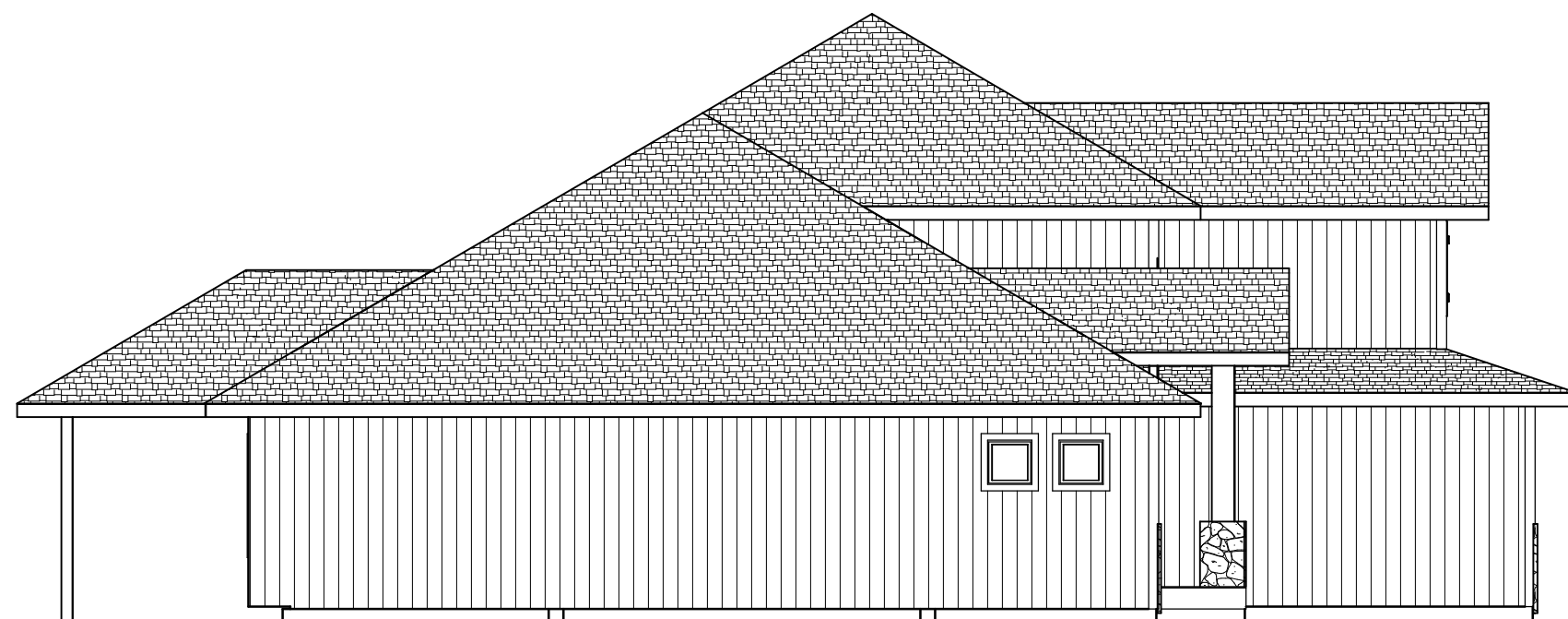
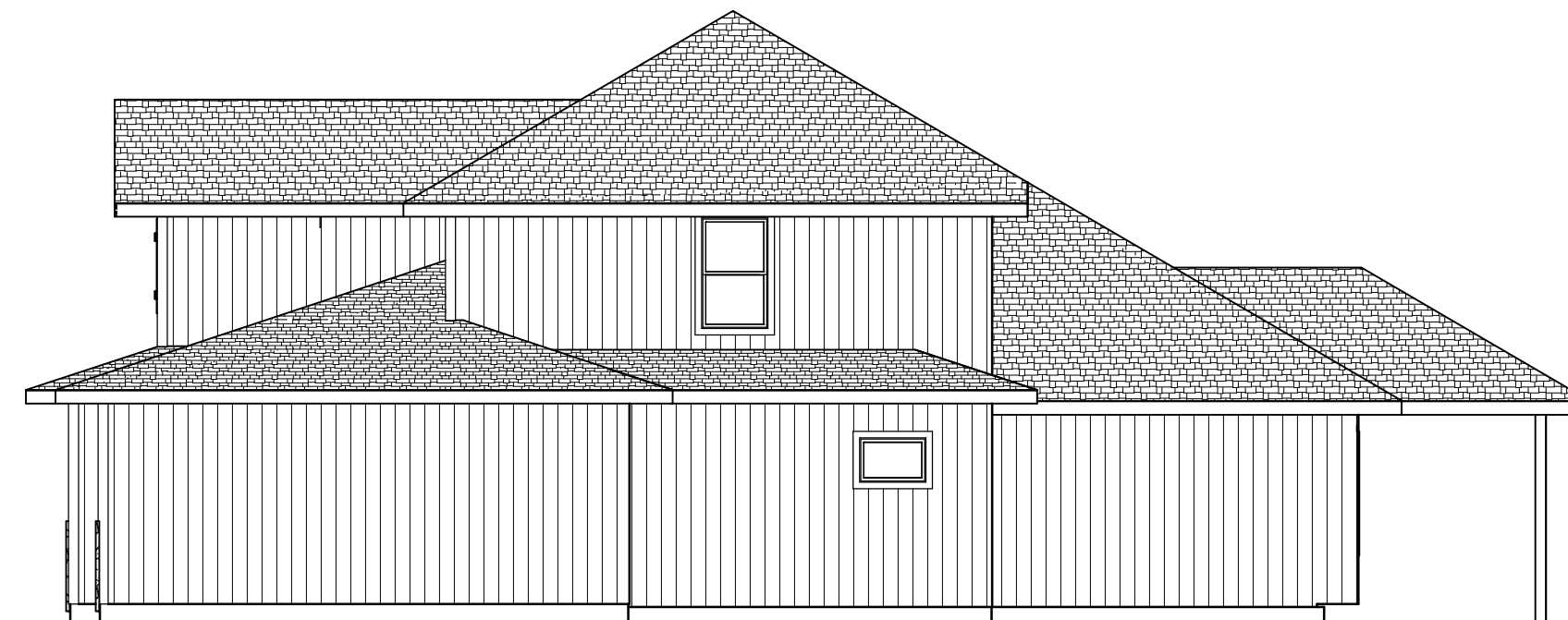




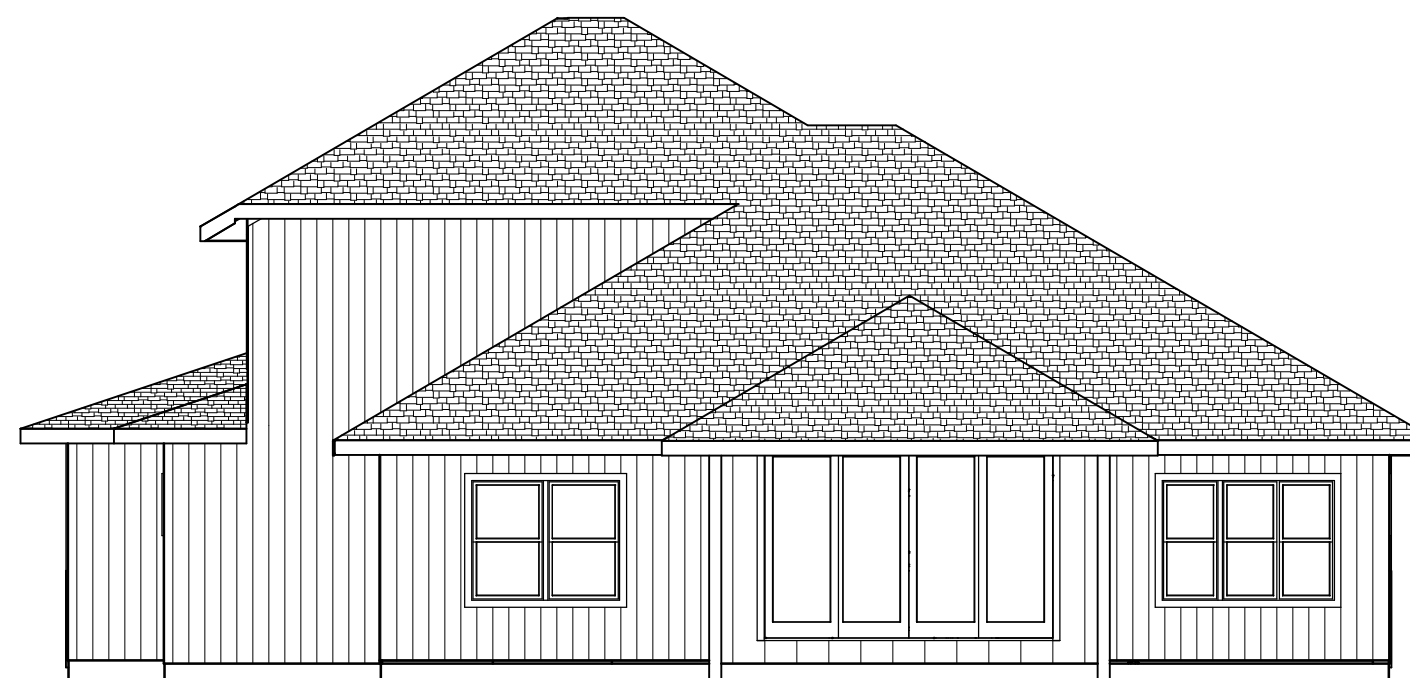
FRONT EL.



LEFT EL.  
1/8" = 1'-0"



RIGHT EL.  
1/8" = 1'-0"



REAR EL.  
1/8" = 1'-0"

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/21/2021

JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

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

NICK ZVACEK HOMES  
ANDERSON III  
LOT 111 MONTECELLO  
4713 NE FREEHOLD DR  
LEE SUMMIT MO

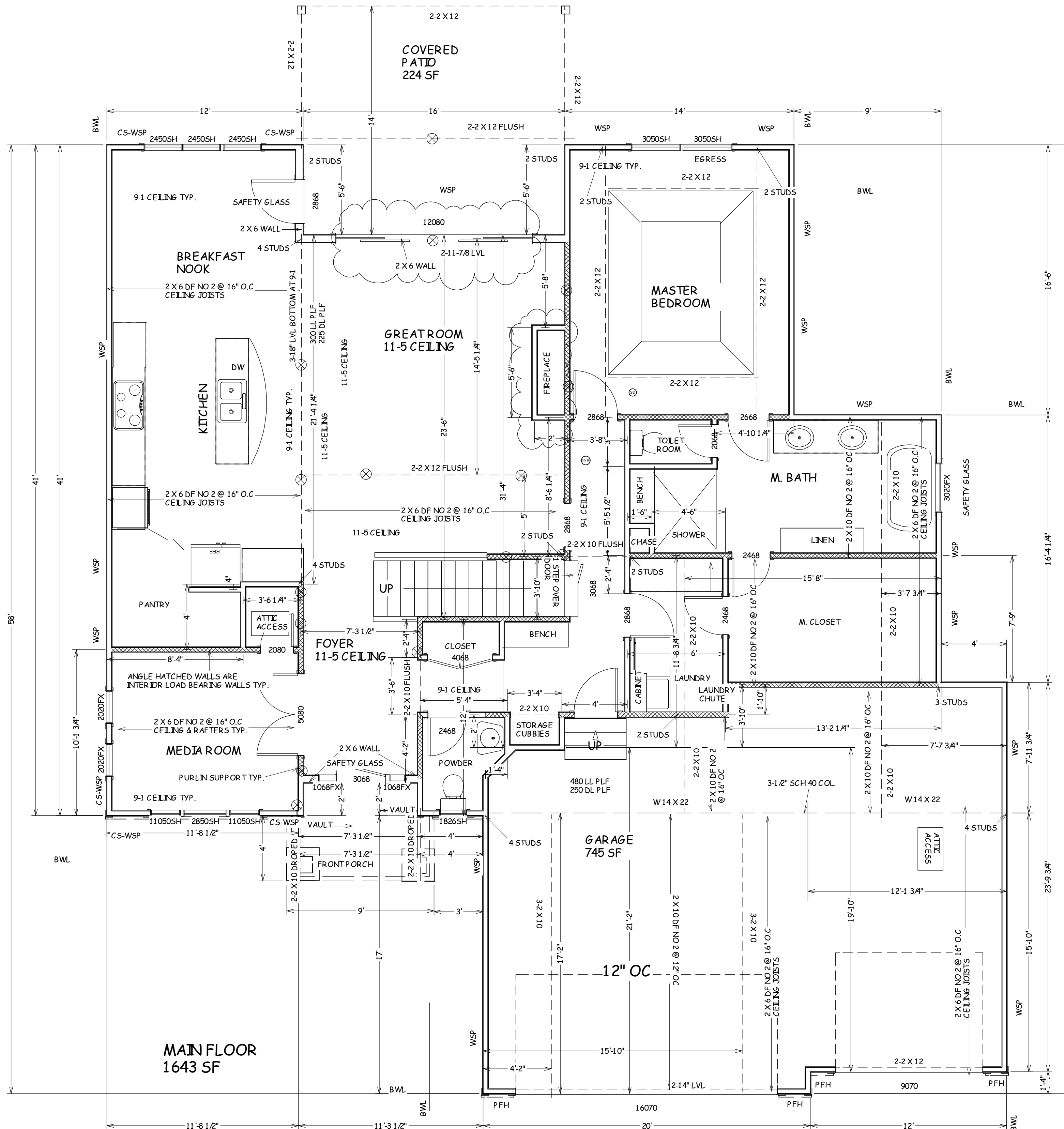
SCALE  
1/4" = 1'-0"

DATE  
9-21-21

PLAN NO.  
3524

SHEET NO.  
1 OF 6





JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

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

NICK ZVACEK HOMES  
ANDERSON III  
LOT 111 MONTECELLO  
4713 NE FREEHOLD DR  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
9-21-21

PLAN NO.  
3524

SHEET NO.

3 OF 6

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/21/2021



ROOF PLAN  
1/8" = 1'-0"  
ROOF PITCHES

RAFTERS 2 X 6  
HIP S AND RIDGES

24' 0"

4/12

4/12

4/12

4/12

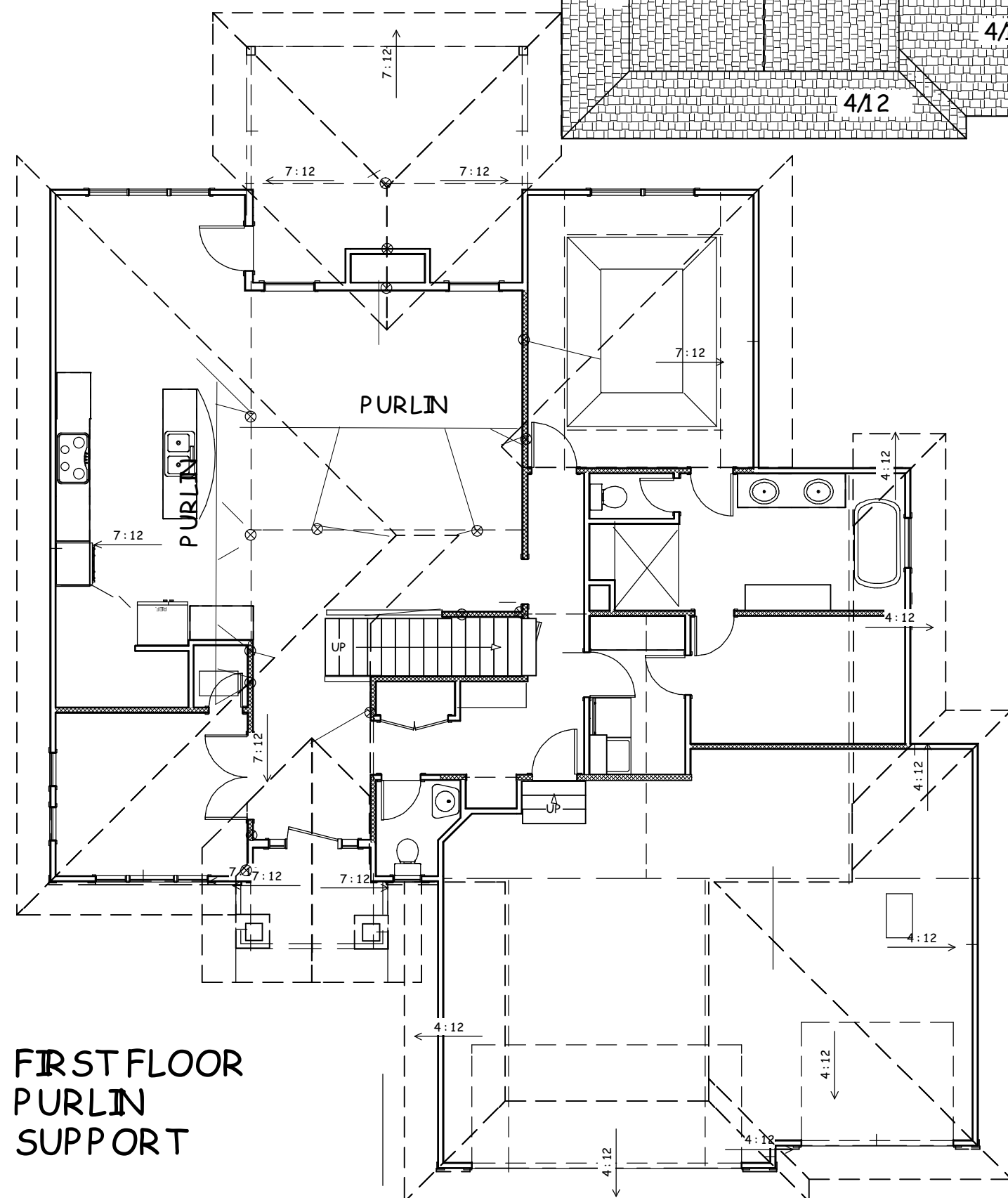
4/12

4/12

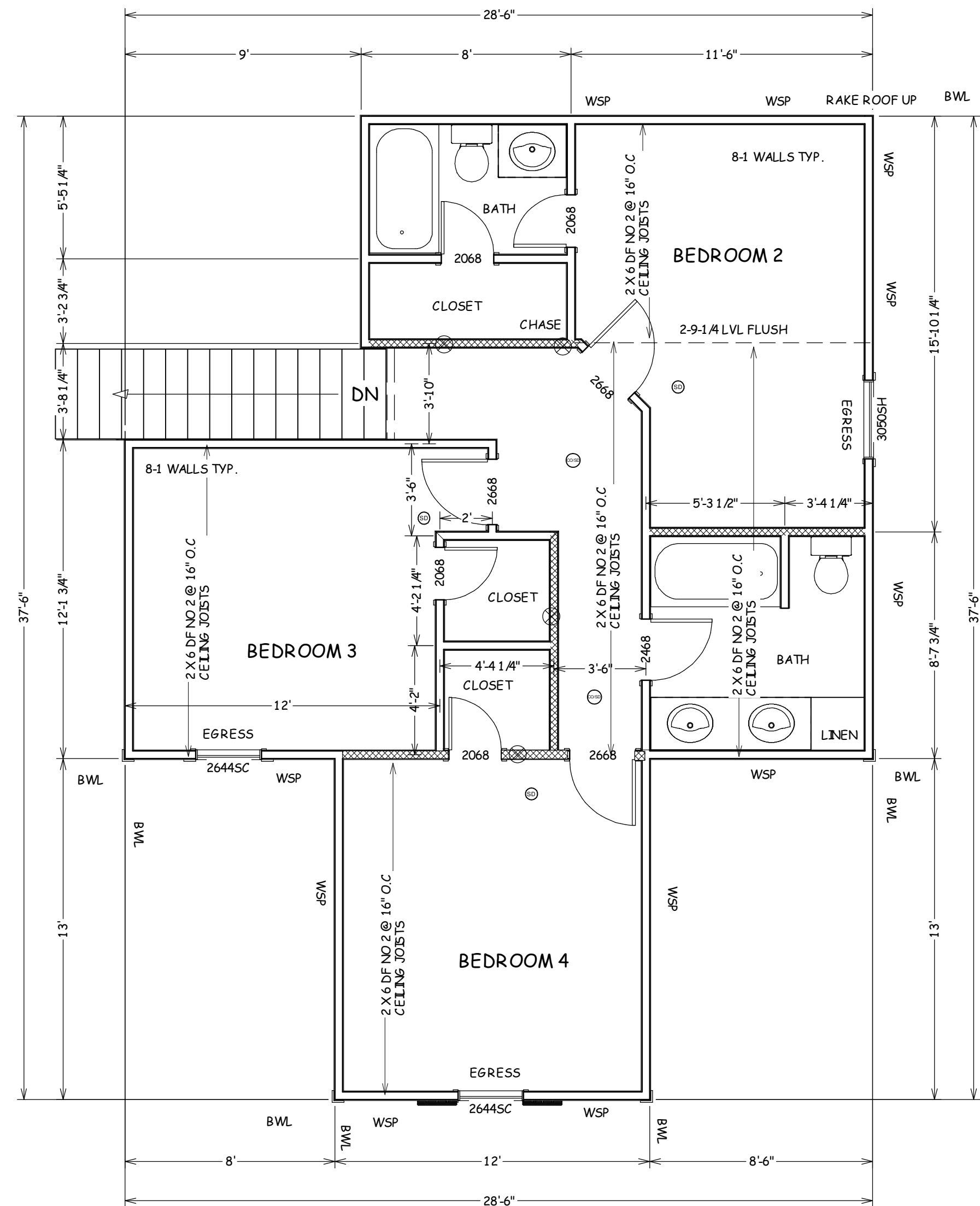
4/12

7'-1 1/2"

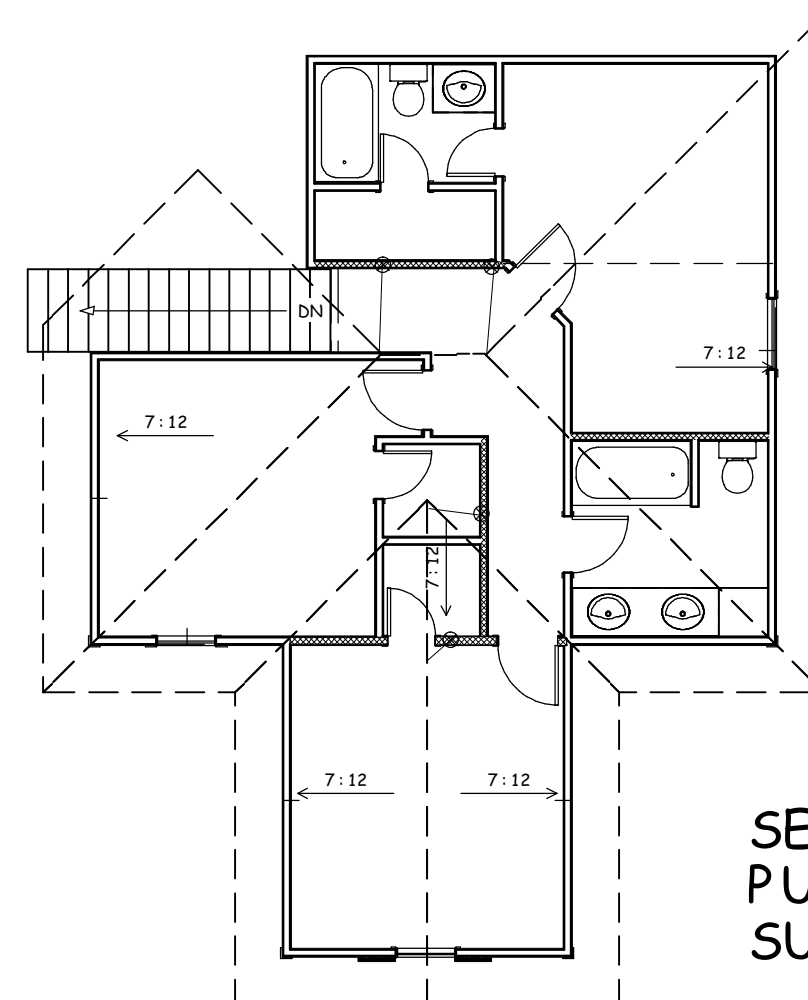
24" SOFFITS TYP.



FIRST FLOOR  
PURLIN  
SUPPORT



SECOND FLOOR  
741 SF



SECOND FLOOR  
PURLIN  
SUPPORT

JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

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

NICK ZVACEK HOMES  
ANDERSON III  
LOT 111 MONTICELLO  
4713 NE FREEHOLD DR  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
9-21-21

PLAN NO.

3524

SHEET NO.

4 OF 6

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/21/2021



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

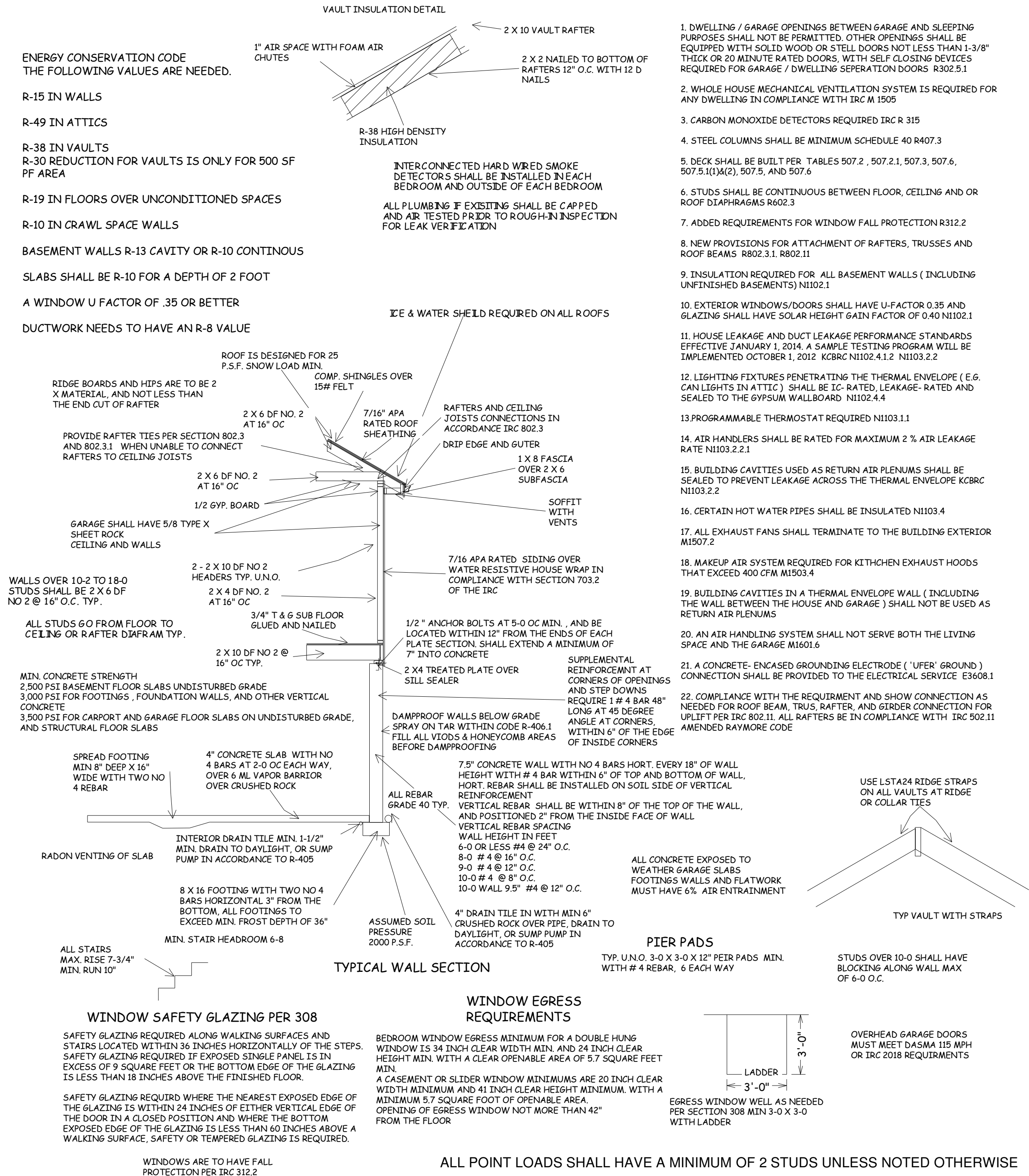
R-10 IN CRAWL SPACE WALLS

BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS

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



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

NICK ZVACEK HOMES  
ANDERSON III  
LOT 111 MONTECELLO  
4713 NE FREEHOLD DR  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

DATE  
9-21-21

PLAN NO.  
3524

SHEET NO.  
5 OF 6

JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/21/2021



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

NICK ZVACEK HOMES  
ANDERSON III  
LOT 111 MONTECELLO  
4713 NE FREEHOLD DR  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
9-21-21

PLAN NO.  
3524

SHEET NO.

6 OF 6

JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/21/2021

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

EXPOSURE CATEGORY B • 30-FOOT NEAR ROOF HEIGHT • 10-FOOT WALL HEIGHT • 2 BRACED WALL LINES		MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE <sup>a</sup>				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing <sup>b</sup> (feet)	Method LIB <sup>c</sup>	Method GB	Methods DWB, WSP, SFB, PFB, PCP, HPS, BV-WSP, ABW, PFH, FCP, CS-SFB	Methods CS-WSP, CS-G, CS-PF
≤ 115		10	3.5	3.5	2.0	2.0
		20	6.5	6.5	3.5	3.5
		30	9.5	9.5	5.5	4.5
		40	12.5	12.5	7.0	6.0
		50	15.0	15.0	9.0	7.5
		60	18.0	18.0	10.5	9.0
		10	7.0	7.0	4.0	3.5
		20	12.5	12.5	7.5	6.5
		30	18.0	18.0	10.5	9.0
		40	23.5	23.5	13.5	11.5
		50	29.0	29.0	16.5	14.0
		60	34.5	34.5	20.0	17.0
		10	NP	10.0	6.0	5.0
		20	NP	18.5	11.0	9.0
		30	NP	27.0	15.5	13.0
		40	NP	35.0	20.0	17.0
		50	NP	43.0	24.5	21.0
		60	NP	51.0	29.0	25.0

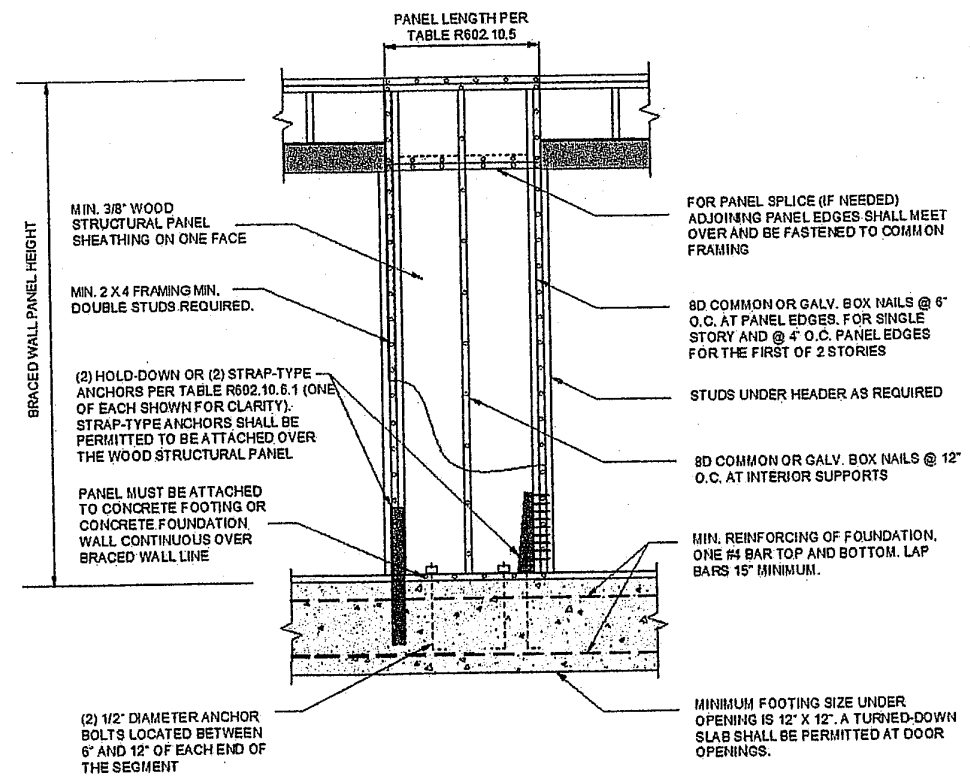


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL

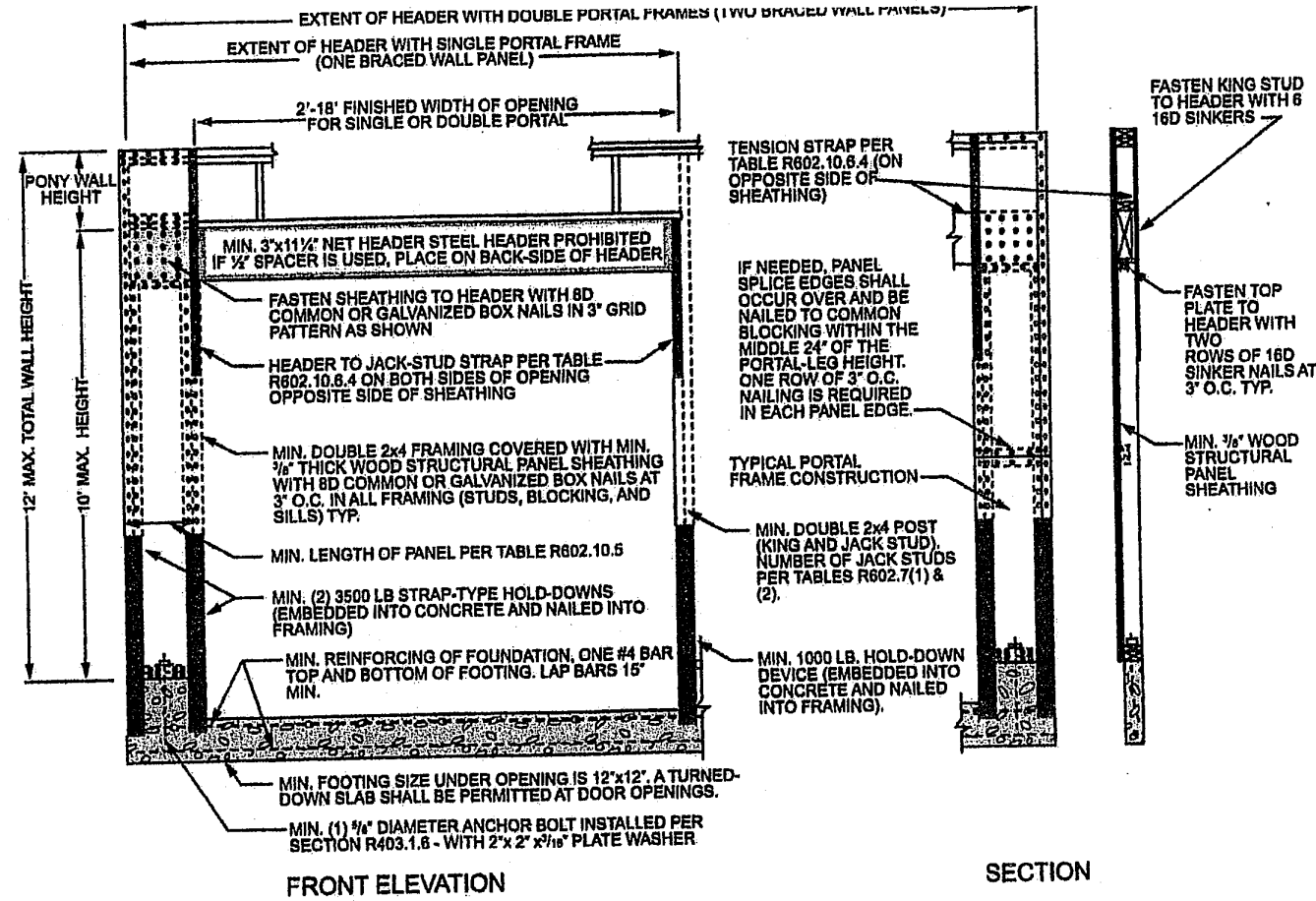


FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

TABLE R602.10.4  
BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA <sup>a</sup>	
			Fasteners	Spacing
LIB Let-in bracing	1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16\"/>		Wood: 2-8d common nails or 3-8d (2 1/2\"/>	Wood: per stud and top and bottom plates Metal: per manufacturer
DWB Diagonal wood boards	3/4\"/>		2-8d (2 1/2\"/>	Per stud
WSP Wood structural panel (See Section R604)	3/4\"/>		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6\"/>
BV-WSP <sup>b</sup> 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\"/>	4\"/>
SFB Structural fiberboard sheathing	1/2\"/>		1 1/2\"/>	3\"/>
GB Gypsum board	1/2\"/>		Nails or screws per Table R602.3(1) for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7\"/>
PBS Particleboard sheathing (See Section R605)	3/4\"/>		For 3/4\"/>	3\"/>
PCP Portland cement plaster	See Section R703.7 for maximum 16\"/>		1 1/2\"/>	6\"/>
HPS Hardboard panel siding	3/4\"/>		0.092\"/>	4\"/>
ABW Alternate braced wall	3/4\"/>		See Section R602.10.6.1	See Section R602.10.6.1

TABLE R602.10.5  
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)	MINIMUM LENGTH <sup>a</sup> (Inches)					CONTRIBUTING LENGTH (Inches)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual <sup>b</sup>
GB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LIB	55	62	69	NP	NP	Actual <sup>b</sup>
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub> , ultimate design wind speed < 140 mph	32	32	34	NP	NP
CS-G	Adjacent clear opening height (Inches)	24	27	30	33	36
	≤ 64	24	27	30	33	36
CS-WSP, CS-SFB	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
METHOD (See Table R602.10.4)	Portal header height					48
	8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	16	16	16	Note c	Note c
PFH	Supporting one story and roof	24	24	24	Note c	Note c
PFH	Supporting two stories and roof	24	27	30	Note d	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub>	16	18	20	Note e	Note e

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 where it is greater than or equal to the minimum length.  
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.  
d. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.  
e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

TABLE R602.10.4—continued  
BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA <sup>a</sup>	
			Fasteners	Spacing
PFH Portal frame with hold-downs	3/4\"/>		See Section R602.10.6.2	See Section R602.10.6.2
PFH 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(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6\"/>
CS-G <sup>b</sup> Continuously sheathed wood structural panel adjacent to garage openings	3/4\"/>		See Method CS-WSP	See Method CS-WSP
CS-PF <sup>c</sup> Continuously sheathed portal frame	3/4\"/>		See Section R602.10.6.4	See Section R602.10.6.4
CS-SFB <sup>d</sup> Continuously sheathed structural fiberboard	1/2\"/>		1 1/2\"/>	3\"/>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 0.0479 kN/m<sup>2</sup>, 1 mile per hour = 0.447 m/s.  
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D<sub>1</sub>, D<sub>2</sub>, and D<sub>3</sub>.  
b. Applies to panels next to garage door opening where supporting gable and wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>1</sub>, D<sub>2</sub>, and D<sub>3</sub>, roof covering dead load shall not exceed 3 psf.  
c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.7(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<sub>1</sub>, D<sub>2</sub>, and D<sub>3</sub>.  
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>1</sub> through D<sub>3</sub> only.

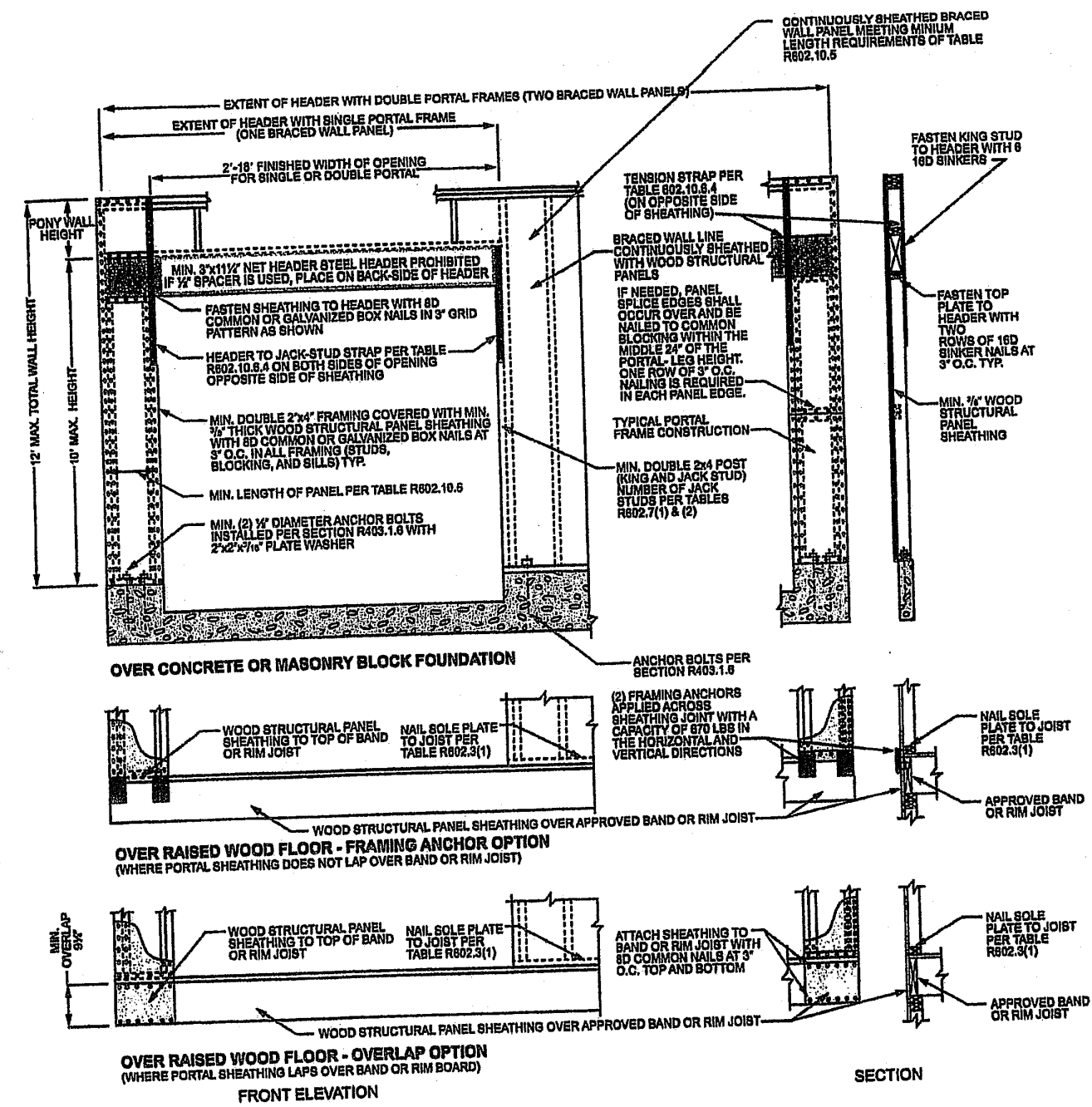


FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION