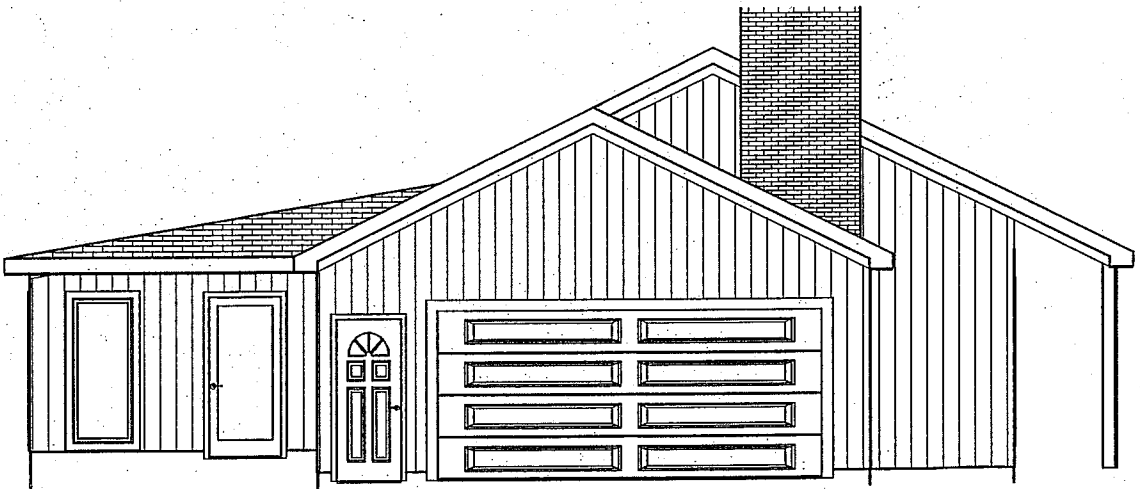
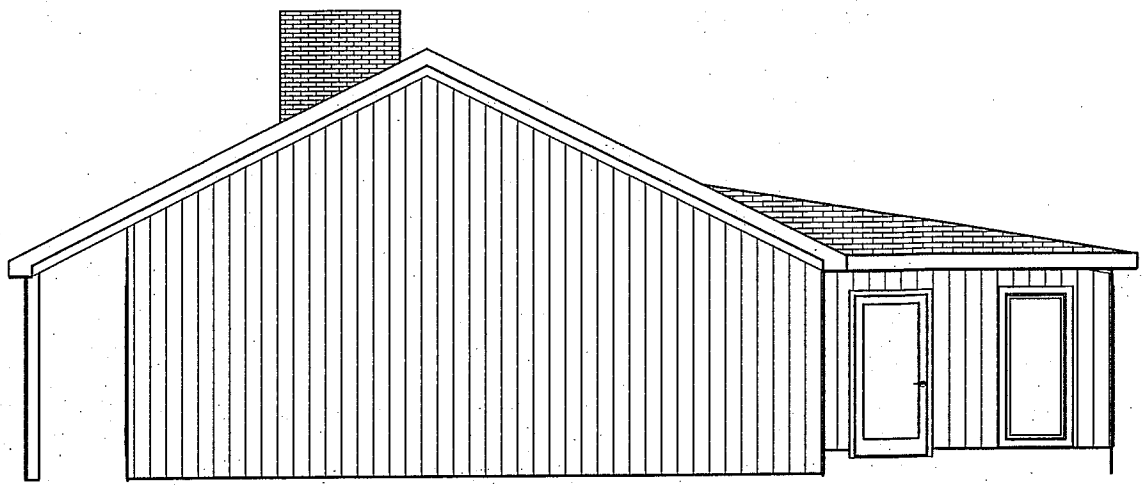


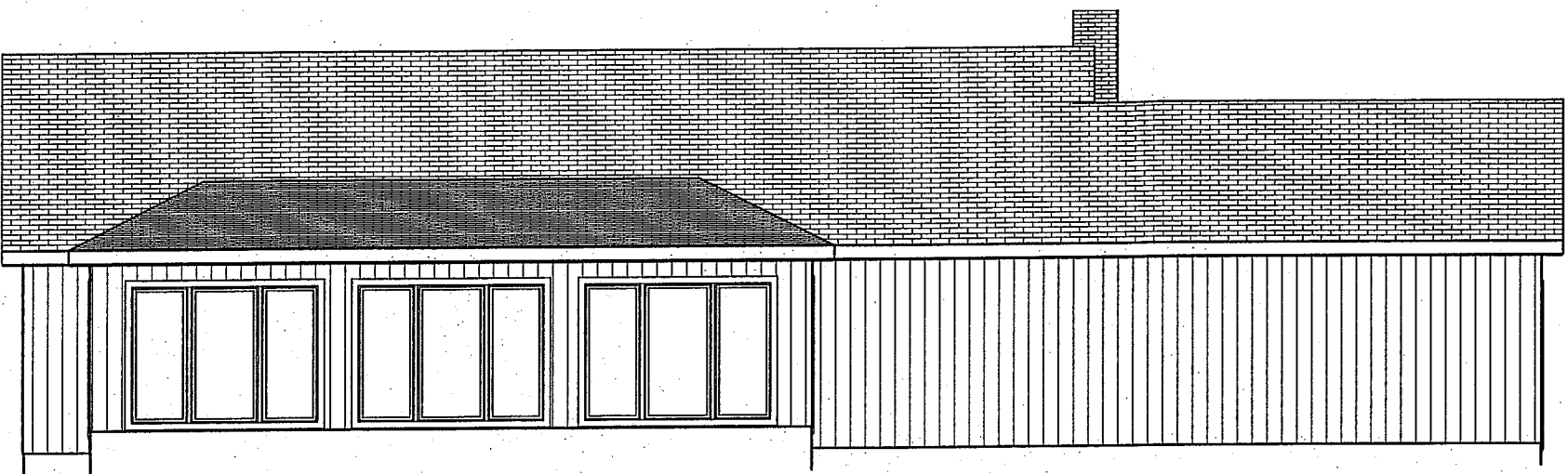
EXISTING FRONT EL.  
1/8" = 1'-0"



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



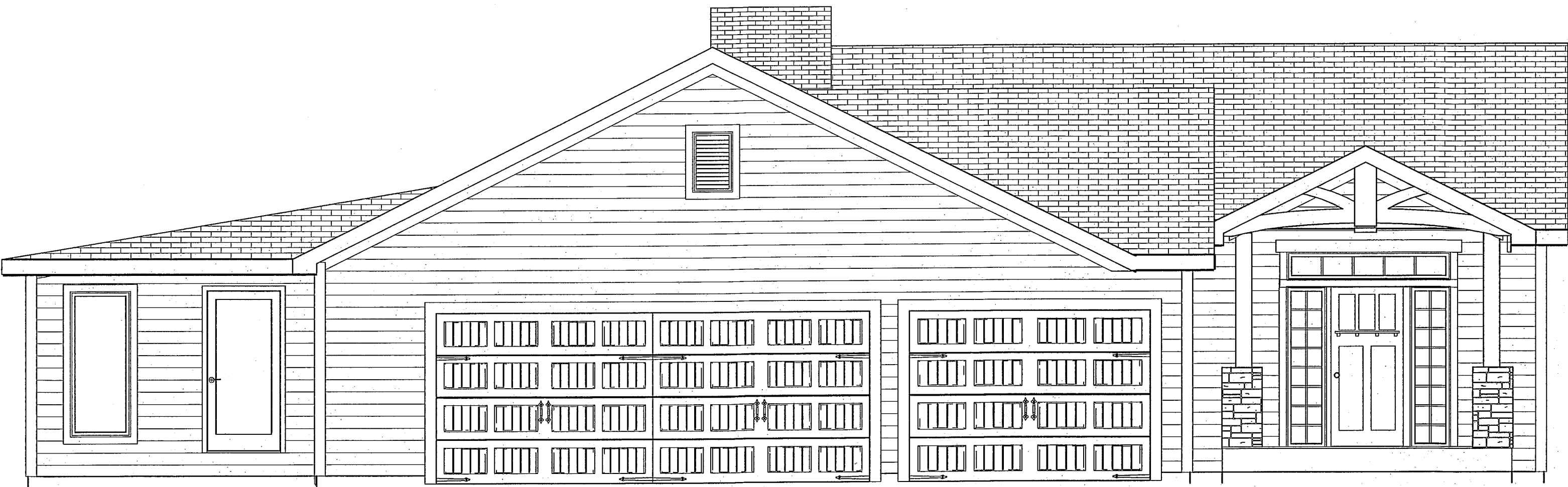
EXISTING RIGHT EL.  
1/8" = 1'-0"



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



NEW FRONT ELEVATION



NEW LEFT ELEVATION



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



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

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

RHOADS RES.  
REMODEL AND ADDITION  
1400 NE WOODS CHAPEL  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

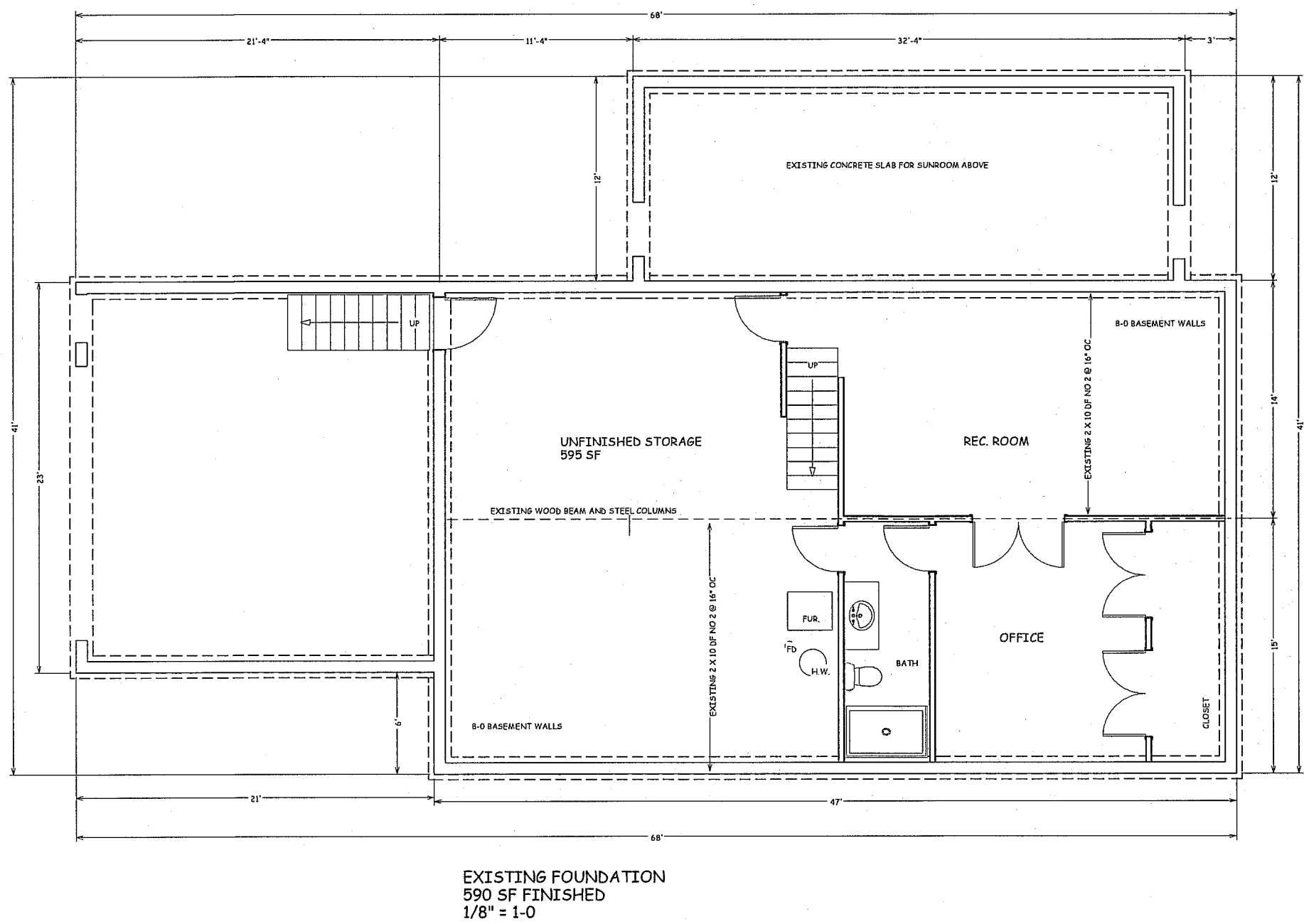
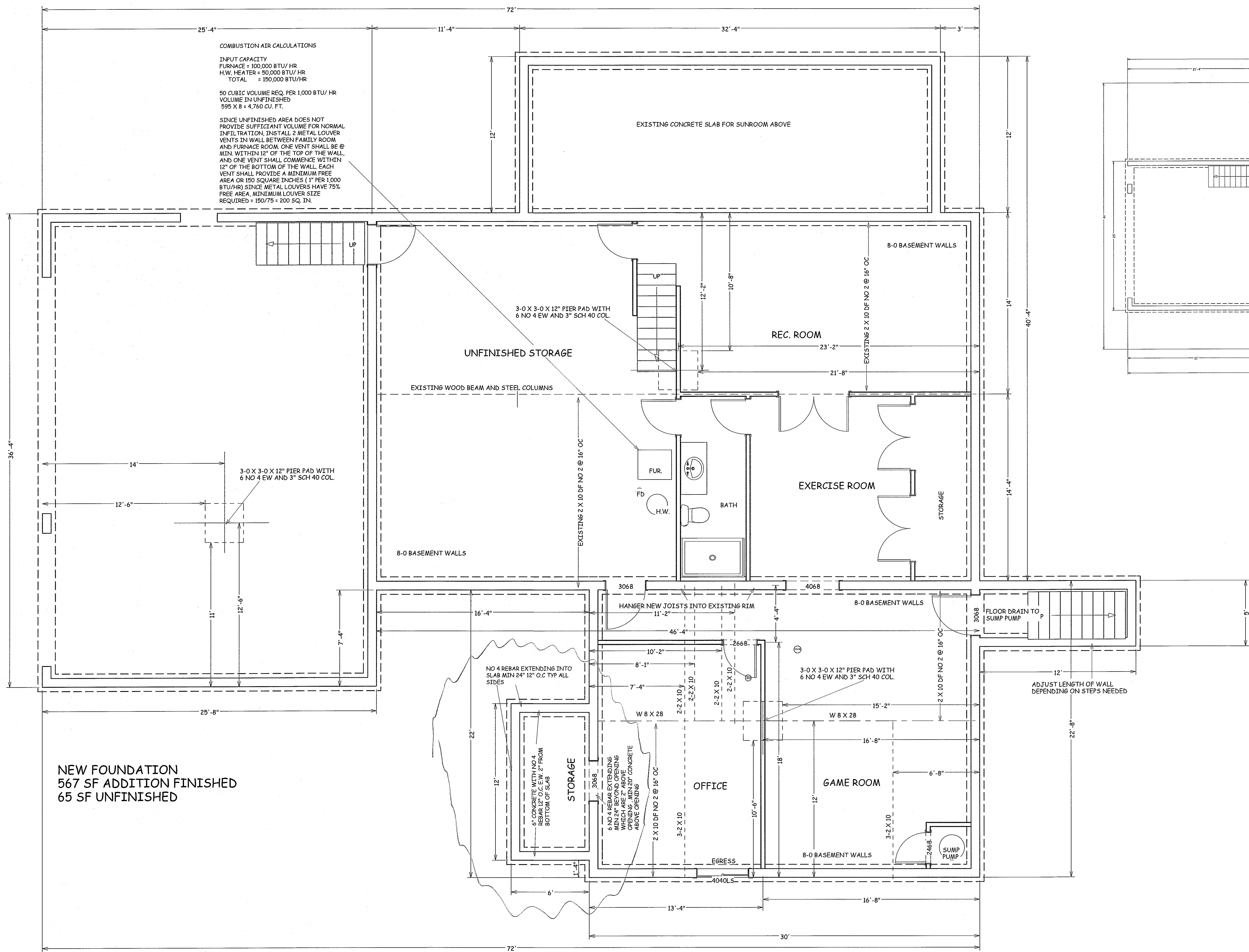
DATE  
7-27-20

PLAN NO.  
3149

SHEET NO.  
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RHOADS RES.  
REMODEL AND ADDITION  
1400 NE WOODS CHAPEL  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

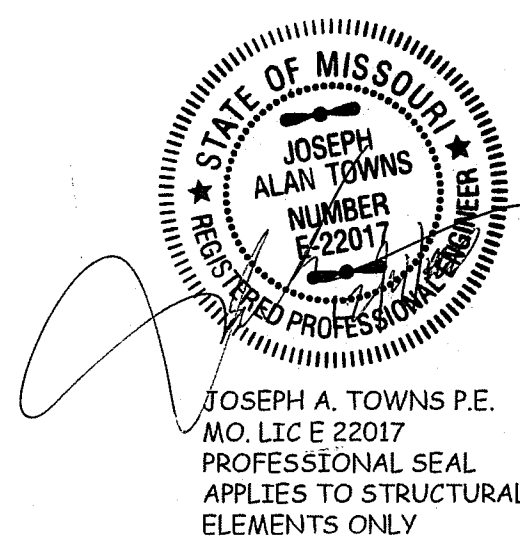
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12-4-20

PLAN NO.

3149

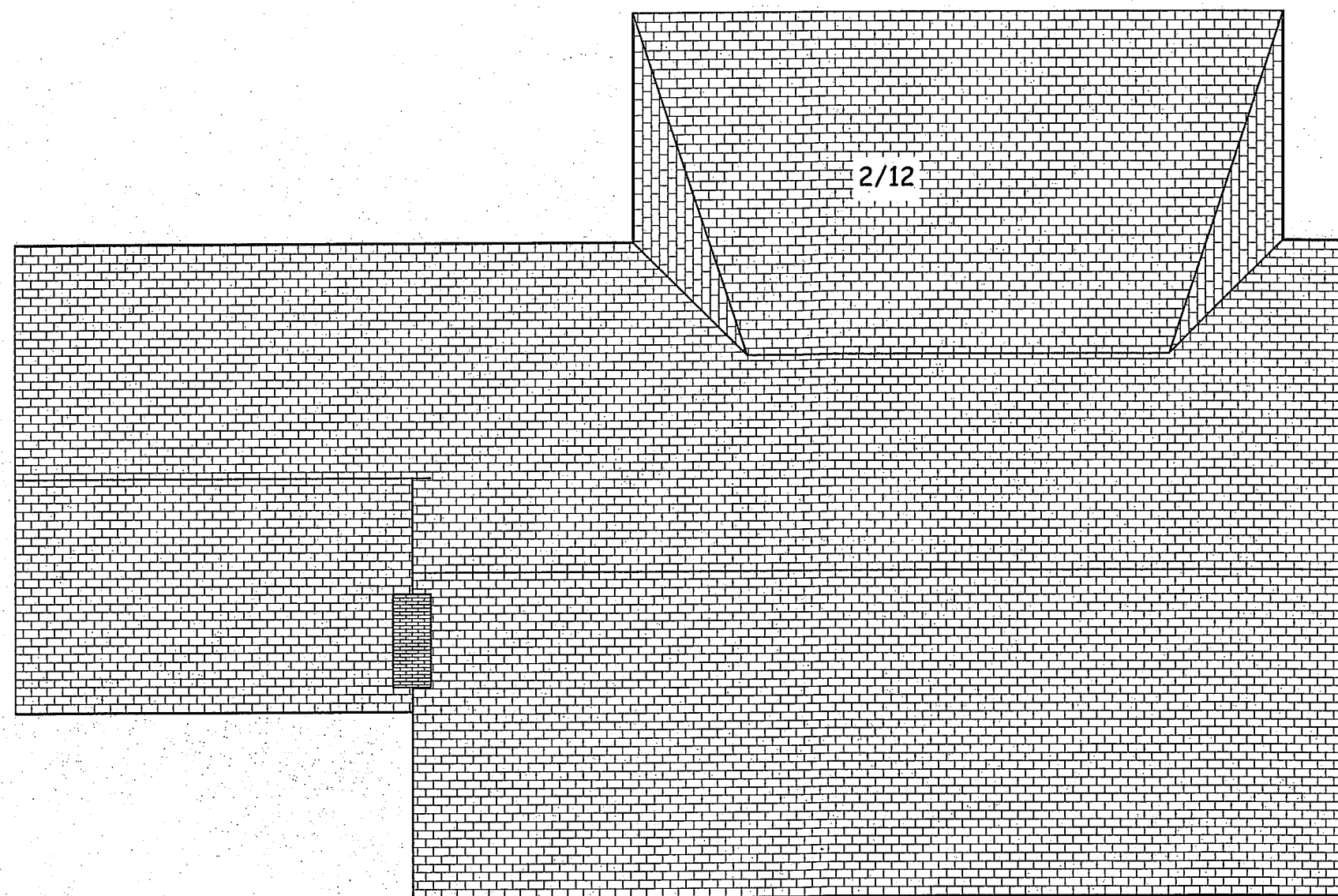
SHEET NO.

2 OF 6

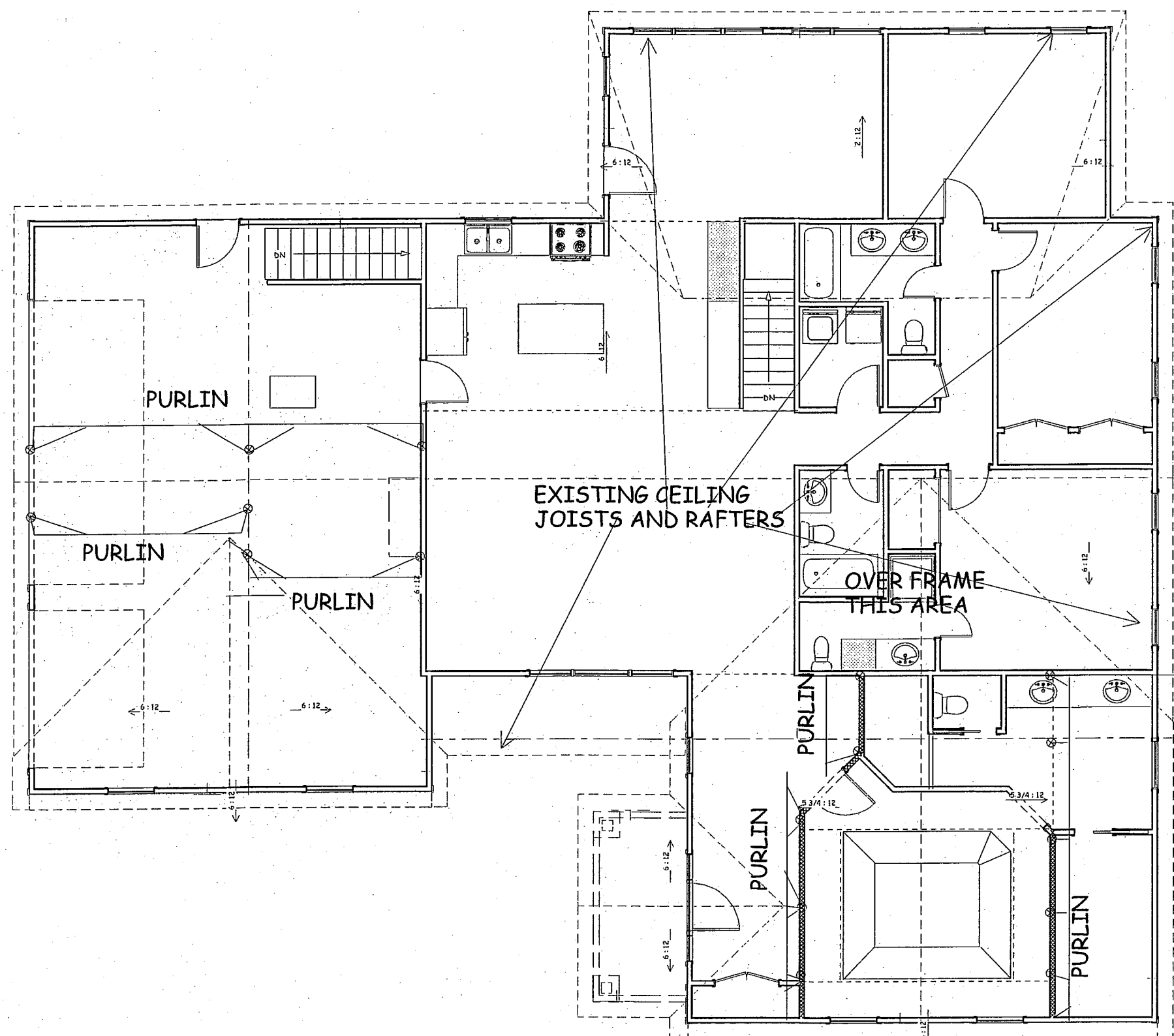


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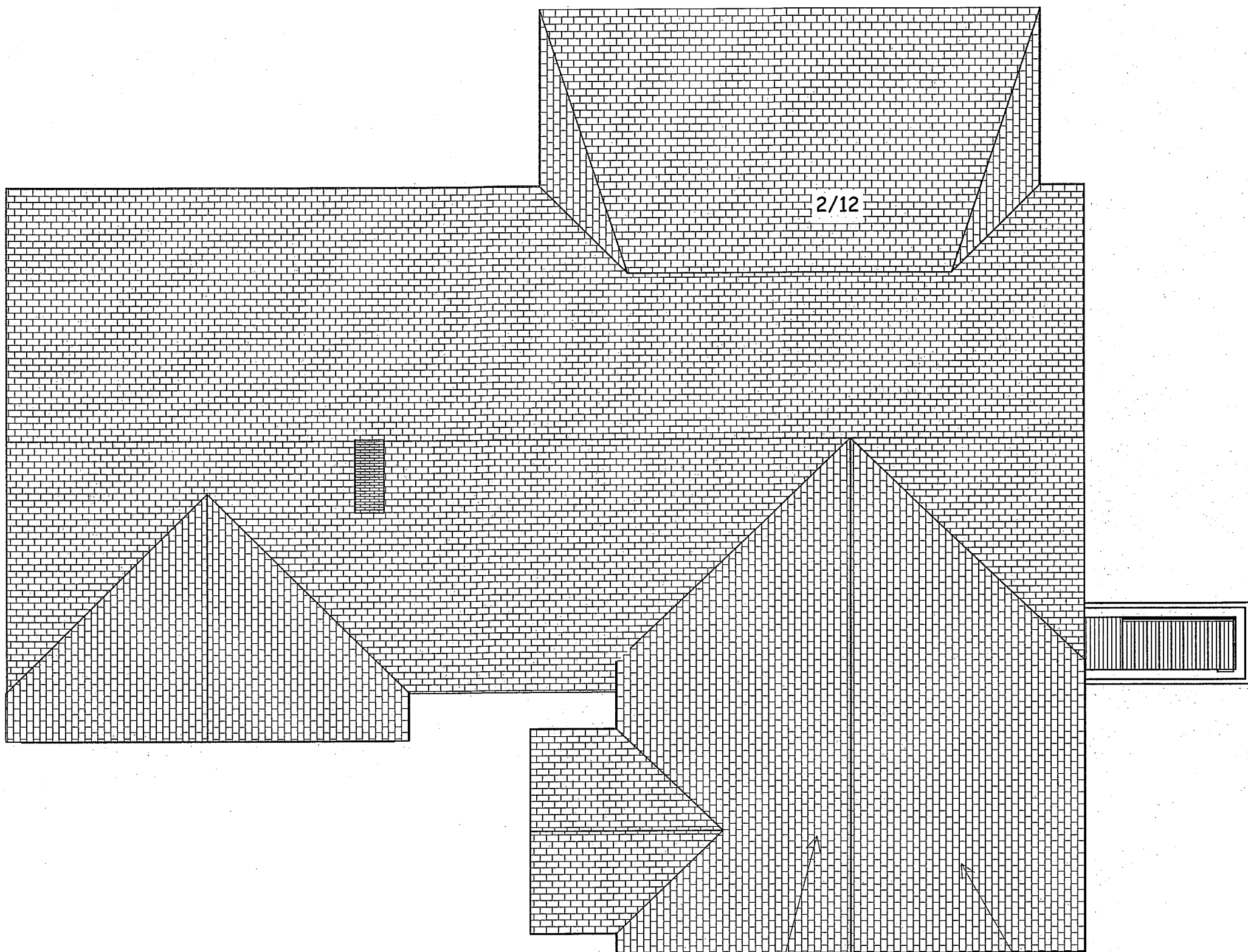




EXISTING ROOF PLAN  
1/8 = 1-0  
ROOF PITCHES 6/12 U.N.O.  
RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.  
HIPS AND RIDGES 2 X 8 DF NO 2 TYP.

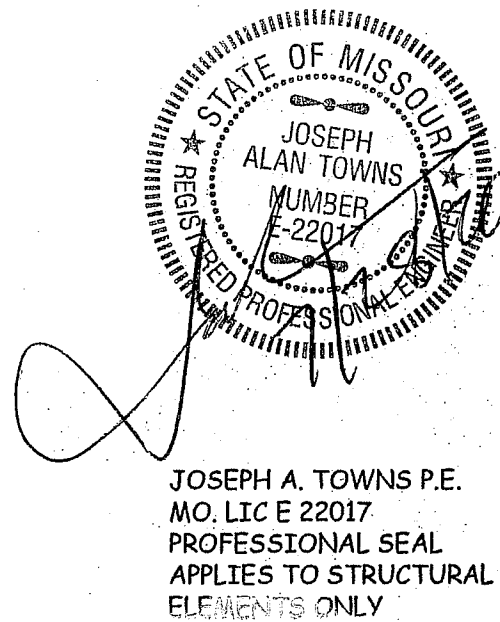


PURLIN PLAN  
1/8 = 1-0



NEW 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.

ADJUST ROOF PITCH TO MATCH MAIN RIDGE 5-3/4 / 12



BUILD IN ACCORDANCE WITH  
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RESIDENTIAL CODE AND  
LOCAL CODES.

RHOADS RES.  
REMODEL AND ADDITION  
1400 NE WOODS CHAPEL  
LEE SUMMIT MO

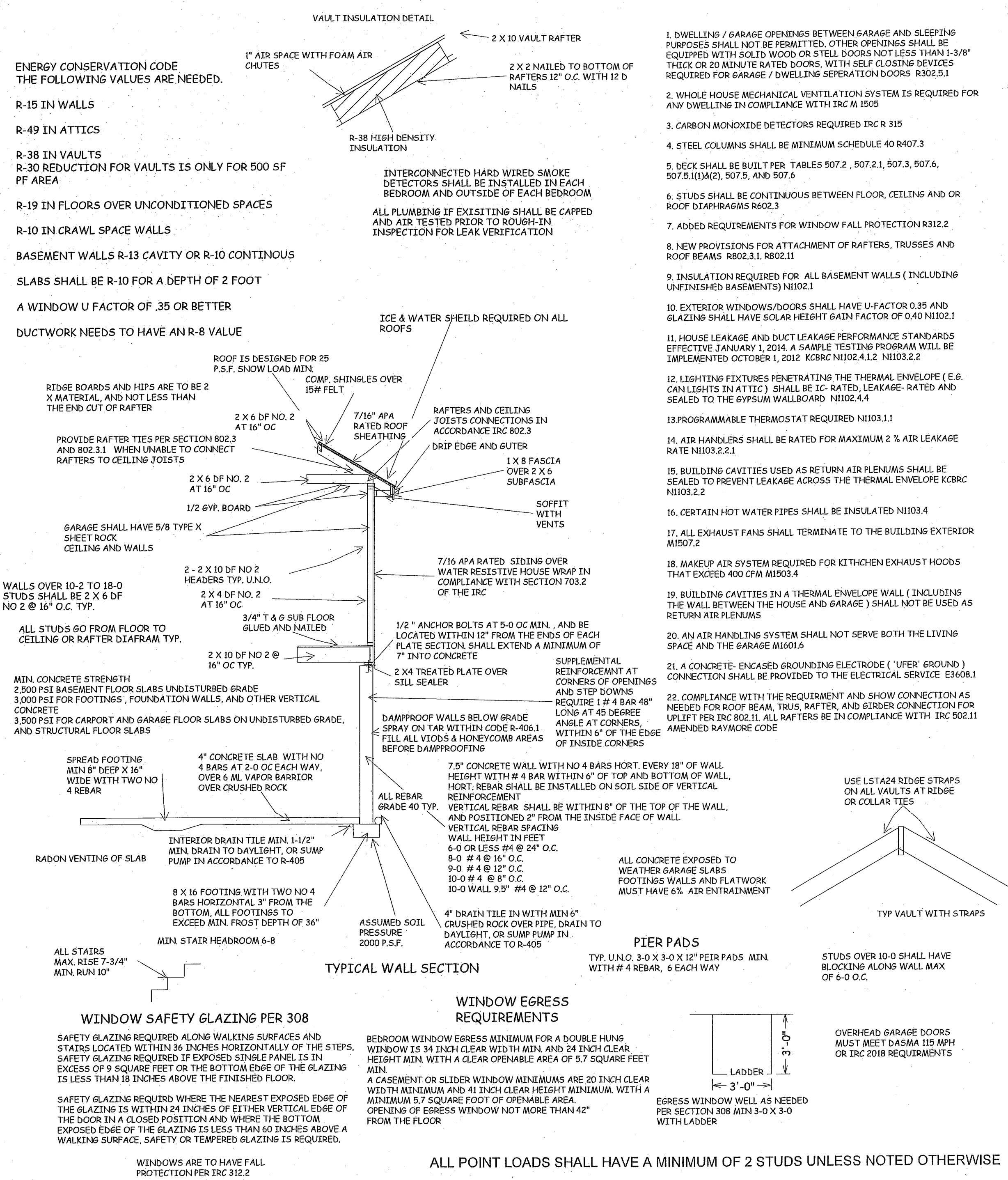
SCALE  
1/4" = 1-0

DATE  
7-27-20

PLAN NO.  
3149

SHEET NO.  
4 OF 6





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

RHOADS RES.  
REMODEL AND ADDITION  
1400 NE WOODS CHAPEL  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0

DATE  
7-27-20

PLAN NO.  
3149

SHEET NO.  
5 OF 6

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TABLE R602.10.3(1) BRACING REQUIREMENTS BASED ON WIND SPEED						
EXPOSURE CATEGORY B • 30-FOOT MEAN 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 (feet)	Method LIB <sup>b</sup>	Method GB	Methods DWB, WSP, SFB, PFB, FCF, HPS, BV-WSP, ABW, PFH, 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	5.0	4.5
		40	12.5	12.5	7.5	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	NP	6.0	5.0
		20	NP	NP	11.0	9.0
		30	NP	NP	15.5	13.0
		40	NP	NP	20.0	17.0
		50	NP	NP	24.5	21.0
		60	NP	NP	29.0	25.0

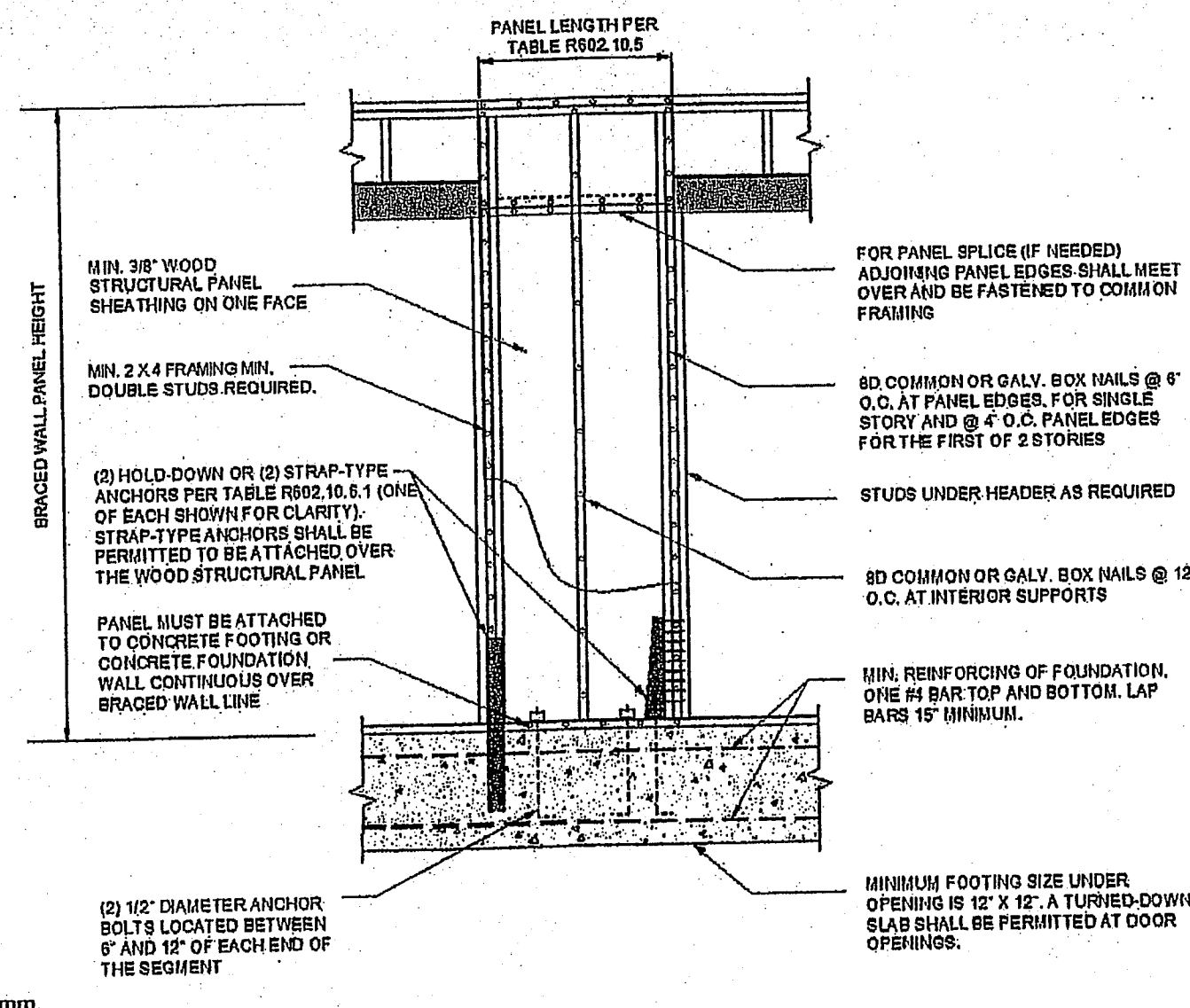


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL

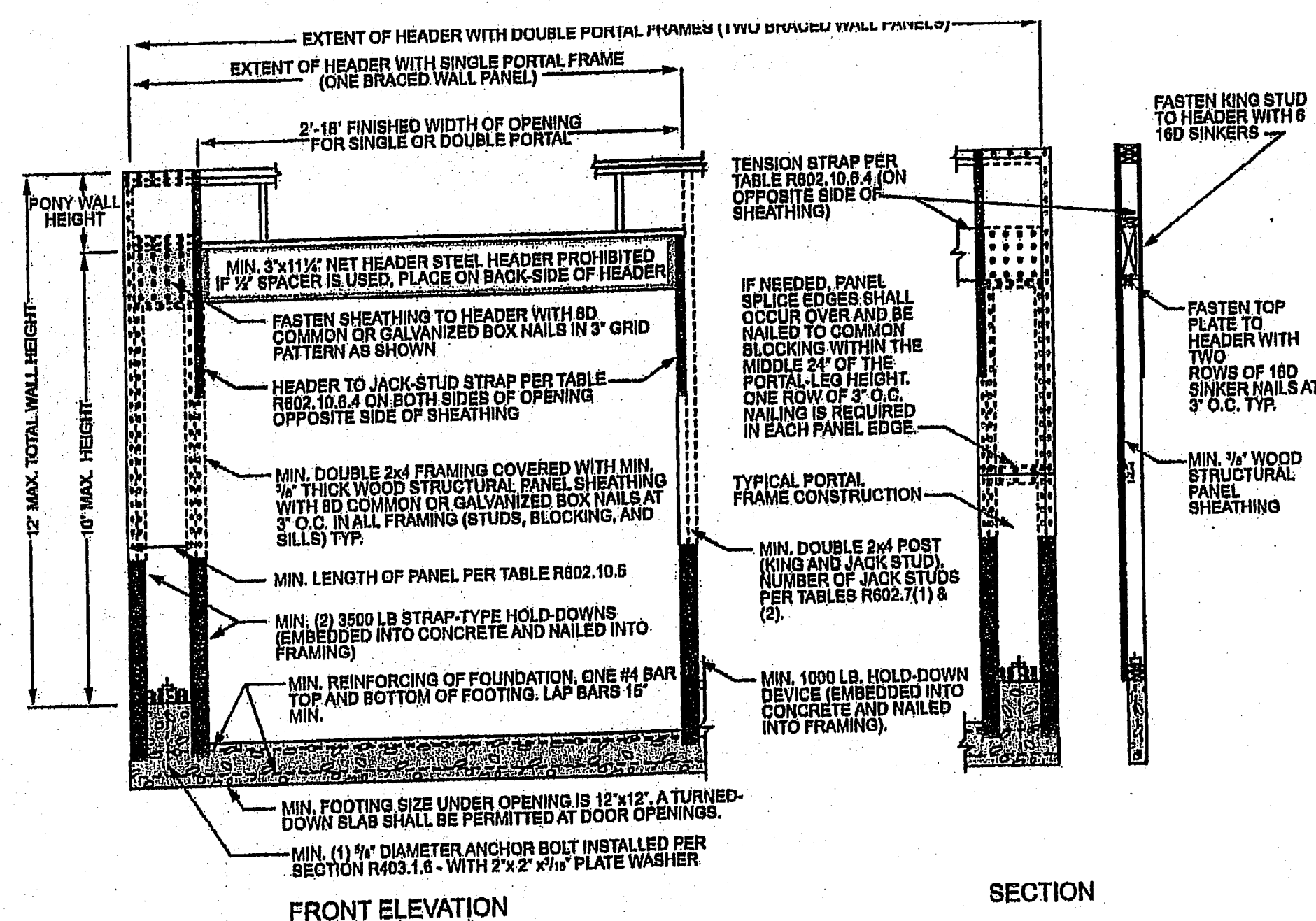


FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

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	1/2\"/>		2-8d (2 1/2\"/>	Per stud
WSP Wood structural panel (See Section R604)	3/8\"/>		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)	7/16\"/>	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)	3/8\"/>		For 3/8\"/>	3\"/>
FCF Portland cement plaster	See Section R703.7 for maximum 16\"/>		1 1/2\"/>	6\"/>
HPS Hardboard panel siding	7/16\"/>		0.092\"/>	4\"/>
ABW Alternate braced wall	3/8\"/>		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)	
	Wall Height						
	8 feet	9 feet	10 feet	11 feet	12 feet	Actual <sup>b</sup>	
DWB, WSP, SFB, PBS, FCF, 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 × 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	48
	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	Actual <sup>b</sup>
CS-WSP, CS-SFB	≤ 64	24	27	30	33	36	Actual <sup>b</sup>
	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					CONTRIBUTING LENGTH (inches)	
	8 feet	9 feet	10 feet	11 feet	12 feet		
PFH	Supporting roof only	16	16	16	Note c	Note c	48
	Supporting one story and roof	24	24	24	Note c	Note c	
PFG	SDC A, B and C	24	27	30	Note d	Note d	1.5 × Actual <sup>b</sup>
CS-PF	SDC A, B and C	16	18	20	Note e	Note e	1.5 × Actual <sup>b</sup>
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub>	16	18	20	Note e	Note e	

For SFI: 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 PFG 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	3/8\"/>		See Section R602.10.6.2	See Section R602.10.6.2
PFG Portal frame at garage	7/16\"/>		See Section R602.10.6.3	See Section R602.10.6.3
CS-WSP Continuously sheathed wood structural panel	3/8\"/>		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	3/8\"/>		See Method CS-WSP	See Method CS-WSP
CS-PF Continuously sheathed portal frame	7/16\"/>		See Section R602.10.6.4	See Section R602.10.6.4
CS-SFB <sup>c</sup> Continuously sheathed structural fiberboard	1/2\"/>		1 1/2\"/>	3\"/>

For SFI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.9 N/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 end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>1</sub> and D<sub>2</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.

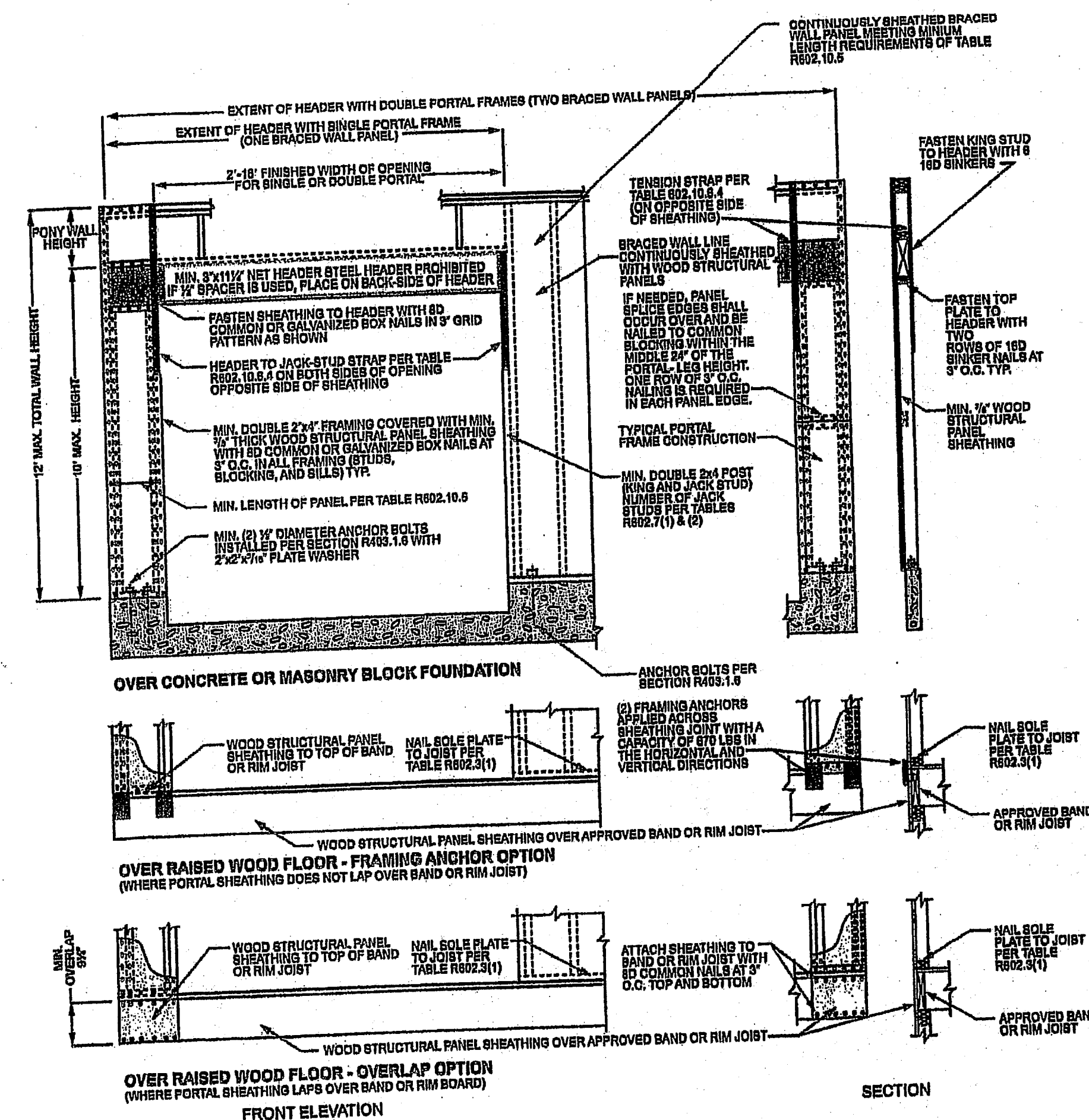


FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

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

RHOADS RES.  
REMODEL AND ADDITION  
1400 NE WOODS CHAPEL  
LEE SUMMIT MO

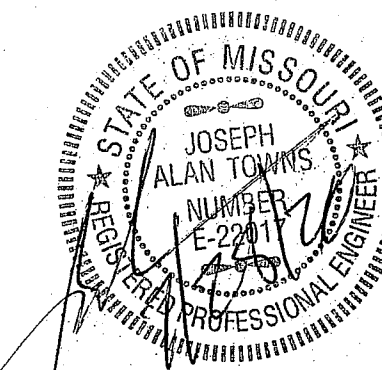
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