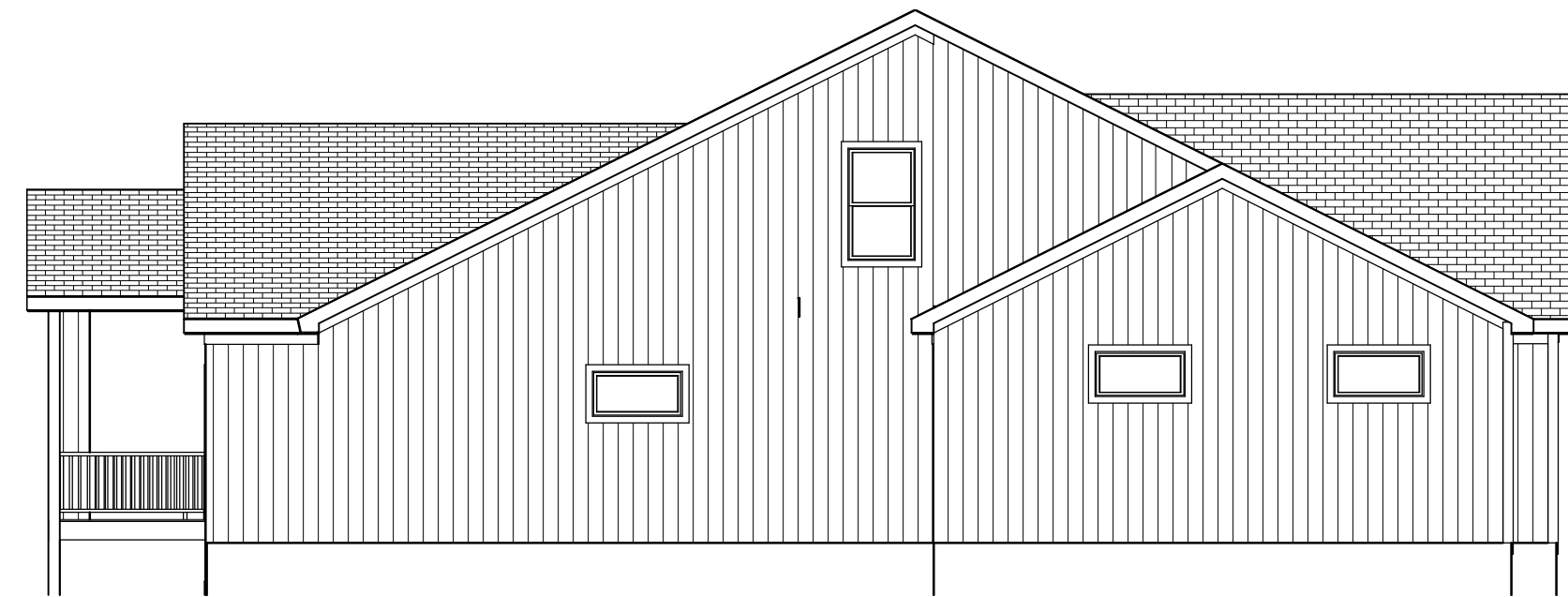


ROOF PLAN
 1/8 = 1-0
 ROOF PITCHES 6/12 U.N.O.
 RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.
 HIPS AND RIDGES 2 X 8 DF NO 2 TYP.
 SOFFITS 12" TYP.



GARAGE DOOR TBD BY OWNER

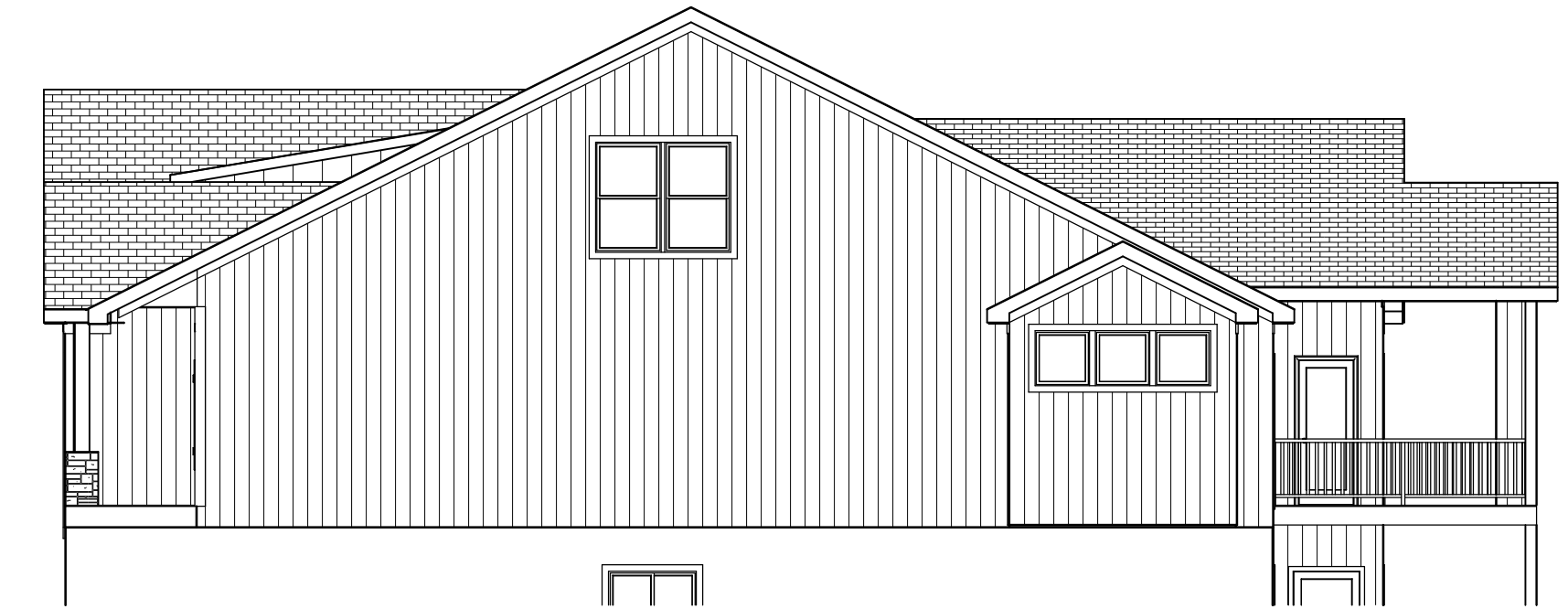
FRONT EL.



LEFT EL.
 1/8 = 1-0



REAR EL.
 1/8 = 1-0



RIGHT EL.
 1/8 = 1-0

RELEASE FOR CONSTRUCTION
 AS NOTED FOR PLAN REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 11/17/2021

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BEHOME LLC
 NOELLE PLAN
 SHADE RES.
 LOT 32 HOOK FARM
 2051 SW HOOK FARM DR
 LEE SUMMIT MO

SCALE
 1/4" = 1-0

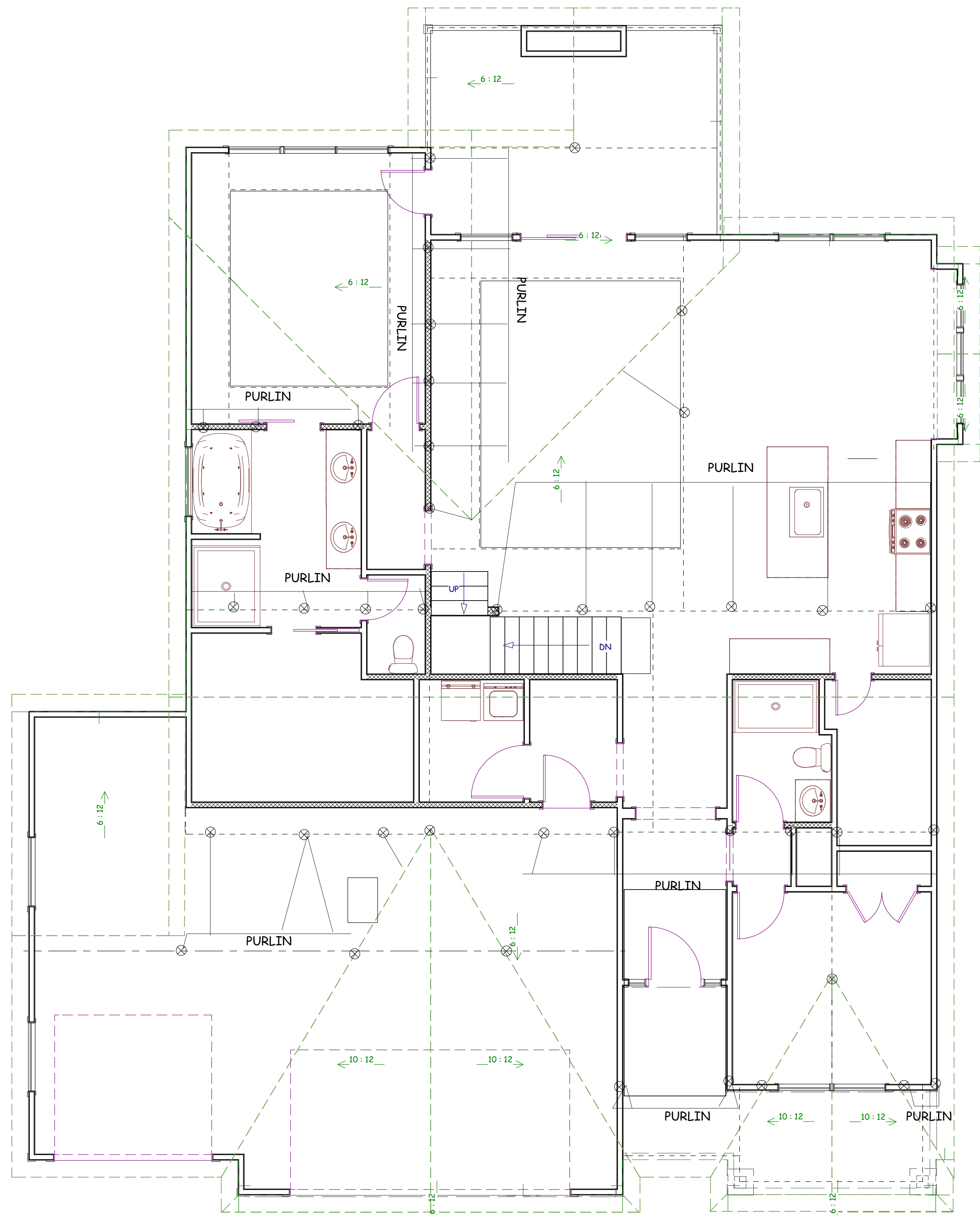
DATE
 11-15-21

PLAN NO.

3618

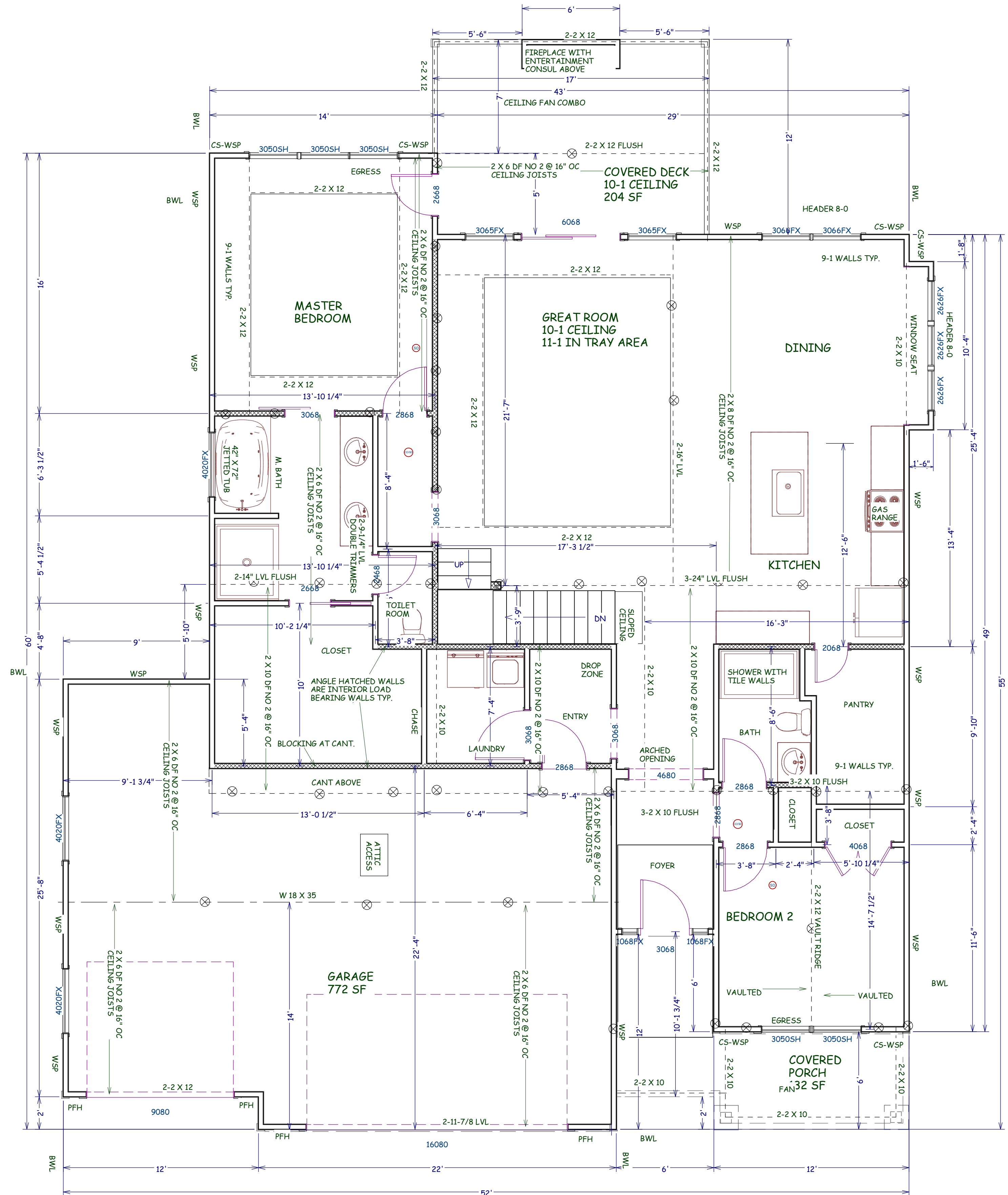
SHEET NO.

1 OF 5



PURLIN PLAN
 ROOF PITCHES 6/12 U.N.O.
 RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.
 HIP AND RIDGES 2 X 8 DF NO 2 TYP.
 SOFFITS 12" TYP.

MAX. RAFTER SPAN 14'-4"



MAIN FLOOR
 1756 SF

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SCALE
 1/4" = 1-0

DATE
 11-15-21

PLAN NO.

3618

SHEET NO.

3 OF 5

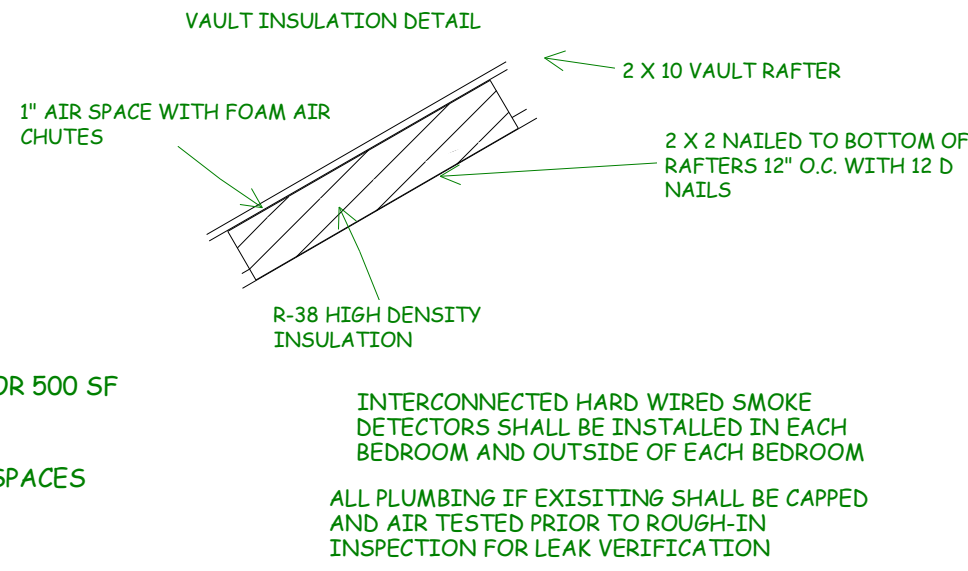
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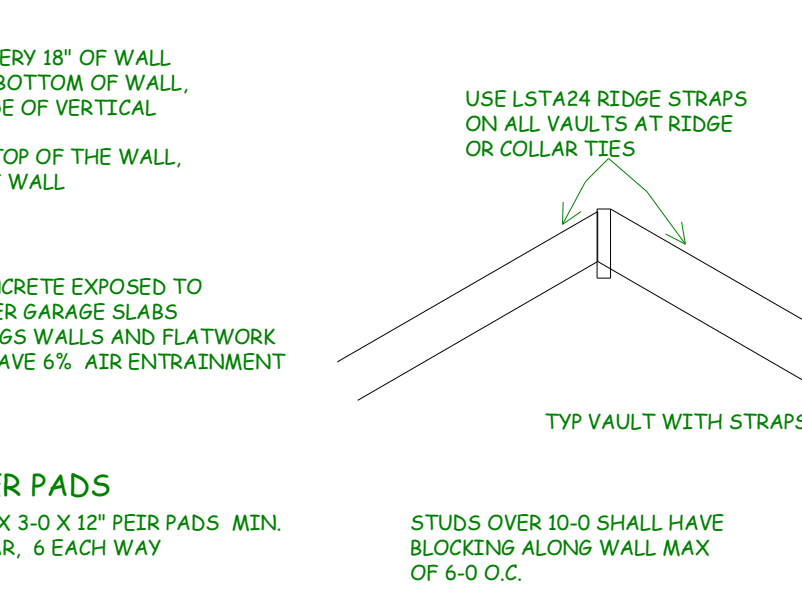
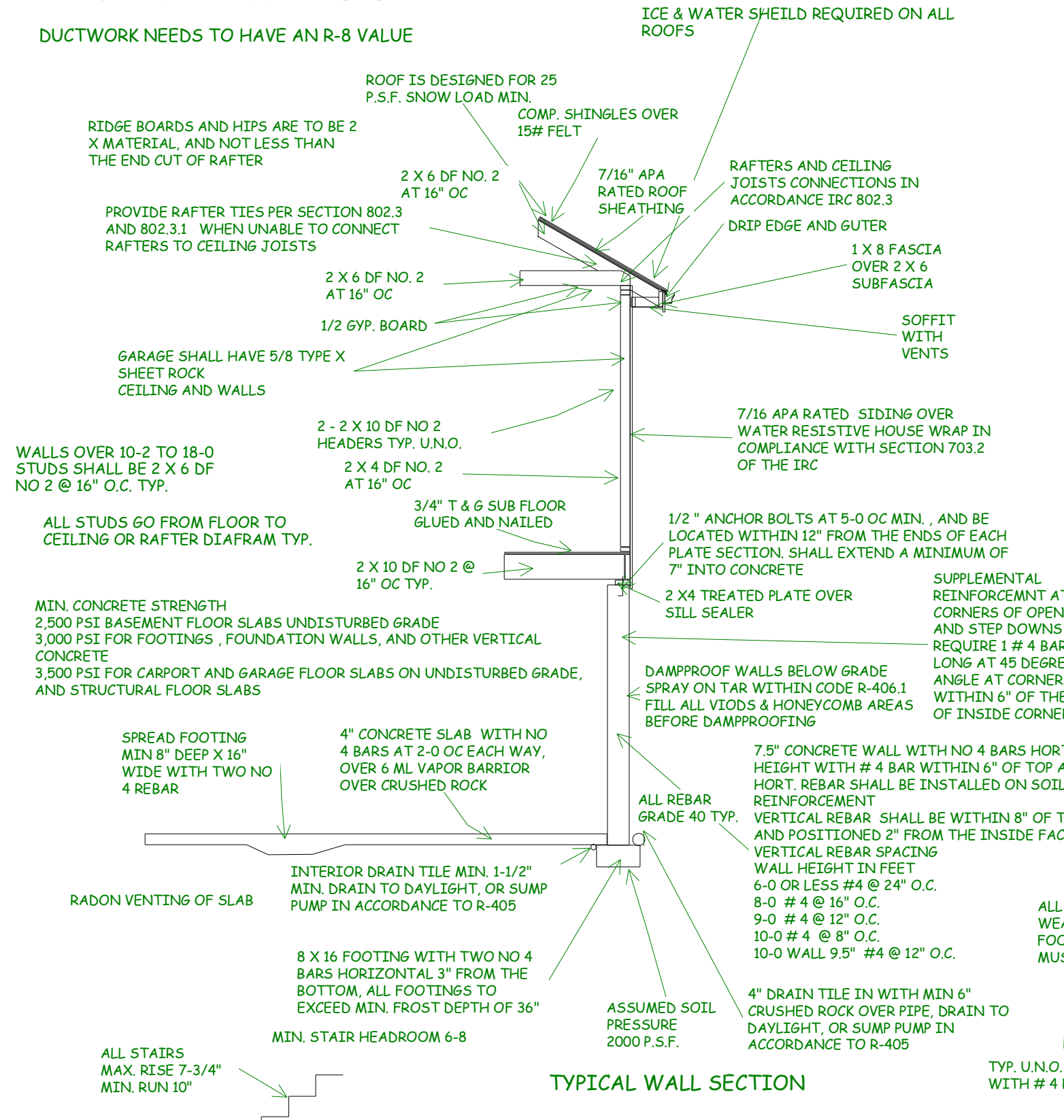
BEHOME LLC
NOELLE PLAN
SHADE RES.
LOT 32 HOOK FARM
2051 SW HOOK FARM DR
LEE SUMMIT MO

ENERGY CONSERVATION CODE
THE FOLLOWING VALUES ARE NEEDED.

R-15 IN WALLS
R-49 IN ATTICS
R-38 IN VAULTS
R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF
PF AREA
R-19 IN FLOORS OVER UNCONDITIONED SPACES
R-10 IN CRAWL SPACE WALLS
BASEMENT WALLS R-13 CAVITY OR R-10 CONTINUOUS
SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT
A WINDOW U FACTOR OF .35 OR BETTER
DUCTWORK NEEDS TO HAVE AN R-8 VALUE



- DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE EQUIPPED WITH SOLID WOOD OR STEEL DOORS NOT LESS THAN 1-3/8" THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1
- WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR ANY DWELLING IN COMPLIANCE WITH IRC M 1505
- CARBON MONOXIDE DETECTORS REQUIRED IRC R 315
- STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3
- DECK SHALL BE BUILT PER TABLES 507.2, 507.2.1, 507.3, 507.6, 507.5.1(1)(2), 507.5, AND 507.6
- STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR ROOF DIAPHRAGMS R602.3
- ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2
- NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND ROOF BEAMS R802.3.1, R802.11
- INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING UNFINISHED BASEMENTS) N1102.1
- EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1
- HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE IMPLEMENTED OCTOBER 1, 2012. KCBRC N1102.4.1.2 N1103.2.2
- LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G. CAN LIGHTS IN ATTIC) SHALL BE IC-RATED, LEAKAGE-RATED AND SEALED TO THE GYPSUM WALLBOARD N1102.4.4
- PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1
- AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2% AIR LEAKAGE RATE N1103.2.2.1
- BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC N1103.2.2
- CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4
- ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR M1507.2
- MAKEUP AIR SYSTEM REQUIRED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM M1503.4
- BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS RETURN AIR PLENUMS
- AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE M1601.6
- A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND) CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3408.1
- COMPLIANCE WITH THE REQUIREMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUSS, RAFTER, AND GIRDER CONNECTION FOR UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11 AMENDED RAYMORE CODE



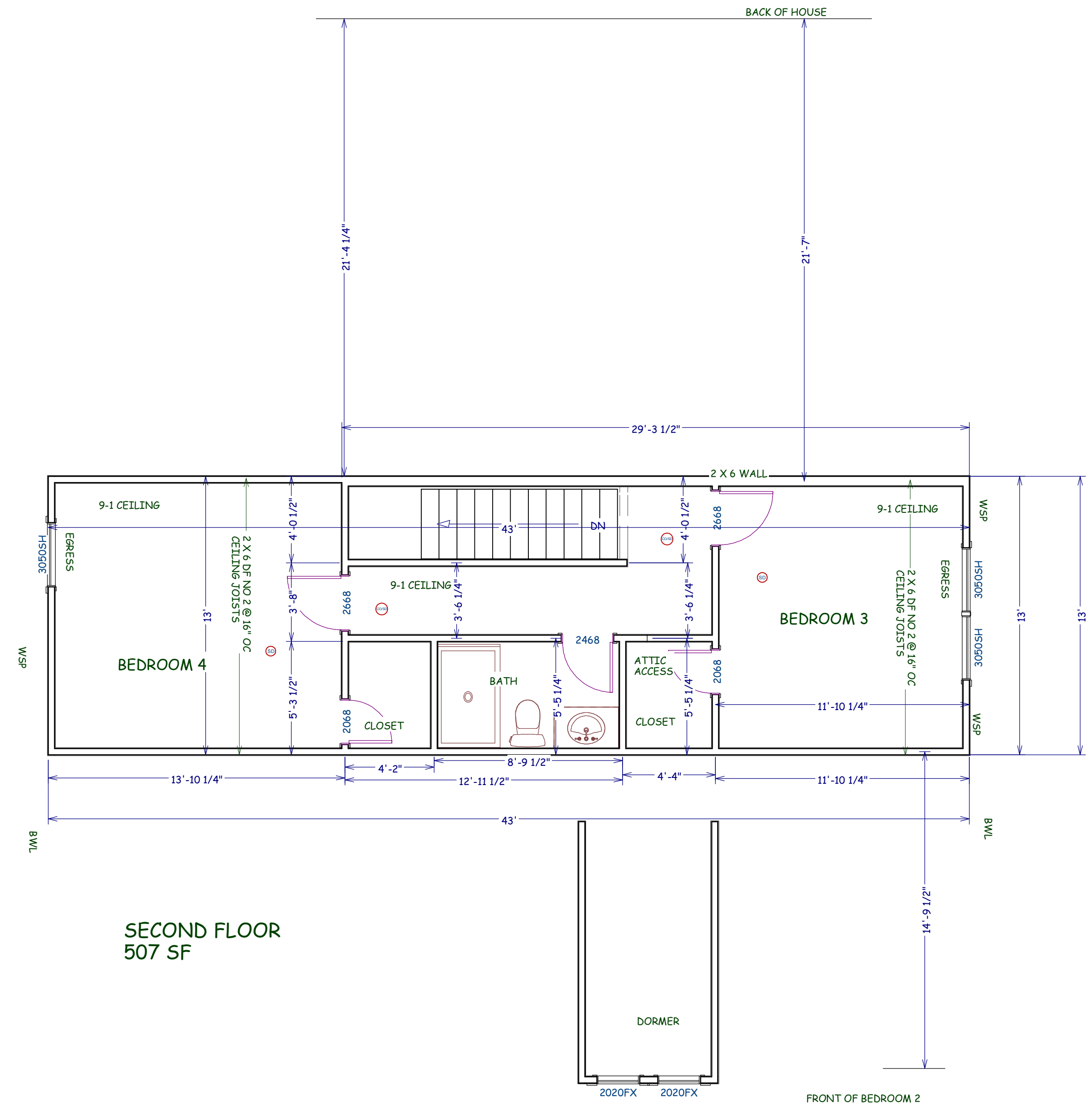
WINDOW SAFETY GLAZING PER 308
SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS.
SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR.
SAFETY GLAZING REQUIRED WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE. SAFETY OR TEMPERED GLAZING IS REQUIRED.

WINDOW EGRESS REQUIREMENTS
BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET MIN.
A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM WITH A MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA.
OPENINGS OF EGRESS WINDOW NOT MORE THAN 42" FROM THE FLOOR.

PIER PADS
TYP. U.N.O. 3-0 X 3-0 X 12" PETR. PADS. MIN. WITH # 4 REBAR, 6 EACH WAY

EGRESS WINDOW WELL AS NEEDED
PER SECTION 308 MIN 3-0 X 3-0 WITH LADDER

ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED OTHERWISE



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TABLE R602.10.3(1) BRACING REQUIREMENTS BASED ON WIND SPEED

Basic Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE*			
			Method LB ^b	Method GB	Methods DWB, WSP, SFB, PFB, PFC, HFS, BV-WSP	Methods CS-WSP, CS-G, CS-PF
≤ 90	1st	10	3.5	3.5	2.0	2.0
		20	7.0	7.0	4.0	3.5
		30	9.5	9.5	5.5	5.0
		40	12.5	12.5	7.5	6.0
		50	15.5	15.5	9.0	7.5
		60	18.5	18.5	10.5	9.0
	2nd	10	7.0	7.0	4.0	3.5
		20	13.0	13.0	7.5	6.5
		30	18.5	18.5	10.5	9.0
		40	24.0	24.0	14.0	12.0
		50	29.5	29.5	17.0	14.5
		60	35.0	35.0	20.0	17.0
	3rd	10	NP	10.5	6.0	5.0
		20	NP	19.0	11.0	9.5
		30	NP	27.5	15.5	13.5
		40	NP	35.5	20.5	17.5
		50	NP	44.0	25.0	21.5
		60	NP	52.0	30.0	25.5

TABLE R602.10.4 BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
			Fasteners	Spacing
LB Let-in-bracing	1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d (2 1/2" long x 0.113" dia.) nails Metal straps: per manufacturer	Wood: per stud and top and bottom plates Metal: per manufacturer
DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long x 0.113" dia.) nails or 2 - 1 1/2" long staples	Per stud
WSP Wood structural panel (See Section R604)	3/4"		Exterior sheathing per Table R602.3(1) or R602.3(2) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
BV-WSP Wood Structural Panels with Stone or Masonry Veneer (See Section R602.10.6.5)	3/4"	See Figure R602.10.6.5	8d common (2 1/2" x 0.131") nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
SFB Structural fiberboard sheathing	1/2" or 5/8" for maximum 16" stud spacing		1 1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1 1/4" long x 0.12" dia. (for 5/8" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long x 0.131" dia.) nails	3" edges 6" field
GB Gypsum board	5/8"		Nails or screws per Table R702.3.5 for exterior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 3" field
PBS Parti-board sheathing (See Section R605)	3/4" or 1/2" for maximum 16" stud spacing		For 3/4": 6d common (2" long x 0.113" dia.) nails For 1/2": 8d common (2 1/2" long x 0.131" dia.) nails	3" edges 6" field
PFC Portland cement plaster	See Section R703.6 for maximum 16" stud spacing		1 1/2" long, 11 gage, 1/4" dia. head nails or 1/2" long, 16 gage staples	6" o.c. on all framing members
HFS Hardboard panel siding	3/4" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 1/2" penetration into studs	4" edges 8" field
ABW Alternate braced wall	3/4"		See Section R602.10.6.1	See Section R602.10.6.1

TABLE R602.10.4—continued BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
			Fasteners	Spacing
PFB Portal frame with hold-downs	3/4"		See Section R602.10.6.2	See Section R602.10.6.2
FFG Portal frame at garage	3/4"		See Section R602.10.6.3	See Section R602.10.6.3
CS-WSP Continuously sheathed wood structural panel	3/4"		Exterior sheathing per Table R602.3(1) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
CS-G Continuously sheathed wood structural panel adjacent to garage openings	3/4"		See Method CS-WSP	See Method CS-WSP
CS-PF Continuously sheathed portal frame	3/4"		See Section R602.10.6.4	See Section R602.10.6.4
CS-SFB Continuously sheathed structural fiberboard	1/2" or 5/8" for maximum 16" stud spacing		1 1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1 1/4" long x 0.12" dia. (for 5/8" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long x 0.131" dia.) nails	3" edges 6" field

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.88 N/m², 1 mile per hour = 0.447 m/s.
 a. Alternative attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D_s, D₁, and D₂.
 b. Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage. In Seismic Design Categories D_s, D₁, and D₂, roof covering dead load may not exceed 3 psf.
 c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.
 d. Method CS-SFB does not apply in Seismic Design Categories D_s, D₁, and D₂ and in areas where the wind speed exceeds 100 mph.

BUILD IN ACCORDANCE WITH 2012 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

BRACE WALL DETAILS
WIND SPEED 90 MPH
WIND EXPOSURE A
SEISMIC DESIGN CATEGORY A

SCALE
NO SCALE

DATE

PLAN NO.

SHEET NO.
BRACE WALL DETAILS

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

BEHOME LLC
NOELLE PLAN
SHADE RES.
LOT 32 HOOK FARM
2051 SW HOOK FARM DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
11-15-21

PLAN NO.

3618

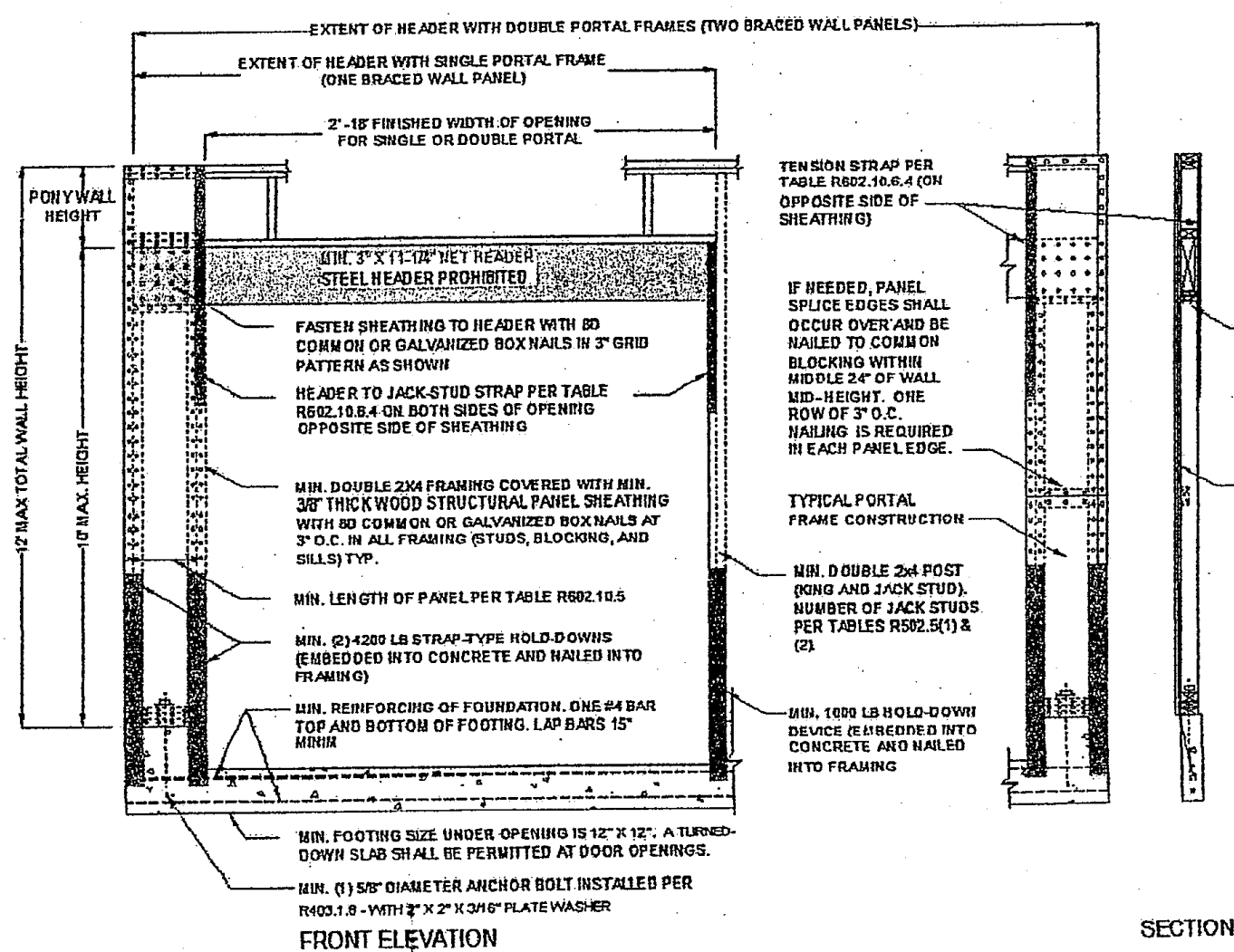
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For SI: 1 inch = 25.4 mm.

FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2
METHOD PFB—PORTAL FRAME WITH HOLD-DOWNS

2012 INTERNATIONAL RESIDENTIAL I

TABLE R602.10.5
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)	MINIMUM LENGTH ^a (feet)					CONTRIBUTING LENGTH (feet)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, PFB, PFC, HFS, BV-WSP	48	48	48	53	58	Actual ^b
GB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LB	55	62	69	NP	NP	Actual ^b
ABW	SDC A, B and C, wind speed < 110 mph	28	32	34	38	42
	SDC D _s , D ₁ and D ₂ , wind speed < 110 mph	32	32	34	NP	NP
PFB	Supporting roof only	16	16	16	18	20
	Supporting one story and roof	24	24	24	27	29
FFG		24	27	30	33	36
CS-G		24	27	30	33	36
CS-PF		16	18	20	22	24
CS-WSP, CS-SFB	Adjacent clear opening height (inches)					
	≤ 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	—	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.
 NP = Not Permitted.
 a. Linear interpolation shall be permitted.
 b. Use the actual length when it is greater than or equal to the minimum length.
 c. Maximum header height for PFB is 10 feet in accordance with Figure R602.10.6.2, but wall height may be increased to 12 feet with pony wall.
 d. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height may be increased to 12 feet with pony wall.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

