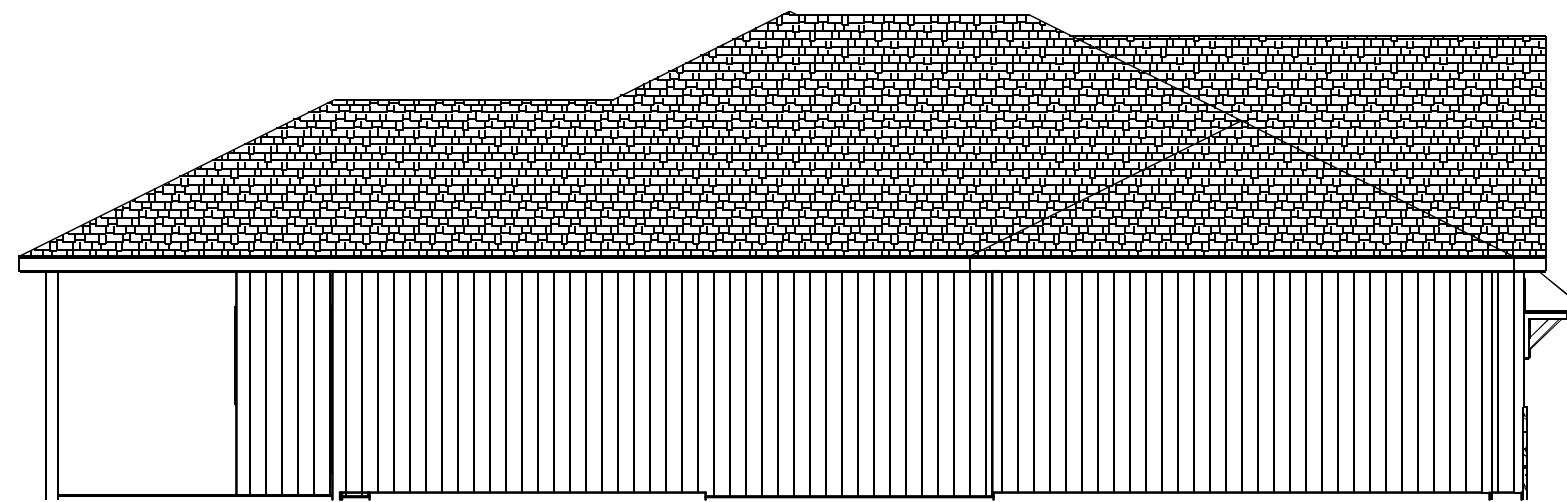


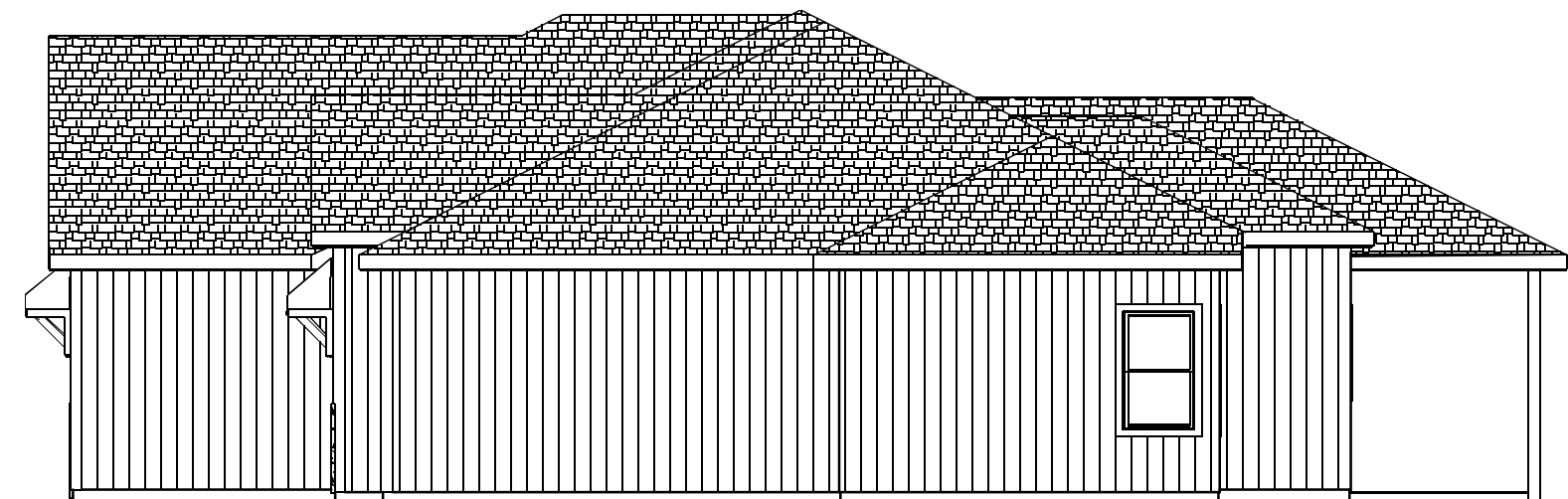


FRONT EL.
LAP AND STONE SIDING

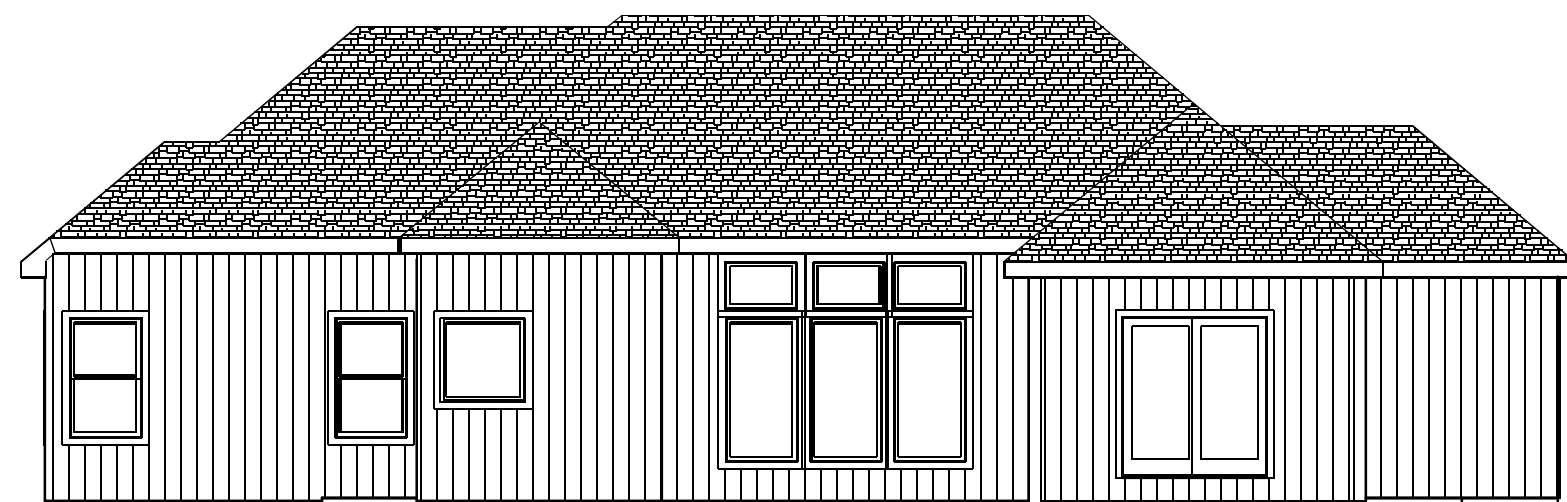
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/17/2024



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



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



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

3 SIDES LP PANEL SIDING

Review and approval
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Kansas City, MO 67116
913-481-3774



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

NICK ZVACEK HOMES
LOT 84 MONTICELLO
2303 SW SERENA PL
LEE SUMMIT MO

SCALE
1/4" = 1'-0"

DATE
4-12-24

PLAN NO.
4213

SHEET NO.
1 OF 6

**BUILD IN ACCORDANCE WITH
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NICK ZVACEK HOMES
LOT 84 MONTICELLO
2303 SW SERENA PL
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1/4" = 1'-0"

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PLAN NO.
4213

HEET NO
2 OF 6

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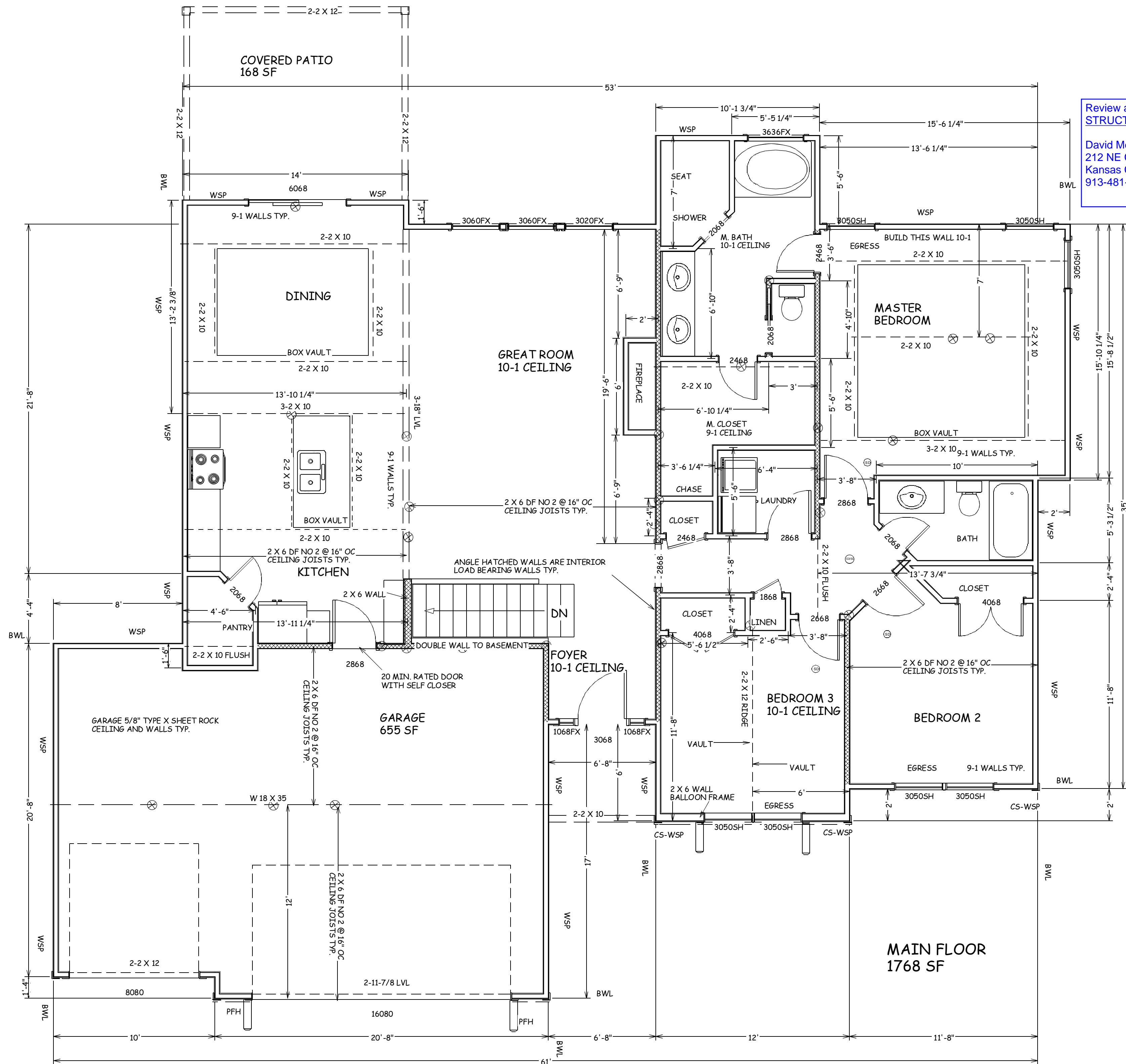
COMBUSTION AIR CALCULATIONS

INPUT CAPACITY
FURNACE = 100,000 BTU/ HR
H.W. HEATER = 50,000 BTU/ HR
TOTAL = 150,000 BTU/HR

50 CUBIC VOLUME REQ. PER 1,000 BTU/ HR
VOLUME IN UNFINISHED
 $706 \times 8 = 6.354 \text{ CU. FT.}$

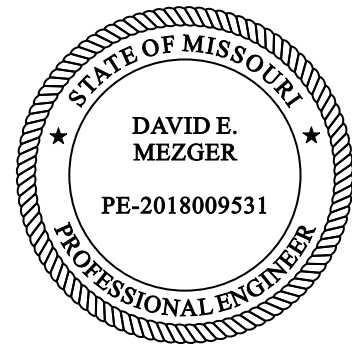
SINCE UNFINISHED AREA DOES NOT PROVIDE SUFFICIENT VOLUME FOR NORMAL INFILTRATION, INSTALL 2 METAL LOUVER VENTS IN WALL BETWEEN FAMILY ROOM AND FURNACE ROOM. ONE VENT SHALL BE @ MIN. WITHIN 12" OF THE TOP OF THE WALL, AND ONE VENT SHALL COMMENCE WITHIN 12" OF THE BOTTOM OF THE WALL. EACH VENT SHALL PROVIDE A MINIMUM FREE AREA OR 150 SQUARE INCHES (1" PER 1000 BTU/HR) SINCE METAL LOUVERS HAVE 75% FREE AREA, MINIMUM LOUVER SIZE REQUIRED = $150/75 = 200$ SQ. IN.

FOUNDATION PLAN
852 SF FINISHED



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NICK ZVACEK HOMES
LOT 84 MONTICELLO
2303 SW SERENA PL
LEE SUMMIT MO

SCALE
1/4" = 1'-0

DATE
4-12-24

PLAN NO.
4213

SHEET NO.
3 OF 6

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

NICK ZVACEK HOMES
LOT 84 MONTICELLO
2303 SW SERENA PL
LEE SUMMIT MO

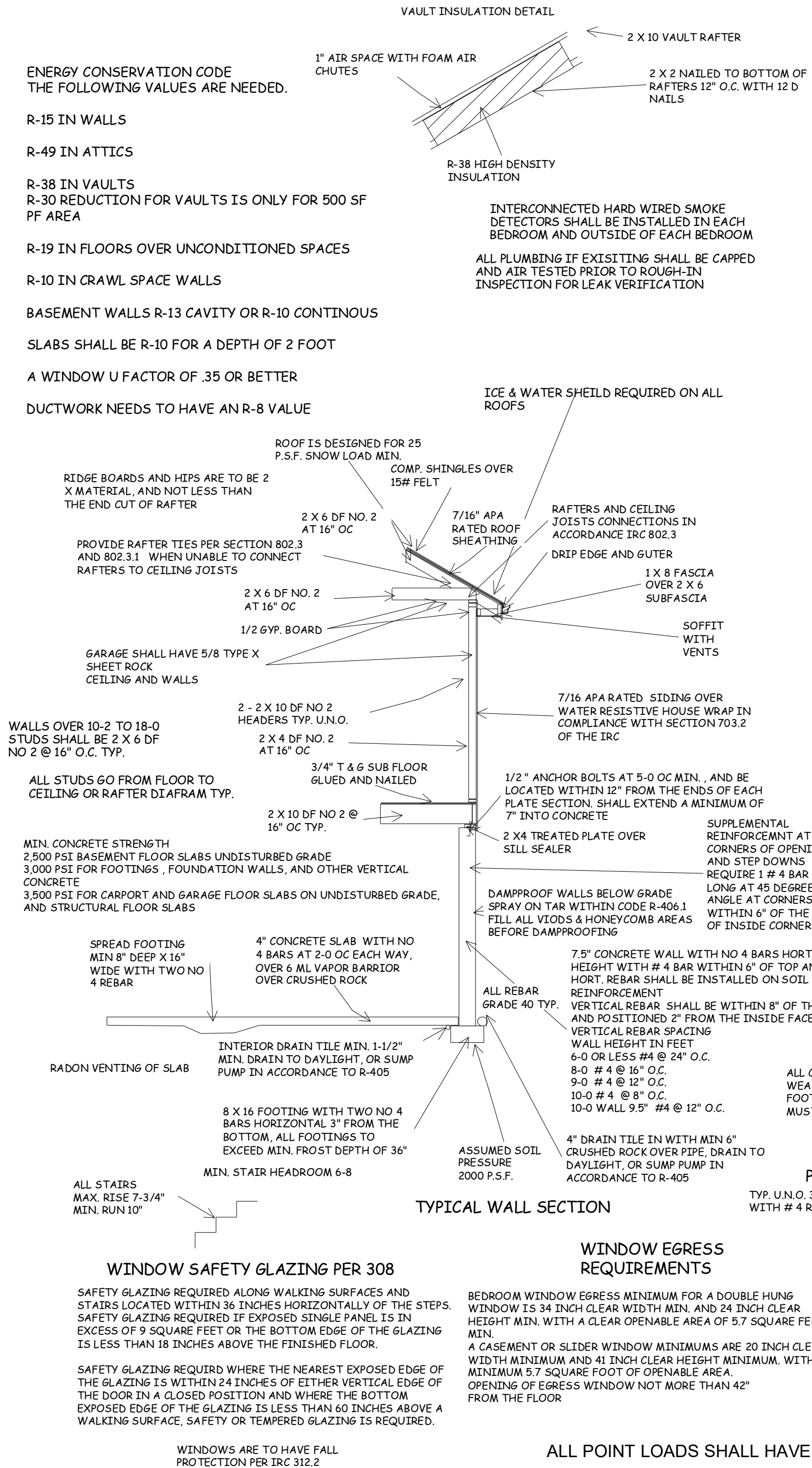
SCALE
1/4" = 1-0

DATE
4-12-24

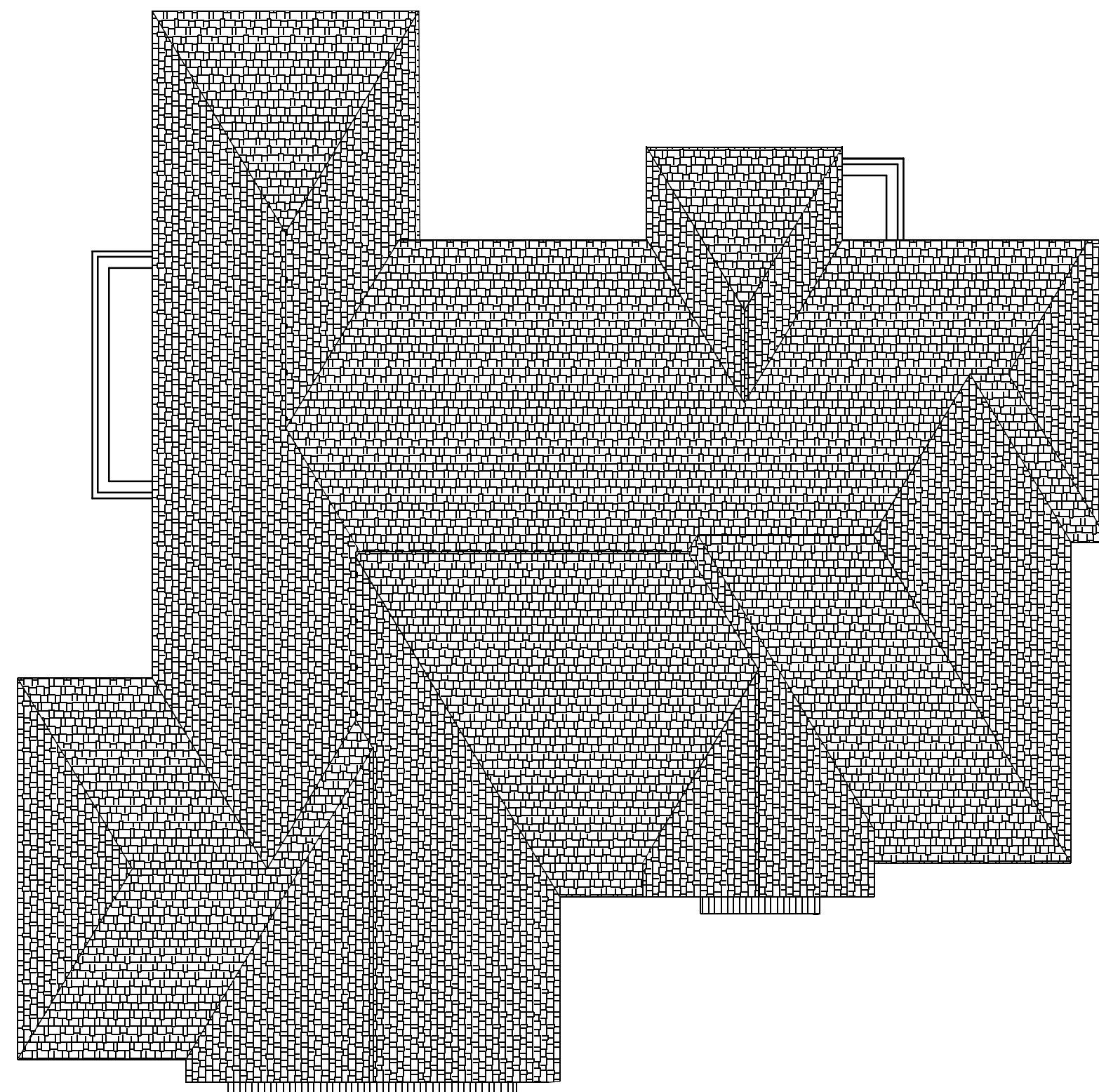
PLAN NO.
4213

SHEET NO.

4 OF 6



1. 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
2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR ANY DWELLING IN COMPLIANCE WITH IRC M 1505
3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315
4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3
5. 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
6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR ROOF DIAPHRAGMS R602.3
7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2
8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND ROOF BEAMS R802.3.1, R802.11
9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING UNFINISHED BASEMENTS) N1102.1
10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1
11. 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
12. 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
13. PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1
14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE RATE N1103.2.2.1
15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC N1103.2.2
16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4
17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR M1507.2
18. MAKEUP AIR SYSTEM REQUIRED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM M1503.4
19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS RETURN AIR PLENUMS
20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE M1601.6
21. A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND) CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1
22. COMPLIANCE WITH THE REQUIREMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11 AMENDED RAYMORE CODE



ROOF PLAN
1/8 = 1-0
RAFTERS 2 X 6 DF NO 2 @ 16" O.C.
HIPS AND RIDGES 2 X 8 DF NO 2
ROOF PITCH FRONT TO BACK 6/12 TYP.
ROOF PITCH SIDE TO SIDE 10/12 TYP.

Review and approval
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SCALE
1/4" = 1'-0

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SHEET NO.
5 OF 6

PURLIN LEG O.C. SUPPORT
2 X 6 DF NO 2 4'-0"
2 X 8 DF NO 2 5'-4"
2 X 10 DF NO 2 8'-0"
2 X 12 DF NO 2 9'-6"

SUPPORT LEG FOR PURLINS
2 X 4 8'-0"
2 X 4 W 2 X 4 T - BRACE 9'-7"
2 X 6 W 2 X 6 T - BRACE 17'-2"
2 X 8 W 2 X 6 T - BRACE 17'-4"

NOTE: LOCATE RAFTER TIES
AS NEAR AS PRACTICAL TO
THE TOP OF CEILING JOISTS

2 X 4 RAFTER
TIES AT EVERY
RAFTER TYP.

DOUBLE 2 X 12

2 X 6 @ 16" O.C.

RAFTER AND CEILING JOIST
CONNECTIONS SHALL COMPLY
WITH SECTIONS R802.5.22 OF
THE 2018 IRC.

SKIP ONE CEILING
JOISTS THEN
DOUBLE NEXT
CEILING JOISTS,
FOR RAFTER TIES

RAFTER TIES
SAME SIZE AS
CEILING
JOISTS

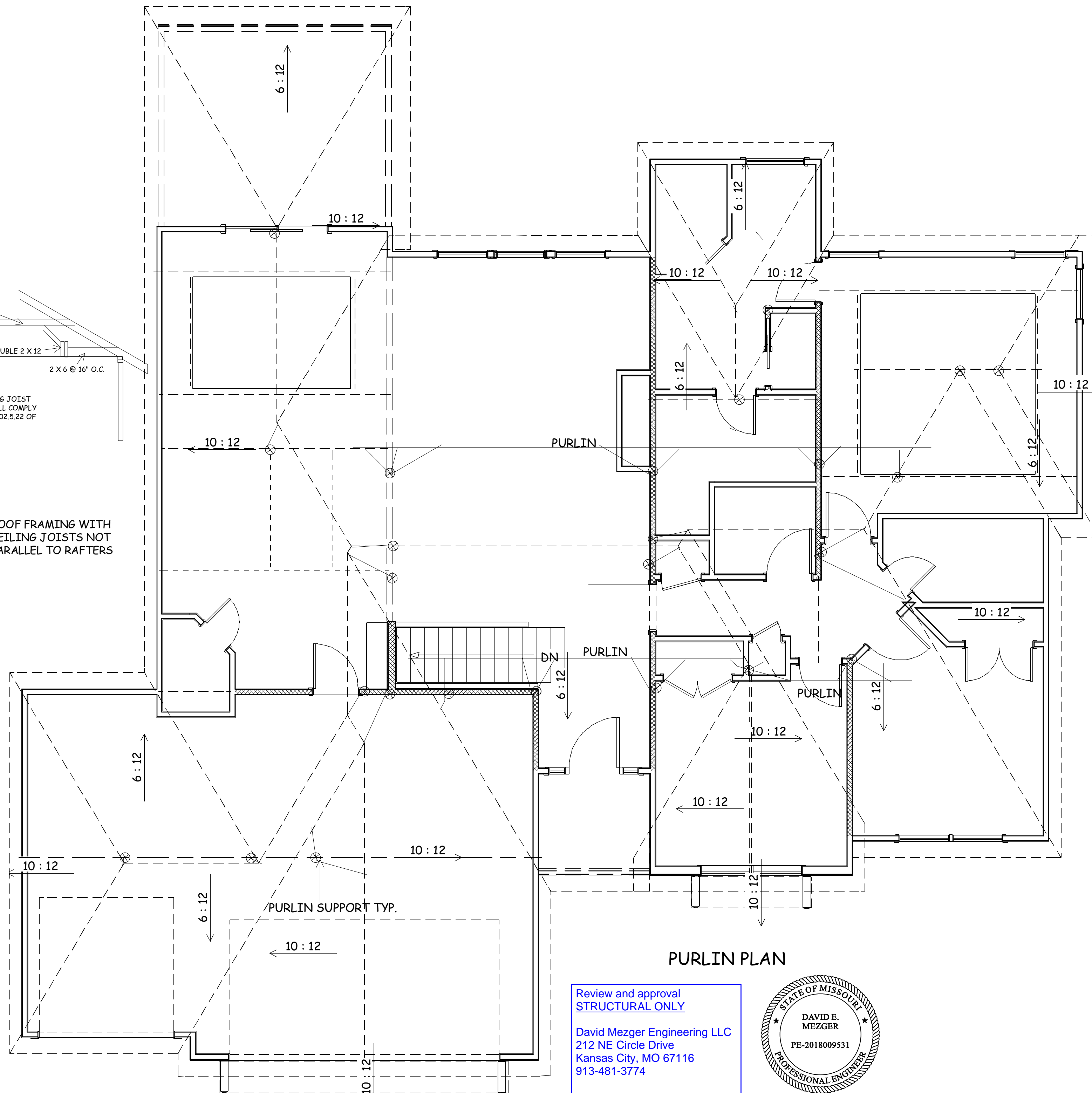
VAULT RAFTERS

SKIP ONE CEILING
JOISTS THEN DOUBLE
NEXT CEILING JOISTS,
FOR RAFTER TIES

RAFTER TIES
SAME SIZE AS
CEILING
JOISTS

RAFTER TIES

ROOF FRAMING WITH
CEILING JOISTS NOT
PARALLEL TO RAFTERS



PURLIN PLAN

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LEE SUMMIT MO

SCALE
1/4" = 1-0

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PLAN NO.

4213

SHEET NO.

6 OF 6

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 ^a			
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing ^b (feet)	Method LIB ^c	Method OB	Methods DWB, WSP, SFB, FBS, FCP, HFS, BV-WSP, ABW, PFH, FPG, CS-SFB
≤ 115		10	3.5	3.5	2.0
		20	6.5	6.5	3.5
		30	9.5	9.5	4.5
		40	12.5	12.5	6.0
		50	15.0	15.0	7.5
		60	18.0	18.0	9.0
		10	7.0	7.0	4.0
		20	12.5	12.5	6.5
		30	18.0	18.0	9.0
		40	23.5	23.5	11.5
		50	29.0	29.0	14.0
		60	34.5	34.5	17.0
		10	NP	10.0	6.0
		20	NP	18.5	11.0
		30	NP	27.0	15.5
		40	NP	35.0	20.0
		50	NP	43.0	24.5
		60	NP	51.0	29.0

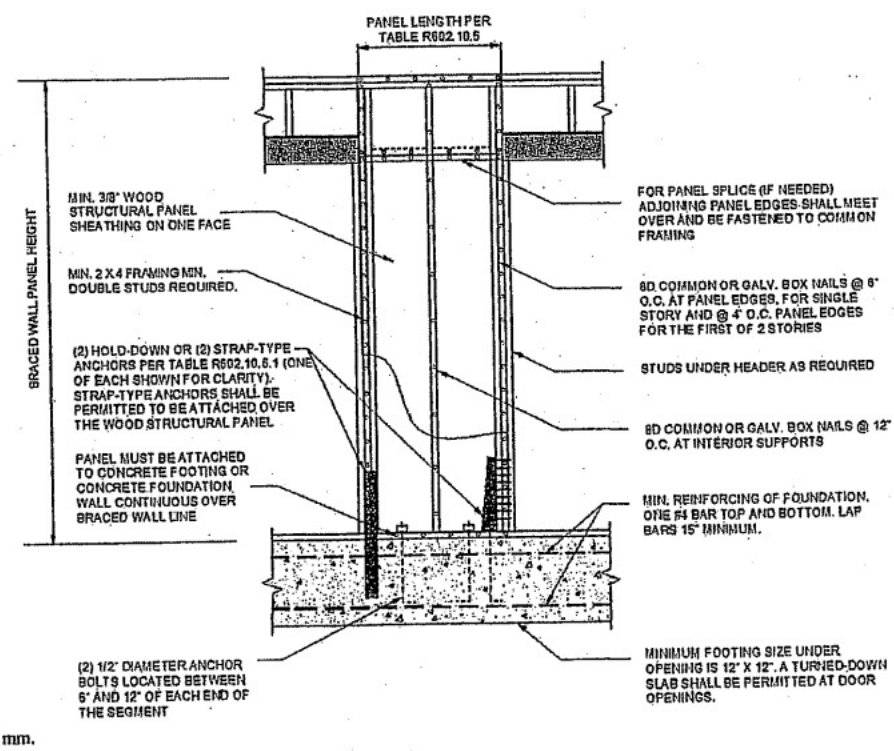


FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

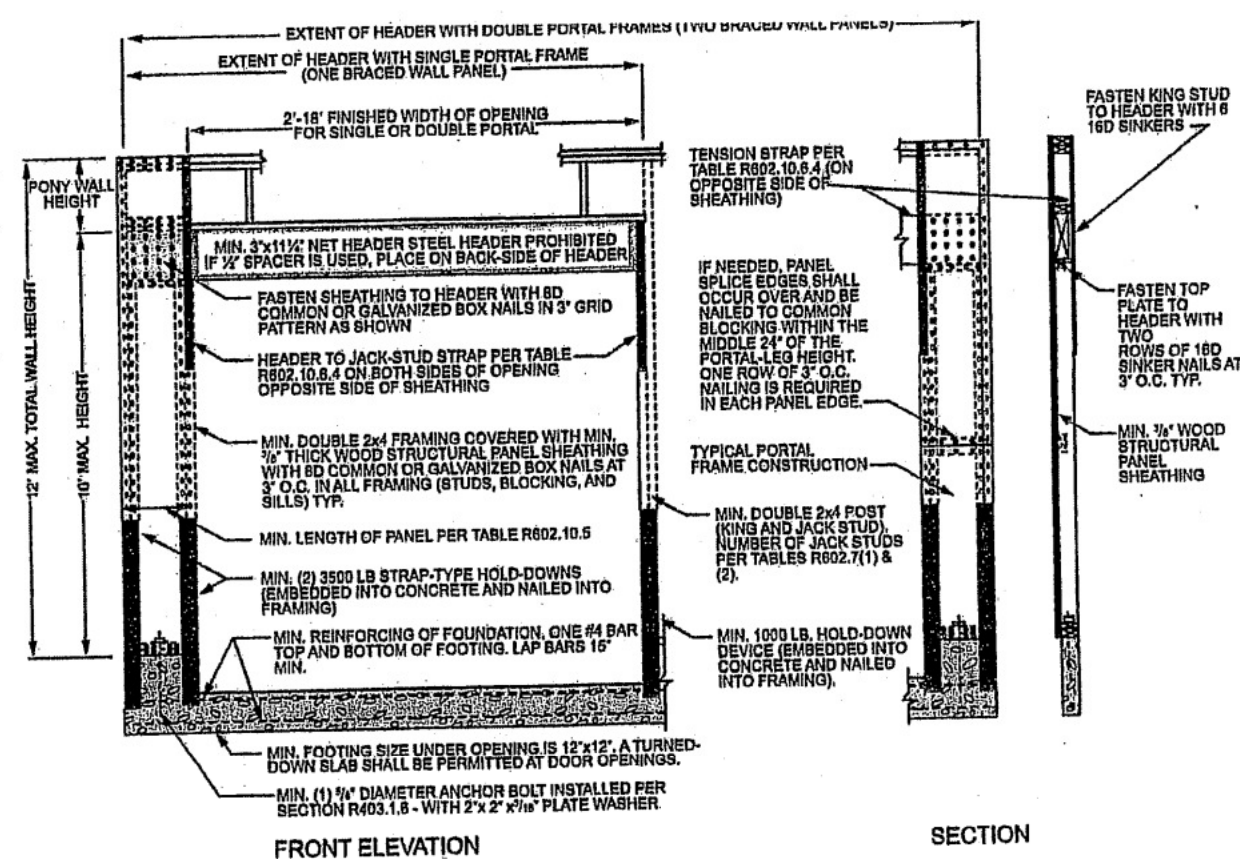


FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

TABLE R602.10.4 BRACING METHODS				
METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
			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)	3/4\"/>		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6\"/>
BV-WSP ^b 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\"/>
FBS Particleboard sheathing (See Section R605)	1/2\"/>		For 1/2\", 6d common (2\"/>	3\"/>
FCP Portland cement plaster	See Section R703.7 for maximum 16\"/>		1 1/2\"/>	6\"/>
HFS 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 ^a (inches)					CONTRIBUTING LENGTH (inches)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, FBS, FCP, 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
LIB	55	62	69	NP	NP	Actual ^b
ABW	SDC A, B and C, ultimate design wind speed ≤ 140 mph	28	32	34	38	42
	SDC D ₁ , D ₂ and D ₃ , ultimate design wind speed ≤ 140 mph	32	32	34	NP	NP
CS-G	Adjacent clear opening height (inches)	24	27	30	33	36
CS-WSP, CS-SFB	54	24	27	30	33	36
	64	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
PFH	Supporting one story and roof	24	24	24	Note c	Note c
FPG		24	27	30	Note d	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D ₁ , D ₂ and D ₃	16	18	20	Note e	Note e

For S₁: 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 FPG 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 ^a	
			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 ^b 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 ^c Continuously sheathed structural fiberboard	1/2\"/>		1 1/2\"/>	3\"/>

For S₁: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.88 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_s, D_s, D₃, and D₄.
b. Applies to grade next to garage door opening where supporting side and wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D_s, D₃, and D₄, 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_s, D₃, and D₄.
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D_s through D₄ only.

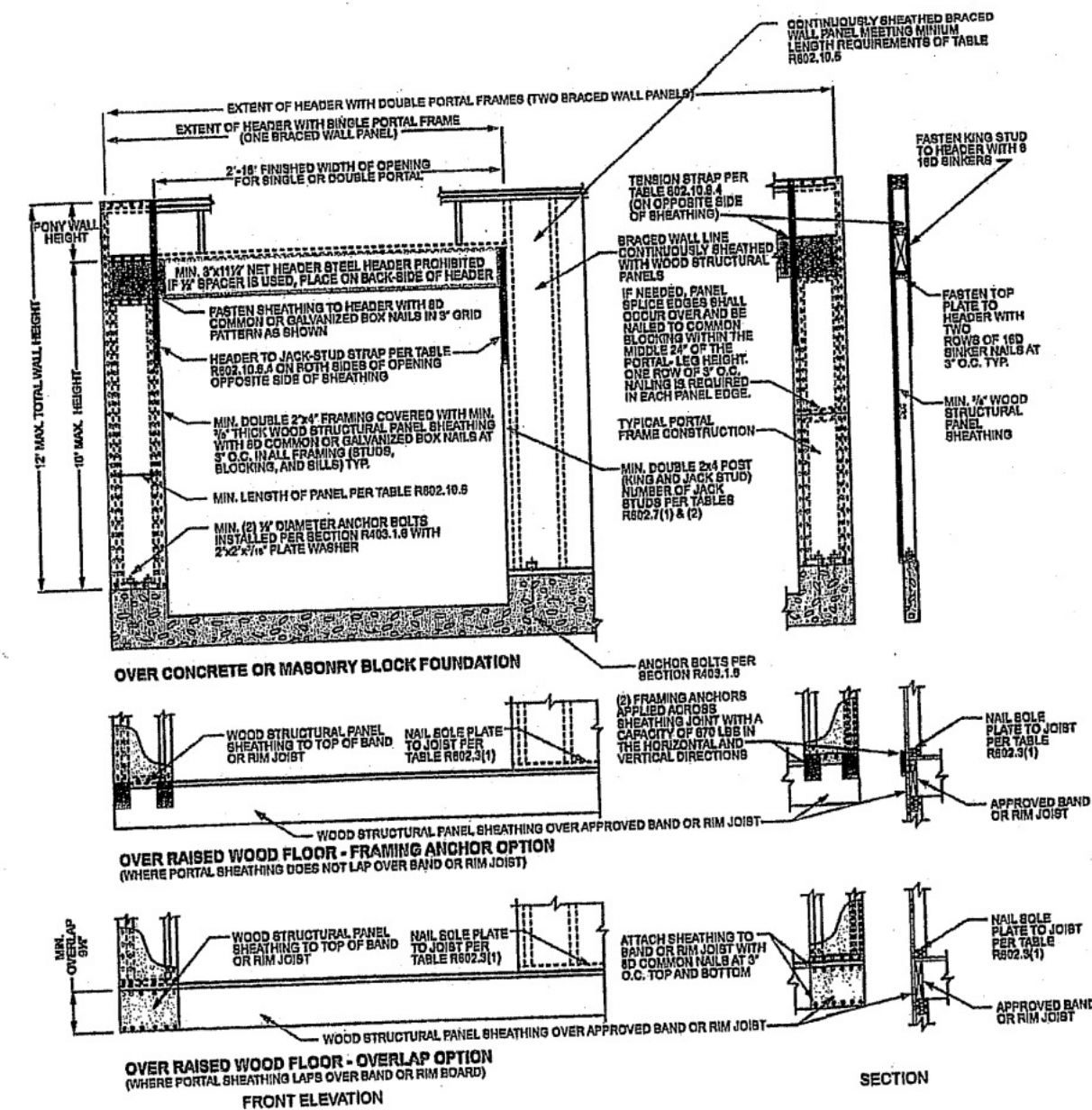


FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

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David Mezger Engineering LLC
212 NE Circle Drive
Kansas City, MO 67116
913-481-3774

