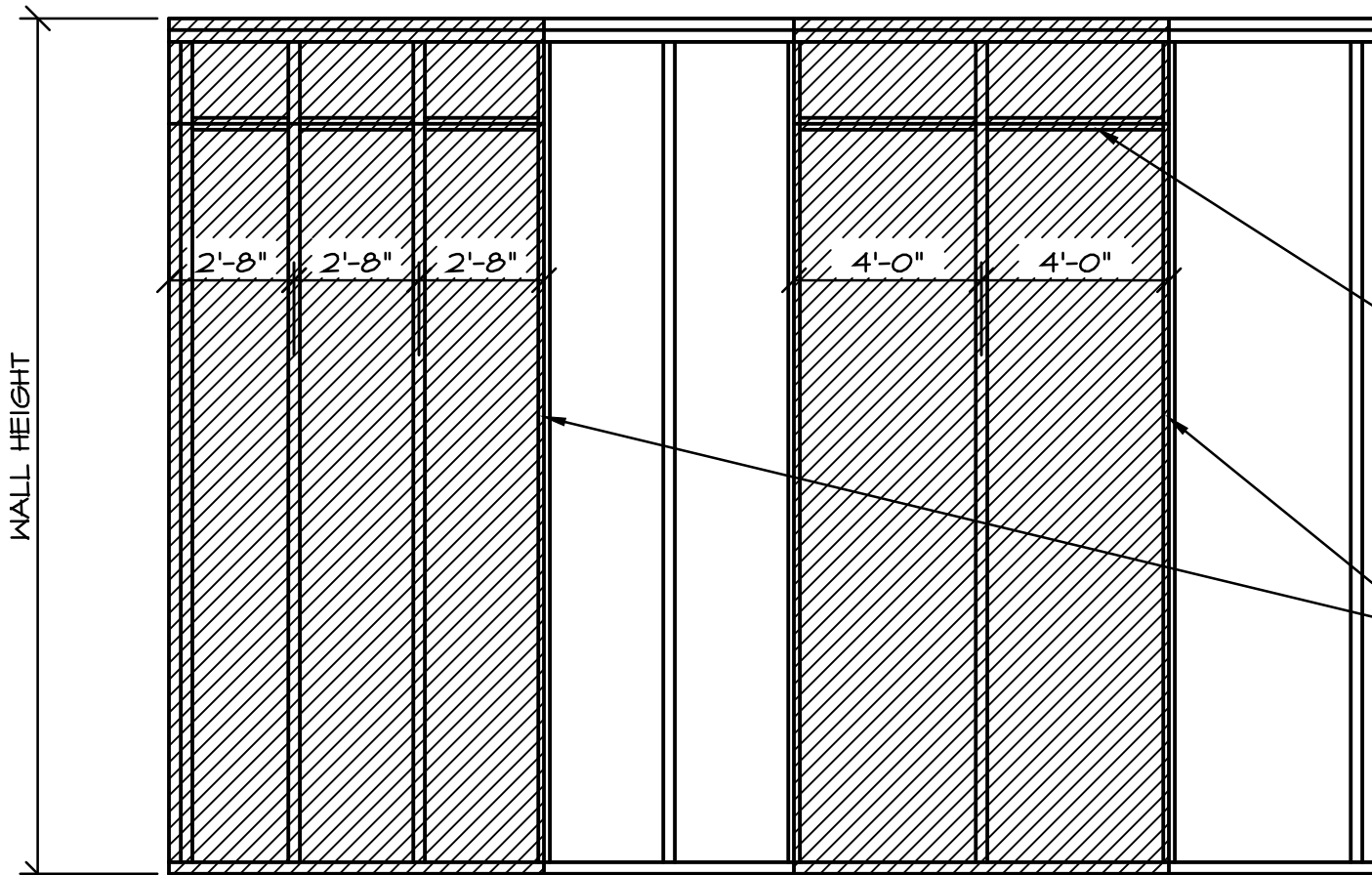
MINIMUM LENGTH OF CS-WSP BRACED WALL PANELS					
ADJACENT CLEAR OPENING HEIGHT	WALL HEIGHT				
	8'	9'	10'	11'	12'
<64"	24"	27"	30"	33"	36"
68"	26"	27"	30"	33"	36"
72"	27"	27"	30"	33"	36"
76"	30"	29"	30"	33"	36"
80"	32"	30"	30"	33"	36"
84"	35"	32"	32"	33"	36"
88"	38"	35"	33"	33"	36"
92"	43"	37"	35"	35"	36"
96"	48"	41"	38"	36"	36"
100"		44"	40"	38"	38"
104"		49"	43"	40"	39"
108"		54"	46"	43"	41"
112"			50"	45"	43"
116"			55"	48"	45"
120"			60"	52"	48"
124"				56"	51"
128"				61"	54"
132"				66"	58"
136"					62"
140"					66"
144"					72"

REF. TABLE R602.10.5

NOTE: BRACED WALL PANELS MUST COVER 3 STUD SPACES MINIMUM WHEN STUDS ARE AT 16" ON CENTER OR COVER 2 STUD SPACES MINIMUM WHEN STUDS ARE AT 24" ON CENTER.

MINIMUM PANEL THICKNESS = 3/8" AT 16" STUD SPACING, 7/16" AT 24" STUD SPACING.

REF. TABLES R602.3(3) AND R602.10.4.



ALL PANEL EDGES MUST BE SUPPORTED BY THE USE OF BLOCKING WITH A MINIMUM THICKNESS OF 1-1/2".

6d NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. IN FIELD AT 16" STUD SPACING. 8d NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. IN FIELD AT 24" STUD SPACING.

WSP SHEAR PANEL BRACING DETAIL
N.T.S.

MINIMUM LENGTH OF WSP BRACED WALL PANELS				
WALL HEIGHT				
8'	9'	10'	11'	12'
48"	48"	48"	53"	58"

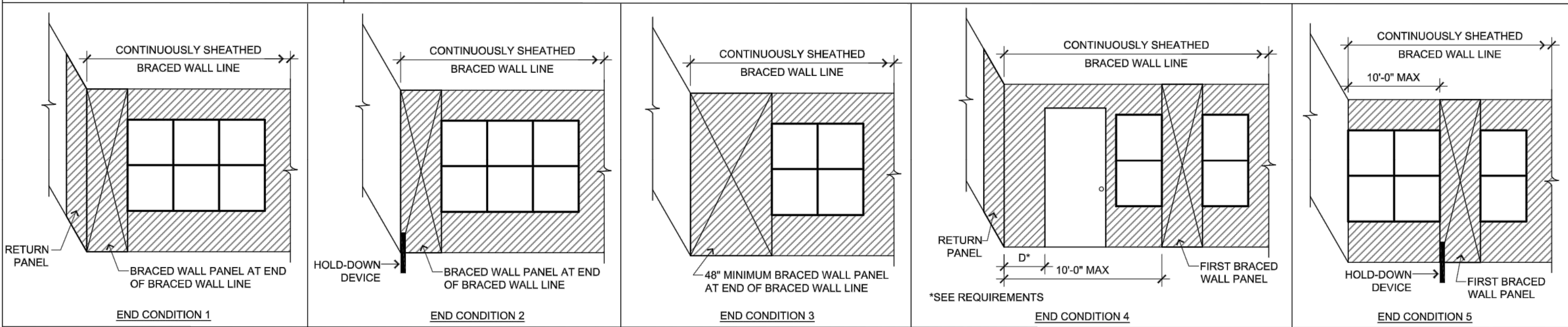
REF. TABLE R602.10.5

REQUIREMENTS

RETURN PANEL:
24" FOR BRACED WALL LINES SHEATHED WITH WOOD STRUCTURAL PANELS
32" FOR BRACED WALL LINES SHEATHED WITH STRUCTURAL FIBERBOARD

DISTANCE D:
24" FOR BRACED WALL LINES SHEATHED WITH WOOD STRUCTURAL PANELS
32" FOR BRACED WALL LINES SHEATHED WITH STRUCTURAL FIBERBOARD

HOLD-DOWN DEVICE:
800 lbs CAPACITY FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FLOOR FRAMING BELOW



1 END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING R602.10.7
SCALE: NTS

CHAPTER 11 MANDATORY PROVISIONS	
IRC CODE REFERENCE	DESCRIPTION
N1101.14	REQUIRES POSTING A PERMANENT CERTIFICATE THAT LISTS THE ENERGY EFFICIENT COMPONENTS INSTALLED AND CONSTRUCTED IN THE HOUSE.
N1102.4	REQUIRES THAT AN AIR LEAKAGE TEST (BLOWER DOOR) BE CONDUCTED, VERIFYING THE HOUSE ACHIEVES 3 AIR CHANGES PER HOUR OR LESS LEAKAGE.
N1103.1.1	REQUIRES THAT EACH HVAC SYSTEM BE PROVIDED WITH A PROGRAMMABLE THERMOSTAT.
N1103.1.2	REQUIRES THAT HEAT PUMPS MEET SUPPLEMENTARY ELECTRIC HEAT ENERGY EFFICIENCY REQUIREMENTS
N1103.3.2	REQUIRES THAT DUCTS, AIR HANDLERS AND FILTER BOXES JOINTS AND SEAMS BE SEALED.
N1103.6	REQUIRES MECHANICAL VENTILATION SYSTEMS TO MEET MINIMUM EFFICIENCY REQUIREMENTS.
N1103.10	REQUIRES POOLS AND SPAS TO MEET MINIMUM ENERGY EFFICIENCY LEVELS.

FOUNDATION NOTES:

–BASEMENT FLOOR TO BE MIN. 4" THICK CONC. SLAB OVER 4" CRUSHED ROCK W/ A 6-MIL-THICK POLYETHYLENE MOISTURE BARRIER BETWEEN SLAB AND ROCK.

–ASSUMED SOIL BEARING CAPACITY–1500 PSF MINIMUM. CONTRACTOR TO VERIFY.

–CONCRETE SHALL BE AIR ENTRANED WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI FOR BASEMENT AND INTERIOR FLOOR SLABS, 3000 PSI FOR BASEMENT AND FOUNDATION WALLS AND 4000 PSI FOR PORCHES AND GARAGE FLOOR SLABS.

–LAP FOUNDATION WALL CORNER AND END BARS 24" MINIMUM. LAP FOOTING BARS 24" MINIMUM.

–FOOTINGS TO BE POURED CONTINUOUS AT FOOTING STEPS. (SOLID JUMPS)

–FLOOR SLABS TO HAVE INSTALLED CONTROL JOINTS TO MINIMIZE THE AMOUNT OF RANDOM CRACKING. JOINTS TO BE SAW CUT WITHIN 18 HOURS OF POURING OR MAY BE TOOLED INTO SLAB.

–FOOTINGS SHALL EXTEND BELOW FROST LINE – MINIMUM DEPTH OF 36" BELOW GRADE IS REQUIRED IN THE KANSAS CITY AREA.

–FOUNDATION DRAIN SHALL BE MIN. 4" PERFORATED DRAIN AROUND USABLE SPACE BELOW GRADE OR OTHER EQUIVALENT MATERIALS (2018 IRC SECTION R405.1). DRAIN TO BE COVERED WITH NOT LESS THAN 6" OF WASHED GRAVEL OR CRUSHED ROCK AND SHALL DRAIN TO DAYLIGHT TO THE EXTERIOR BELOW FLOOR LEVEL OR TERMINATE IN A MIN. 20 GALLON SUMP PUMP.

–STEEL REBAR TO BE MIN. OF GRADE 40.

–ANCHOR BOLT SPACING SHALL NOT EXCEED 72" O. C. W/ 7" MINIMUM EMBEDMENT INTO CONCRETE.

–FOUNDATION WALLS TO BE DAMP–PROOFED (2018 IRC SECTION R406)

DESIGN NOTES:

A. STEEL: A–36
WOOD: # 2 D.F.L. OR BETTER
DEFLECTION: L/360
MIN. SOIL BEARING: 2000 PSF

B. ALL L.V.L.S TO BE 2.0E MICROLAMS UNLESS OTHERWISE SPECIFIED.

C. ALL HEADERS TO BE (2) 2"x10" #2 D.F.L. UNLESS OTHERWISE SPECIFIED

D. ALL BEAM AND HEADER SUPPORTS TO BE (3) 2"x4" #2 D.F.L. UNLESS OTHERWISE SPECIFIED.

E. ALL STEEL BEAM POSTS TO BE STANDARD WEIGHT STEEL PIPE COLUMNS UNLESS OTHERWISE SPECIFIED.

F. ALL WINDOW SIZES SPECIFIED ARE IN INCHES ACCORDING TO THE GLASS UNIT SIZE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING WINDOWS TO MATCH AS CLOSELY AS POSSIBLE TO THE MANUFACTURER OF THE THEIR CHOICE.

G. ALL RECEPTACLES ON 15 OR 20 AMP BRANCH CIRCUITS IN FOLLOWING LOCATIONS ARE TO HAVE G.F.C.I. PROTECTION: BATHROOMS, CRAWL SPACES, UNFINISHED PORTIONS OF BASEMENT, SERVING KITCHEN COUNTERTOPS, WITHIN 6' OF SINKS, OUTDOORS AND IN GARAGES WITHIN 6–6" OF FINISHED FLOOR.

STRUCTURAL NOTES:

–EXTERIOR WALLS TO BE 2 x 6'S (STUD GRADE) @ 16" O. C. W/ 7/16" CDX PLYWOOD OR OSB SHEATHING AS SUB-SIDING. (R–20 BATT INSULATION)

–PROVIDE SOLID BLOCKING BELOW BEAMS AND LOAD BEARING HEADERS.

–STAIRS TO HAVE 3 STRINGERS NOT TO EXCEED 18" O. C.

–ALL SILLS, SLEEPERS AND FURRING ATTACHED TO CONCRETE SHALL BE OF DECAY–RESISTANT MATERIALS.

–FRAMING OF OPENINGS: HEADERS & TRIMMERS SHALL BE OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR FRAMING. TRIMMER JOISTS SHALL BE DOUBLED WHEN THE HEADER IS SUPPORTED MORE THAN 3' FROM THE TRIMMER JOIST BEARING. WHEN THE HEADER SPAN EXCEEDS 4', THE HEADER AND TRIMMER SHALL BE DOUBLED.

–STUDS SHALL BE CONTINUOUS FROM THE FLOOR TO THE ROOF/CEILING DIAPHRAGM. 2018 IRC 602.3.

NOTE:

EXTERIOR WALLS TO BE CONSTRUCTED IN ACCORDANCE WITH IRC 2018 SECTION R602.10.4 METHOD WSP FOR BRACED WALL CONSTRUCTION WITH CONTINUOUS EXTERIOR WOOD STRUCTURAL PANEL SHEATHING.

ROOF NOTES:

A. PROVIDE ROOF VENTS TOTALING MIN. 1 SQ. FT. NET FREE VENTILATING AREA FOR EA. 300 SQ. FT. OF ATTIC SPACE WITH AN EQUAL AMOUNT OF SOFFIT VENTS.

B. ALL ROOF RAFTERS TO BE #2 D.F.L. 2"x6" @ 16" O.C. UNLESS OTHERWISE SPECIFIED.

PLAN NOTES:

A. ALL DIMENSIONS, JOIST, MICROLAMS LVL'S, BEAMS AND POINT LOADS SHALL BE REVIEWED BY CONTRACTORS AND THEIR SUB CONTRACTORS AND VERIFIED. SDC ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY INFORMATION WHICH IS NOT VERIFIED.

B. CONTRACTOR SHALL NOTIFY SDC ENGINEERING IMMEDIATELY OF ANY DISCREPANCY FOUND WITHIN THESE PLANS.

C. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE AND FEDERAL CODES REGARDING CONSTRUCTION OF THIS PLAN.

D. PLANS ARE DESIGNED AND HOME SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS AND ANY AMENDMENTS THAT MAY APPLY.

E. DESIGN CRITERIA WITHIN THIS PLAN ARE SPECIFIED TO PROVIDE WHAT SDC ENGINEERING FEELS IS BEST FOR THE STRUCTURAL INTEGRITY OF THE PLAN. ANY CHANGES TO THOSE SPECIFICATIONS ARE AT THE BUILDERS DISCRETION, HOWEVER SDC ENGINEERING WILL ASSUME NO LIABILITY FOR THE STRUCTURE OF THE PLAN IF CHANGES ARE MADE TO THESE SPECIFICATIONS.

F. DOOR BETWEEN THE GARAGE AND THE DWELLING SHALL BE 1 3/8" THICK SOLID WOOD, 1 3/8" THICK MINIMUM SOLID CORE OR HONEY COMBED STEEL DOOR OR 20–MINUTE FIRE RATED. DOOR SHALL BE EQUIPPED WITH A SELF–CLOSING DEVICE.

G. ALL WALLS BETWEEN THE GARAGE AND HOUSE ARE TO BE CONSTRUCTED WITH 5/8" FIRE ROCK.

H. ALL WINDOWS IN SLEEPING ROOMS OVER 6' ABOVE GRADE MUST BE A MINIMUM OF 24" ABOVE FINISHED FLOOR.

PLANS WERE DESIGNED AND REVIEWED IN ACCORDANCE WITH THE 2018 IRC AS ADOPTED BY THE GOVERNING AUTHORITY.

NAILING SCHEDULE		
DESCRIPTION OF BLDG. ELEMENTS	# AND NAIL TYPE	SPACING
SOLE PLATE TO JOIST	16d	16" O. C.
SOLE PLATE TO STUD, END NAIL	2–16d	–
DOUBLE STUDS, FACE NAIL	10d	24" O. C.
DOUBLE TOP PLATES, FACE NAIL	10d	24" O. C.
RIM JOIST– TOP PLATES, TOE NAIL	8d	6" O. C.
CLG. JOIST TO PLATE, TOE NAIL	3–8d	–
RAFTER TO PLATE, TOE NAIL	2–16d	–
RAFTER TO RIDGE, VALLEY OR HIP		
TOE NAIL	4–16d	–
FACE NAIL	3–16d	–

DWELLING MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS OF 2018 IRC TABLE N1102.1.2.

TABLE N1102.1.2 ALTERNATE INSULATION VALUES (WINDOW AREA NOT LIMITED)			
CEILING R–VALUE	R–49	EXTERIOR WALL	R–20
CATHEDRAL CEILING R–VALUE	R–30	CRAWL SPACE WALL	R–13
FLOOR OVER UNHEATED SPACE	R–19	GLAZING	U≤ 0.40
FLOOR OVER OUTSIDE AIR	R–30	N/A	
DUCTS OUTSIDE OF THE CONDITIONED SPACE	SUPPLY AND RETURN		R–8
	IN FLOOR & CEILING ASSEMBLY		R–6
BASEMENT WALL	R–13 INSULATION CONCRETE WALLS ADJACENT TO FINISHED SPACE.		
ON GRADE TRENCH FOOTINGS	R10, R15 FOR HEATED SLABS		

a. DEFAULT U–FACTOR FOR DOUBLE PANE, ARGON FILLED LOW–E TREATMENT IS U= 0.40. FOR ALL SKYLITES USE U–FACTOR = 0.55.

NOTES:

–ALL NEW HOMES ARE REQUIRED TO HAVE AN AIR LEAKAGE TEST (BLOWER DOOR TEST) PERFORMED TO VERIFY THAT THE AIR LEAKAGE RATE DOES NOT EXCEED 3 AIR CHANGES PER HOUR AT A PRESSURE DIFFERENTIAL OF 50 PASCALS. THE DETAILS OF THE TEST ARE IN SECTION N1102.4.1.2 OF THE 2018 IRC.

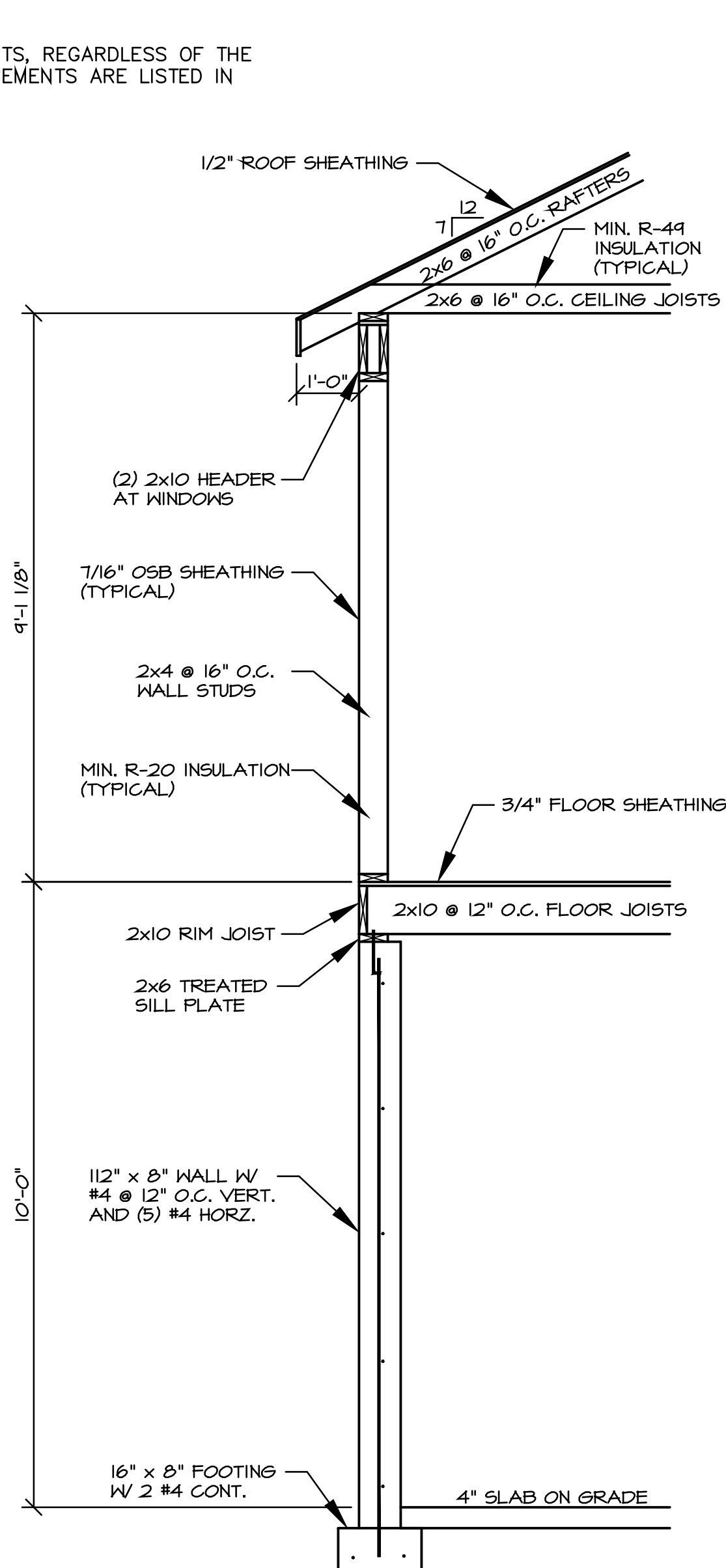
–NEW HOMES THAT HAVE AN AIR LEAKAGE RATE OF LESS THAN 3 AIR CHANGES PER HOUR ARE REQUIRED TO PROVIDE "WHOLE HOUSE MECHANICAL VENTILATION" AS DESCRIBED IN SECTION M1505.4 OF THE 2018 IRC.

–AMENDMENTS TO CHAPTER 11 ENERGY EFFICIENCY OF THE 2018 IRC PROVIDE FOR 3 DIFFERENT COMPLIANCE PATHS:

- 1.) PRESCRIPTIVE ALTERNATIVE
- 2.) PERFORMANCE ALTERNATIVE
- 3.) HERS OPTION

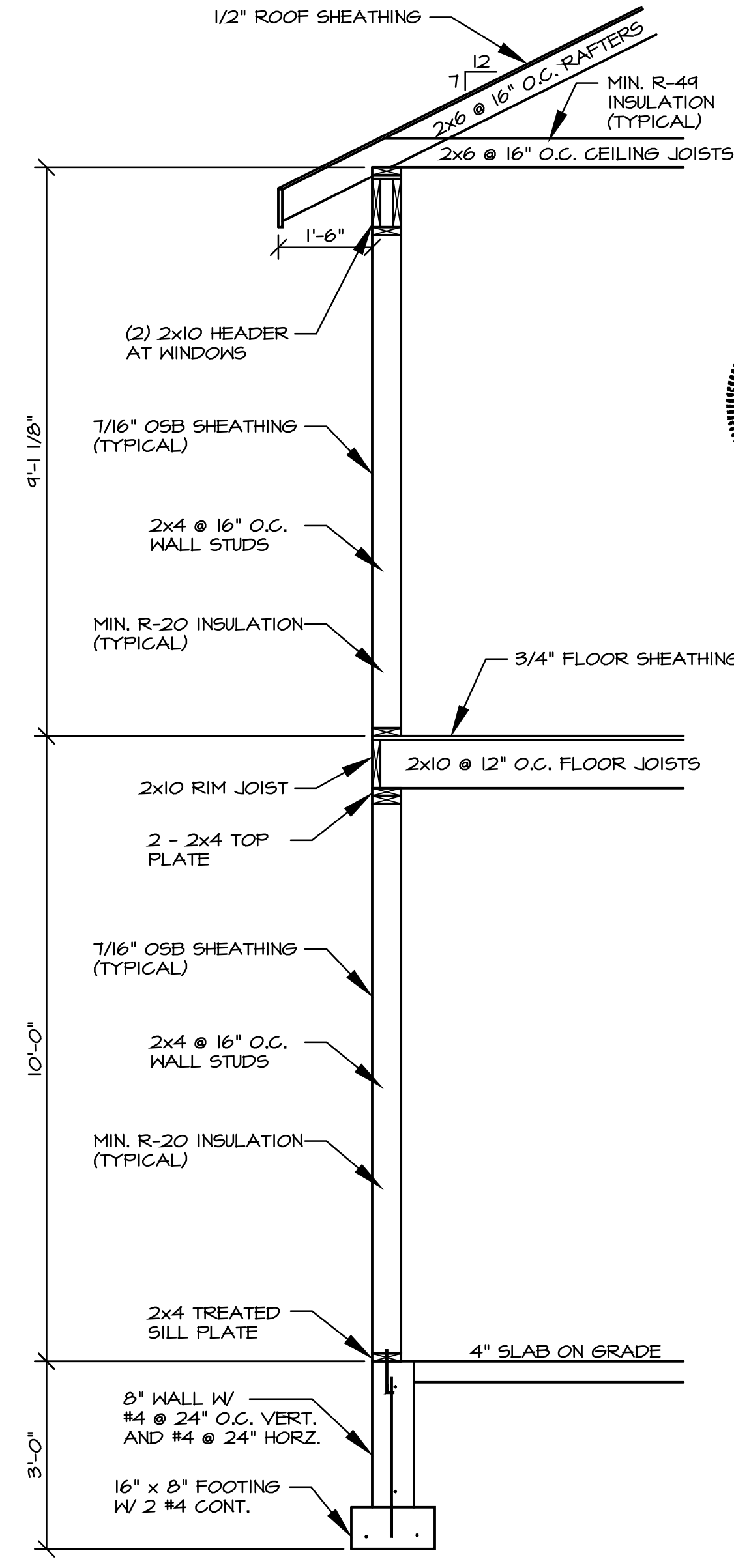
THE NEW HOME COMPLIANCE PATH OPTION MUST BE INDICATED AT THE TIME OF PERMIT APPLICATION.

CHAPTER 11 MANDATES SOME REQUIREMENTS, REGARDLESS OF THE COMPLIANCE PATH CHOSEN. THESE REQUIREMENTS ARE LISTED IN THE TABLE ABOVE.



TYPICAL WALL SECTION

SCALE: 1/2" = 1'-0"

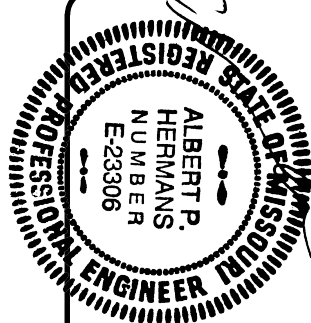


TYPICAL WALL SECTION - WALK OUT

SCALE: 1/2" = 1'-0"

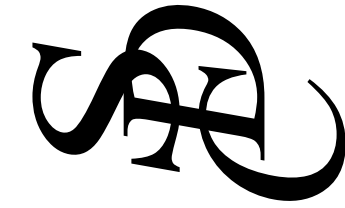
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