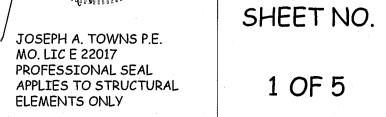
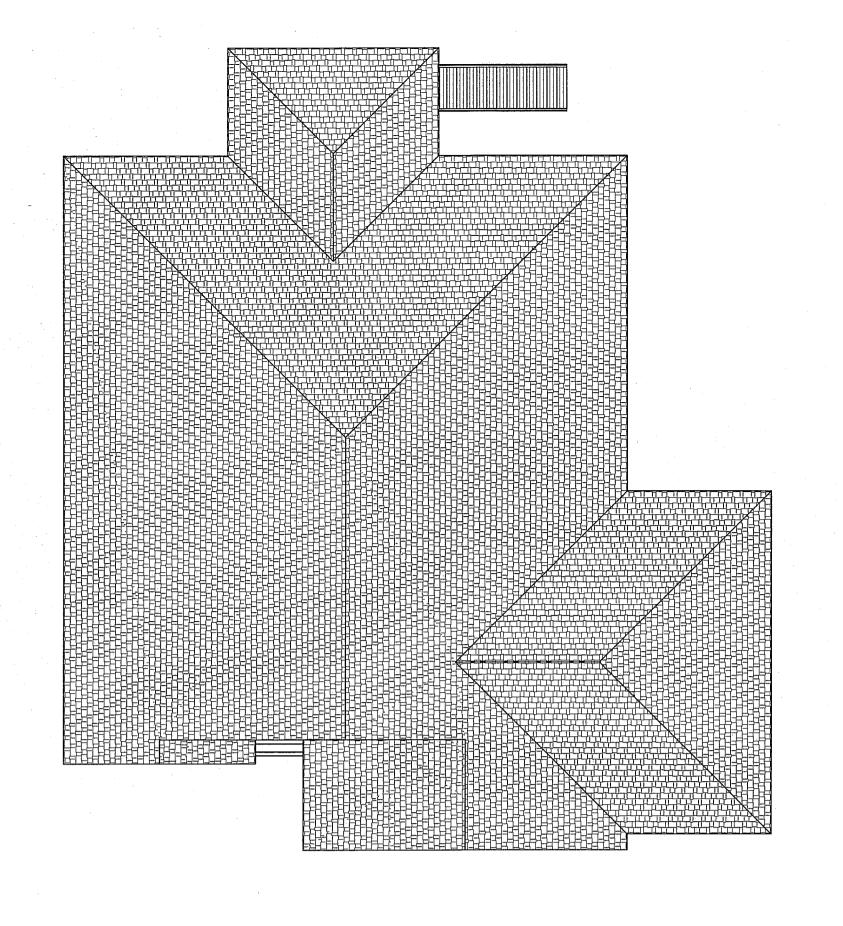
3297

1 OF 5

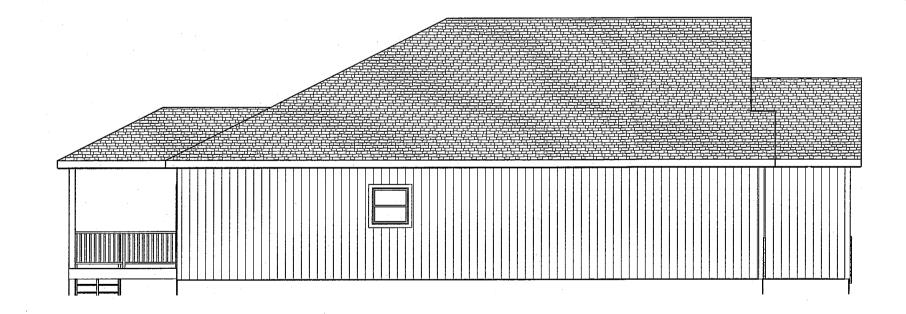




ROOF PLAN 1/8 = 1-0 ROOF PITCHES 6/12 TYP. RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP. HIPS AND RIDGES 2 X 8 DF NO 2 TYP.



FRONT EL.



LEFT EL. 1/8 = 1-0



REAR EL. 1/8 = 1-0



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW CODES ADMINISTRATION LEE'S SUMMIT, MISSOURI

RIGHT EL. 1/8 = 1-0

SCALE 1/4" = 1-0

DATE 4-15-21

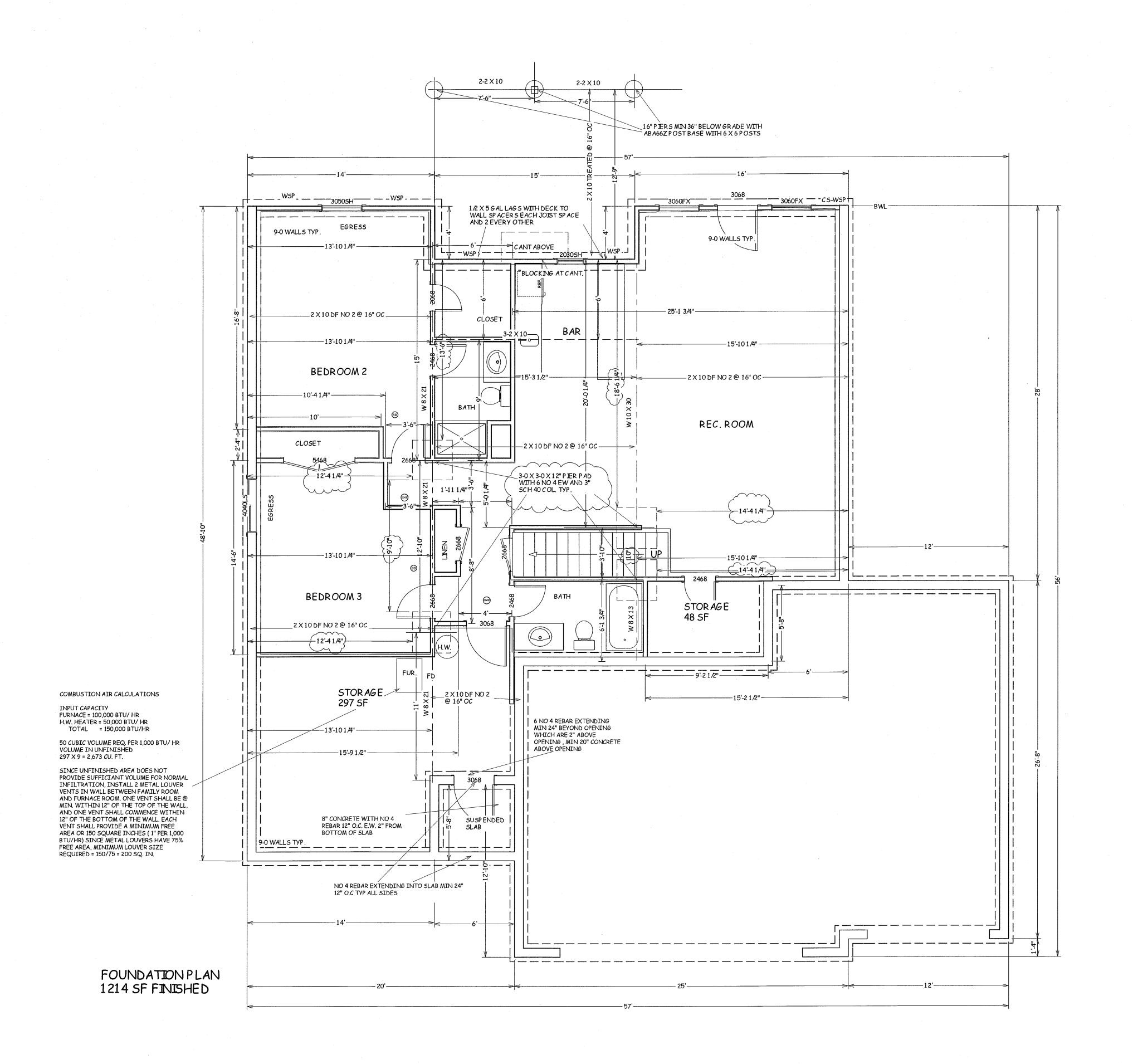
PLAN NO.

JOSEPH A. TOWNS P.E.

PROFESSIONAL SEAL
APPLIES TO STRUCTURAL
ELEMENTS ONLY

MO. LIC E 22017

3297



SCALE 1/4" = 1-0

DATE 4-15-21

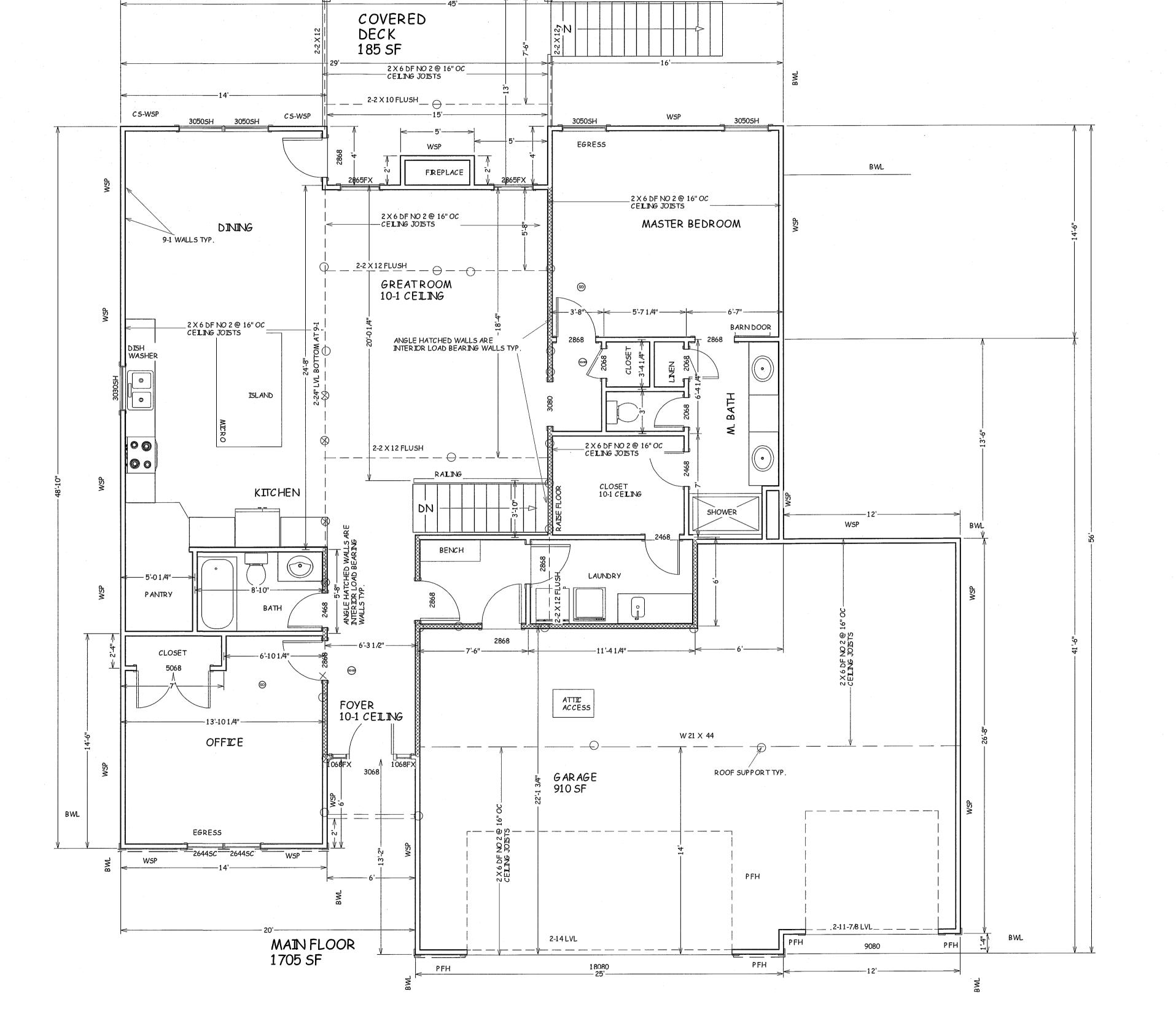
PLAN NO.

JOSEPH A. TOWNS P.E. MO. LIC E 22017 PROFESSIONAL SEAL APPLIES TO STRUCTURAL ELEMENTS ONLY 3297

DATE\_\_\_

SHEET NO.

RELEASE FOR CONSTRUCTION
A PHOTOD ON PLANS REVIEW
CODES ADMINISTRATION
LEE'S SUMMIT, MISSOURI

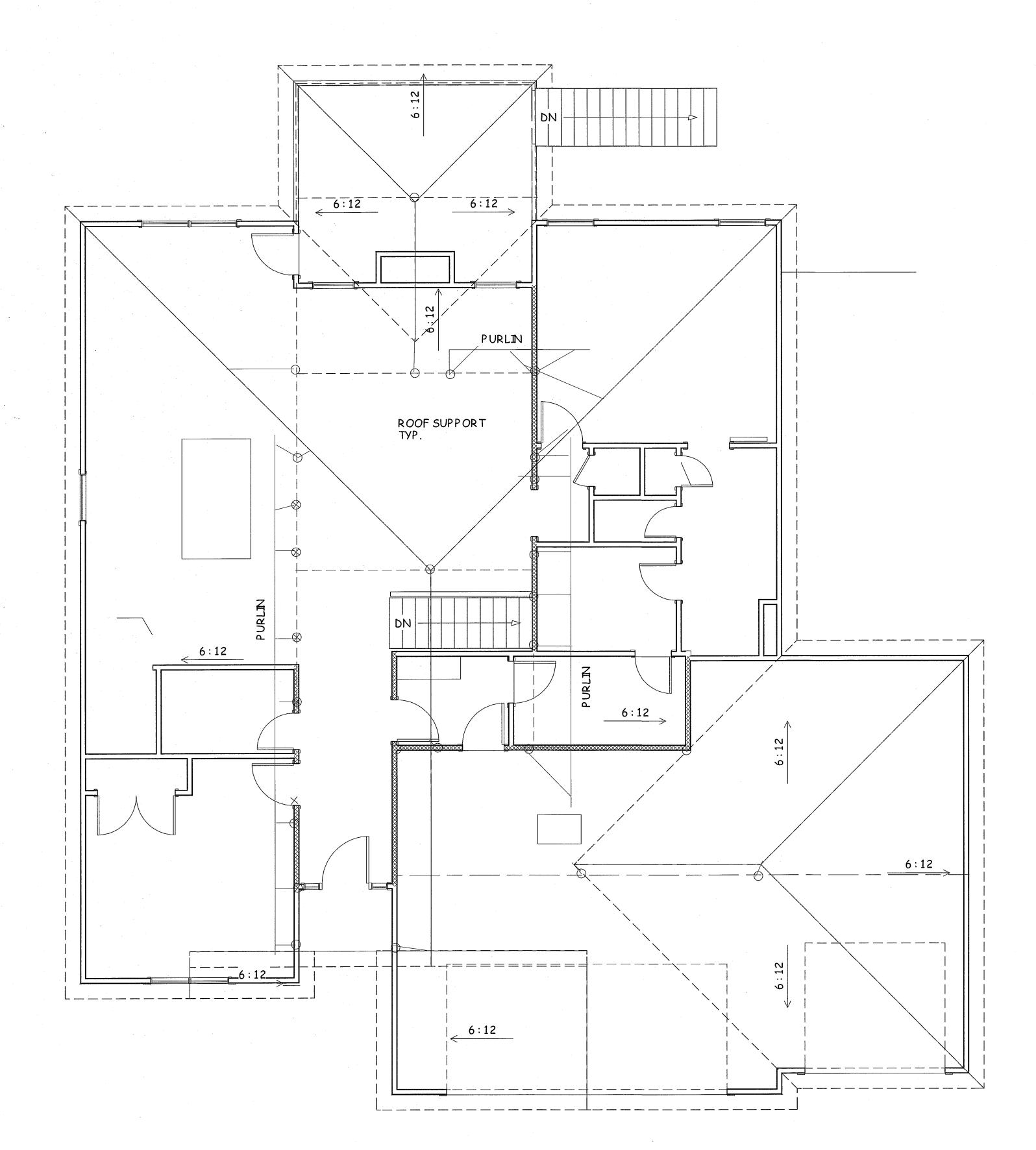


SHEET NO. RELEASE FOR CONSTRUCTION 4 CODES ADMINISTRATION APPLIES TO STRUCTURAL LEE'S SUMMIT, MISSOURI

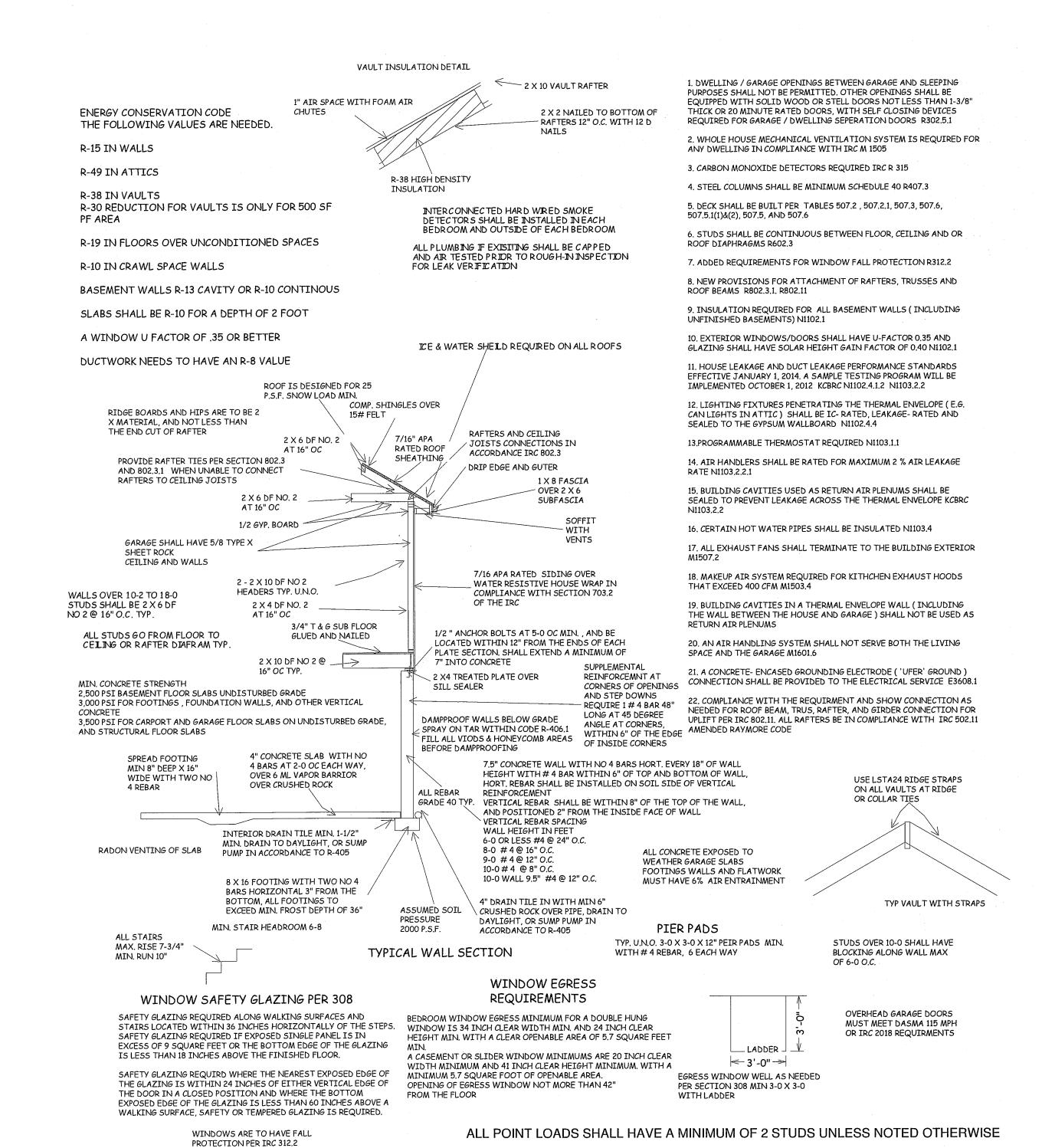
JOSEPH A. TOWNS P.E. MO. LIC E 22017

PROFESSIONAL SEAL

ELEMENTS ONLY



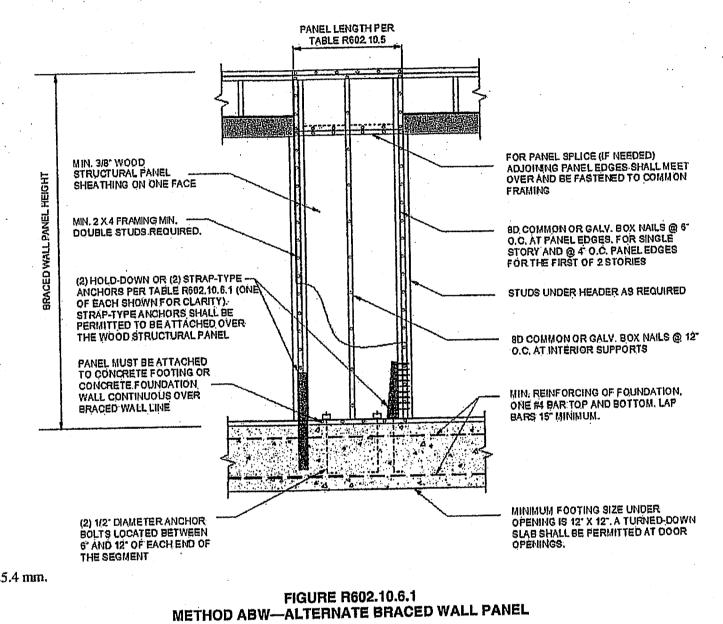
ROOFPURLINPLAN



3297

SHEET NO. AS NOTED ON PLANS REVIEW 500 SALMINISTRATION LEES SUMMIT, MISSOURI

DWB, WSP, SFB, PBS, PCP, HPS, SV-WSP, ABW, PFH, PFC, CS-SFB 12.5 15.0 18.0 14.0 17.0 20.0 34.5 13.0 27.0 17.0 21.0 43.0 25.0



Method LIBb

12.5

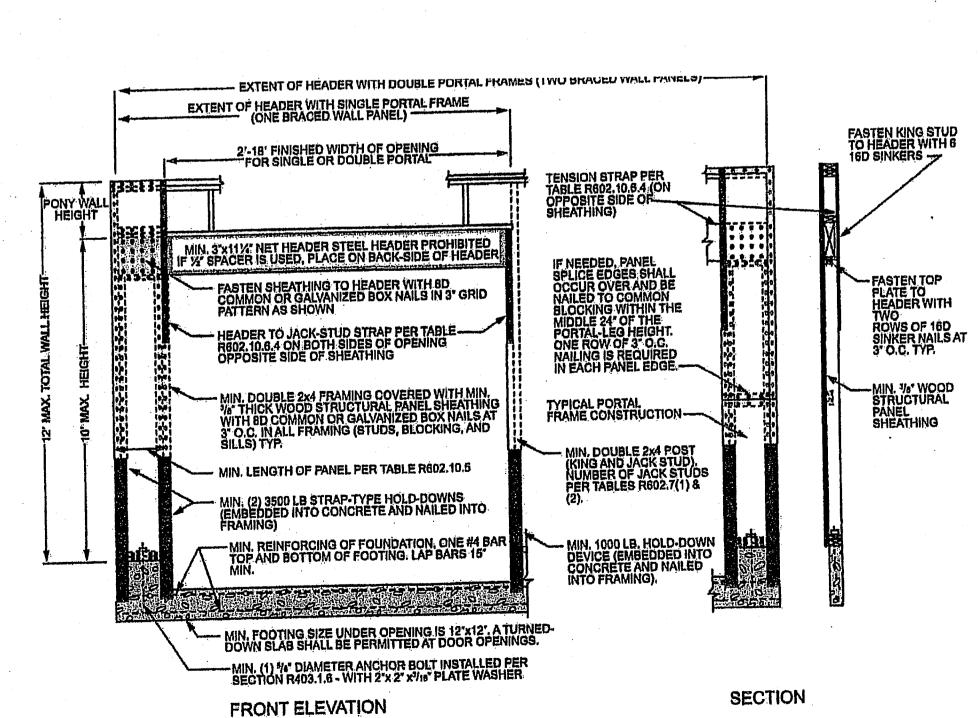
15.0

18.0

23.5

29.0

34.5



4 mm,	1	foot =	304.8	mm.
-------	---	--------	-------	-----

Design Wind Speed (mph)

≤ 115

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

			BRACING METHO	CONNECTION CRITERIA®			
MET	HODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB	1 × 4 wood or approved metal straps		Wood: 2-8d common nails or 3-8d (2 <sup>1</sup> / <sub>2</sub> " long x 0.113" dia.) nails	Wood: per stud and top and bottom plates		
	Let-in-bracing	at 45° to 60° angles for maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d $(2^{1}l_{2}^{"} \text{ long} \times 0.113^{"} \text{ dia.})$ nails or $2 - 1^{3}l_{4}^{"} \text{ long staples}$	Per stud		
	WSP		Togal I I I I I I I I I I I I I I I I I I I	Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	Wood structural panel (See Section R604)	³/ <sub>8</sub> "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
sthods	BV-WSP <sup>o</sup> Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/ <sub>16</sub> "	See Figure R602.10.6.5	8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts		
Intermittent Bracing Methods	SFB Structural fiberboard sheathing	1/2" or <sup>25</sup> / <sub>32</sub> " for maximum 16" stud spacing		1 <sup>1</sup> / <sub>2</sub> " long × 0.12" dia. (for <sup>1</sup> / <sub>2</sub> " thick sheathing) 1 <sup>3</sup> / <sub>4</sub> " long × 0.12" dia. (for <sup>25</sup> / <sub>32</sub> " thick sheathing) galvanized roofing nails	3" edges 6" field		
mittent				Nails or screws per Table R602.3(1) for exterior locations	panel locations: /		
Inter	GB Gypsum board	1/2"		Nails or screws per Table R702.3.5 for interior locations	edges (including top and bottom plates) 7" field		
,	PBS Particleboard sheathing (See Section R605)	<sup>3</sup> / <sub>8</sub> " or <sup>1</sup> / <sub>2</sub> " for maximum 16" stud spacing		For $^{3}/_{8}$ ", 6d common (2" long $\times$ 0.113" dia.) nails For $^{1}/_{2}$ ", 8d common (2' $^{1}/_{2}$ " long $\times$ 0.131" dia.) nails	3" edges 6" field		
	PCP Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		$1^{1}/_{2}$ " long, 11 gage, $7/_{16}$ " dia. head nails or $7/_{8}$ " long, 16 gage staples	members		
	HPS Hardboard panel siding	7/16" for maximum 16' stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 11/2" penetration into studs	4" edges 8" field		
	ABW Alternate braced wall	³/ <sub>8</sub> "		See Section R602.10.6.1	See Section R602.10.6.		

1			MINI	(luches) MNW FENG.	TH'		CONTRIBUTING LENGTH
mi (See Tab	THOD to R602.10.4)		,	Wall Height			(Inches)
·	<del> </del>	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB WSP SFB, P	BS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual <sup>6</sup>
21121112112	GB	48	48	48	53	58	Double sided = Actua Single sided = 0.5 × Act
	LIB	55	62	69	NP	NP	Actual <sup>6</sup>
	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48
ABW	SDC $D_0$ , $D_1$ and $D_2$ , ultimate design wind speed < 140 mph	32	32	34	NP	NP	
	CS-G	24	27	30	33	36	Actual <sup>b</sup>
	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	1
	92	43	37	35	35	36	
	96	48	41	38	36	36	_
CS-WSP, CS-SFB	100		44	40	38	38	Actual <sup>b</sup>
	104		49	43	40	39	Actual
	108		54	46	43	41	-
	112			50	45	43 45	-
	116			55	48	<u> </u>	<b>-</b>
	120			60	52	48	
	124				56	54	
	128				61	58	_
	132				66	62	$\dashv$
	136		<u> </u>			66	<u> </u>
	140	-				72	<u>-</u>
	144		<u> </u>	rtal header	holaht		
	METHOD	8 feet	9 feet	10 feet	11 feet	12 feet	-
(See 1	able R602,10.4) Supporting roof only	16	16	16	Note c	Note c	40
PFH	Supporting one story and roof	1	24	24	Note c	Note c	48
		24	27	30	Note d	Note d	
	PFG SDC A, B and C	16	18	20	Note e	Note e	
CS-PF	SDC D <sub>0</sub> , D <sub>1</sub> and D <sub>2</sub>	16	18	20	Note e	Note e	

NP = Not Permitted.
a. Linear interpolation shall be permitted.
and the state of the control of the state of
b. Use the actual length where it is greater than or equal to the infinitum religious.  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 to the permitted to be permitted to b
d. Maximum header height for PFG 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 te. 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 te.

METHODS, MATERIAL MINIMUM THICKNES				Connection Criteria'		
		MINIMUM THICKNESS	FIGURE	Faateners	Spacing	
, Memods	PFH Portal frame with hold-downs	3/g"		See Section R602.10.6.2	See Section R602.10.6.2	
memical bracing wealth	PFG Portal frame at garage	7/ <sub>16</sub> "		See Section R602.10.6.3	See Section R602.10.6.3	
Continuous Sheathing Methods	CS-WSP			Exterior sheathing per Table R602.3(3)	6" edges 12" field	
	Continuously sheathed wood structural panel	³/g"		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener	
	CS-G <sup>b,c</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/ <sub>16</sub> "		See Section R602.10.6.4	See Section R602.10.6.4	
	CS-SFB <sup>d</sup> Continuously sheathed structural fiberboard	1/2" or <sup>25</sup> / <sub>32</sub> " for maximum 16" stud spacing		1 $\frac{1}{2}$ " long × 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) 1 $\frac{3}{4}$ " long × 0.12" dia. (for $\frac{25}{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field	

TABLE R602.10.4—continued

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, I degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 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>0</sub>, D<sub>1</sub> and D<sub>2</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>0</sub>, 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.

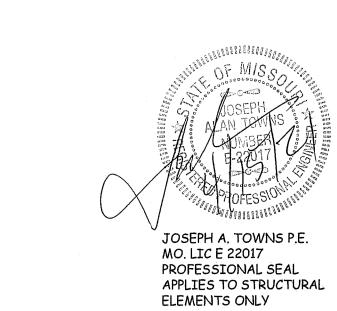
d. Method CS-SFB does not apply in Seismic Design Categories D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub>.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>0</sub> through D<sub>2</sub> only.

--- EXTENT OF HEADER WITH DOUBLE FORTAL FRAMES (TWO BRACED WALL PANEL) MIN. 3"X111/" NET HEADER STEEL HEADER PROHIBITEI "Y SPACER IS USED, FLACE ON BACK-SIDE OF HEADE OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION (WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE FORTAL SHEATHING LAPS OVER BAND OR RIM BOARD) FRONT ELEVATION

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

Figure R802.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



BRACE WALL DETAILS WIND SPEED 115 MPH WIND EXPOSURE A SEISMIC DESIGN CAEGORY A