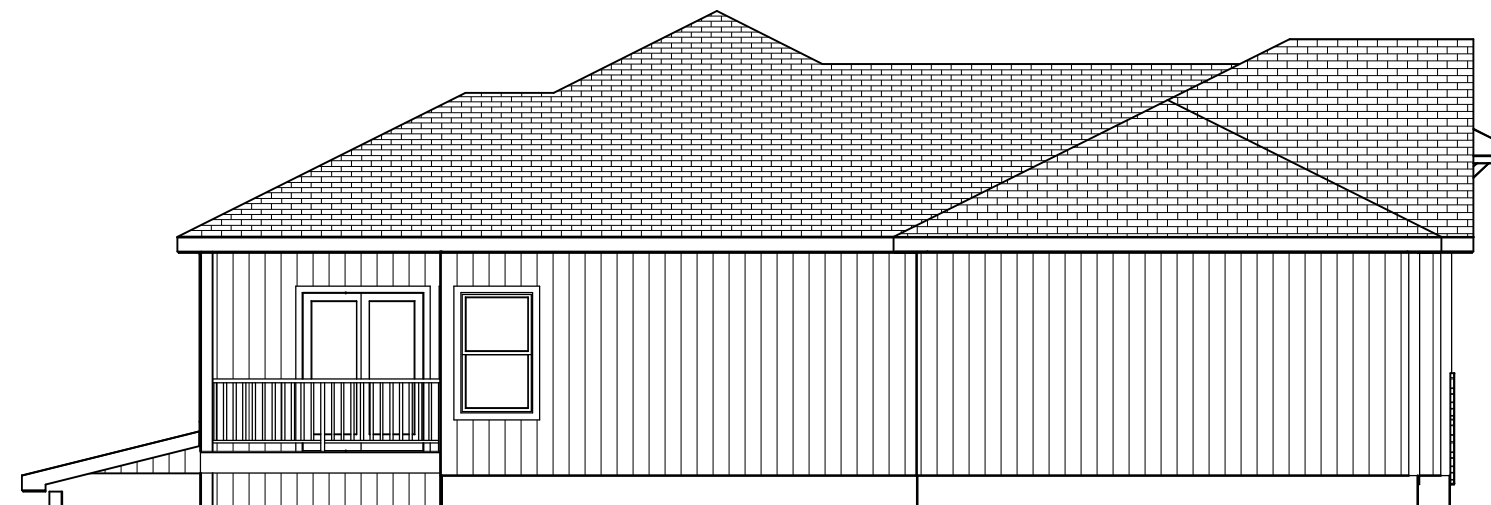
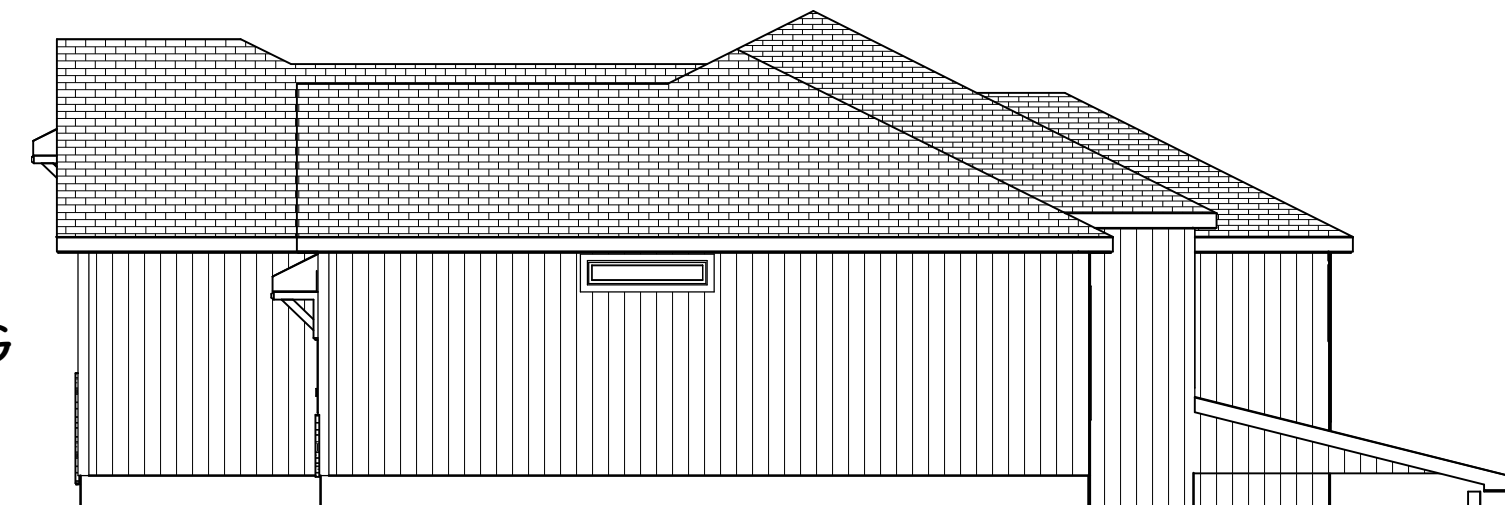




FRONT EL.  
LAP & STONE



LEFT EL.  
1/8 = 1-0



RIGHT EL.  
1/8 = 1-0

3 SIDES LP PANEL SIDING



REAR EL.  
1/8 = 1-0

Review and Approval  
Structural Only

David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022

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

BEHOME LLC  
LUETHJE RES.  
LOT 132 MONTICELLO  
4816 NE FREEHOLD CT  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

DATE  
10-15-22

PLAN NO.  
3575

SHEET NO.  
1 OF 5

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

BEHOME LLC  
LUETHJE RES.  
LOT 132 MONTICELLO  
4816 NE FREEHOLD CT  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
10-15-22

PLAN NO.

3575

SHEET NO.

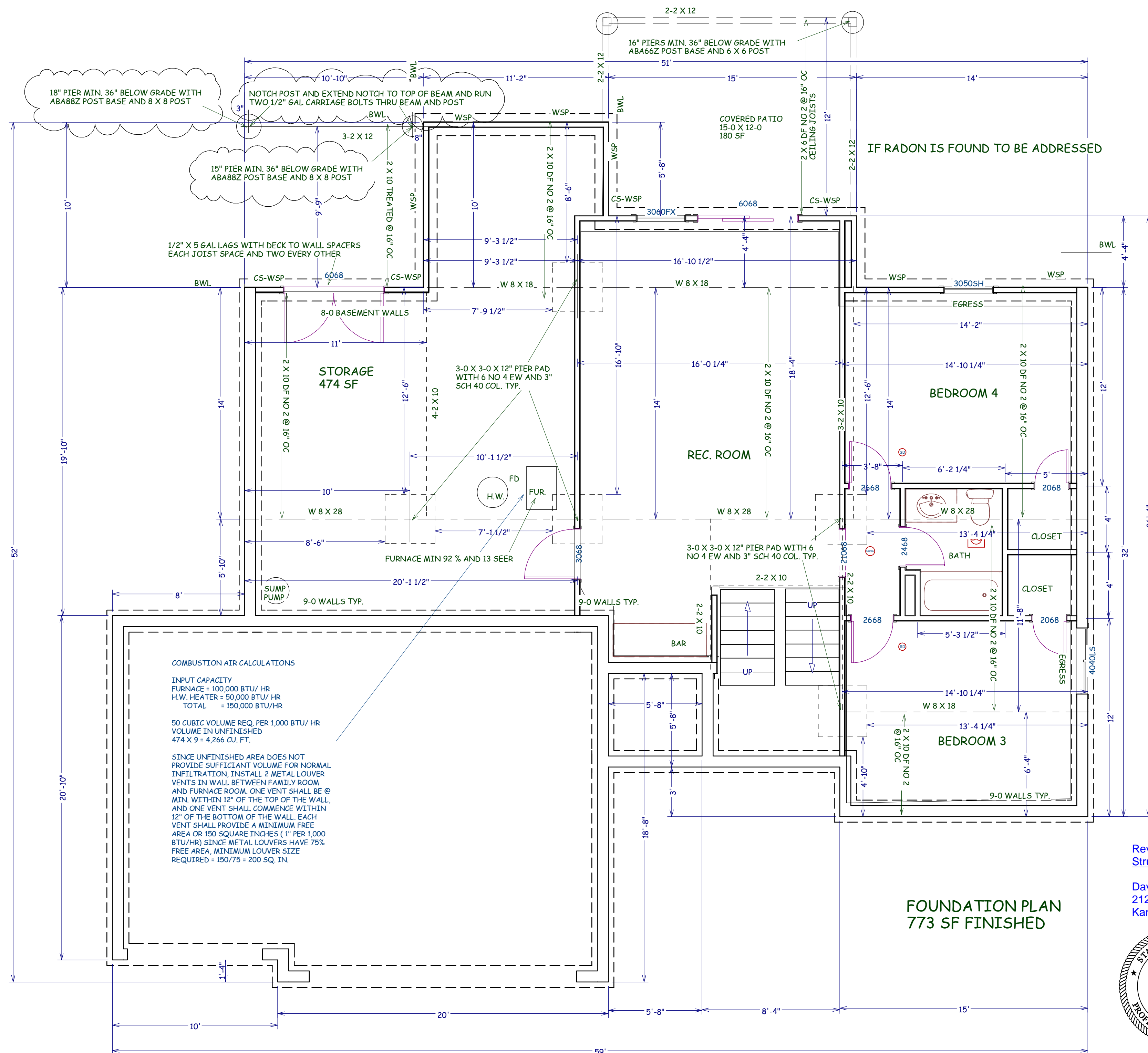
2 OF 5

SHEET NO.

2 OF 5

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022

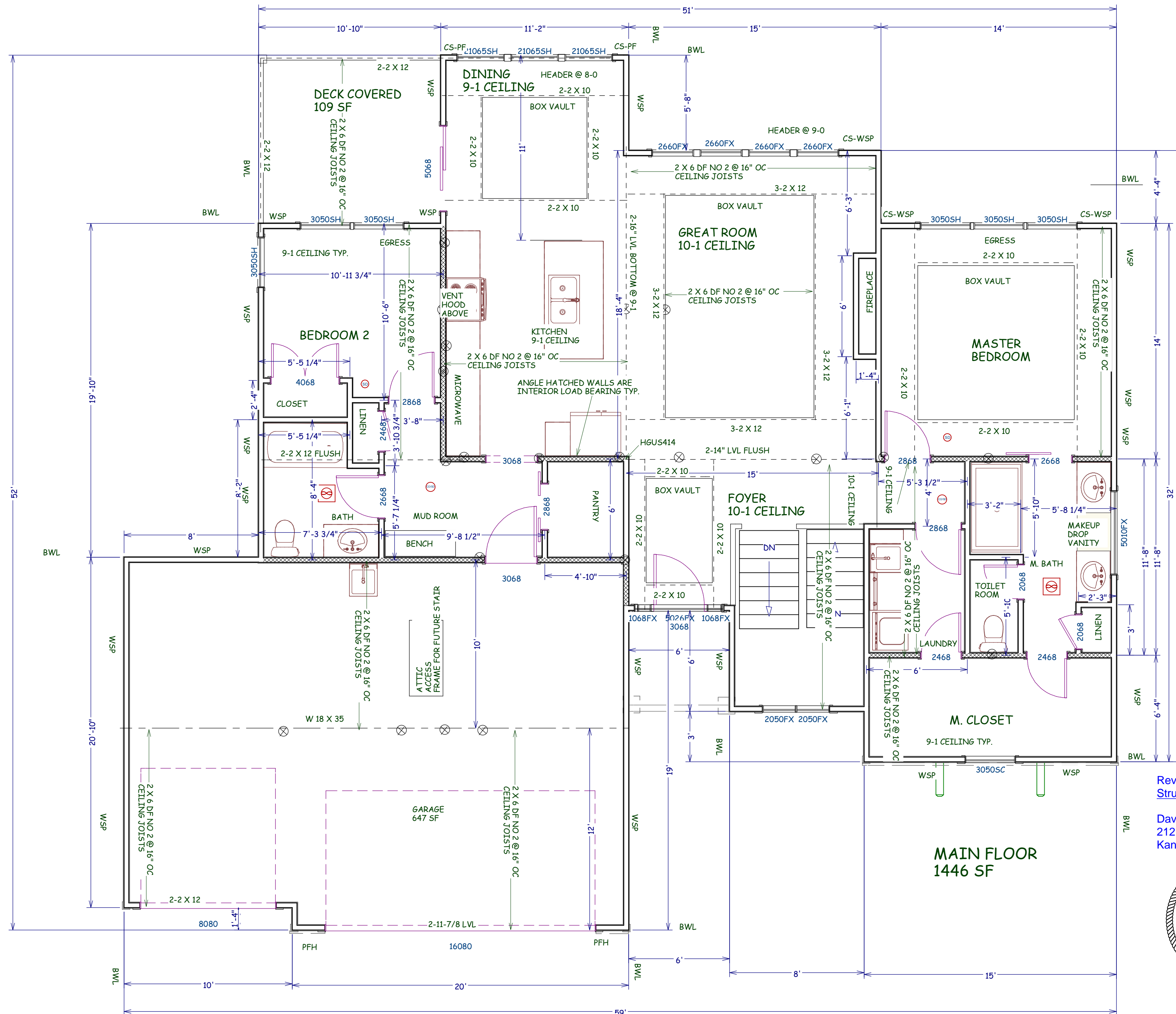
RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022



Review and Approval  
Structural Only

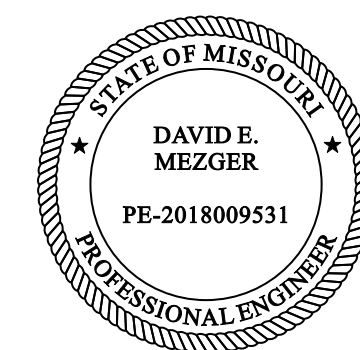
David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116





Review and Approval  
Structural Only

David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



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

BEHOME LLC  
LUETHJE RES.  
LOT 132 MONTICELLO  
4816 NE FREEHOLD CT  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

DATE  
10-15-22

PLAN NO.  
3575

SHEET NO.  
3 OF 5

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022



DUCTWORK NEEDS TO HAVE AN R-8 VALUE



RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022



EXPOSURE CATEGORY B 35-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 <sup>b</sup> (feet)	Method LFB <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

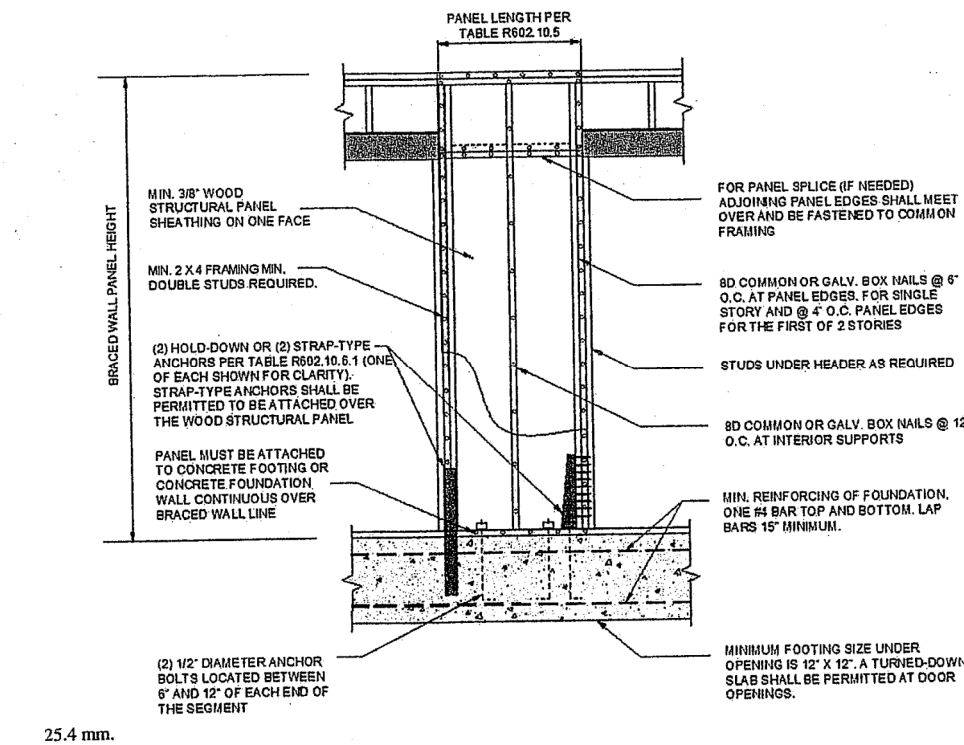


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL

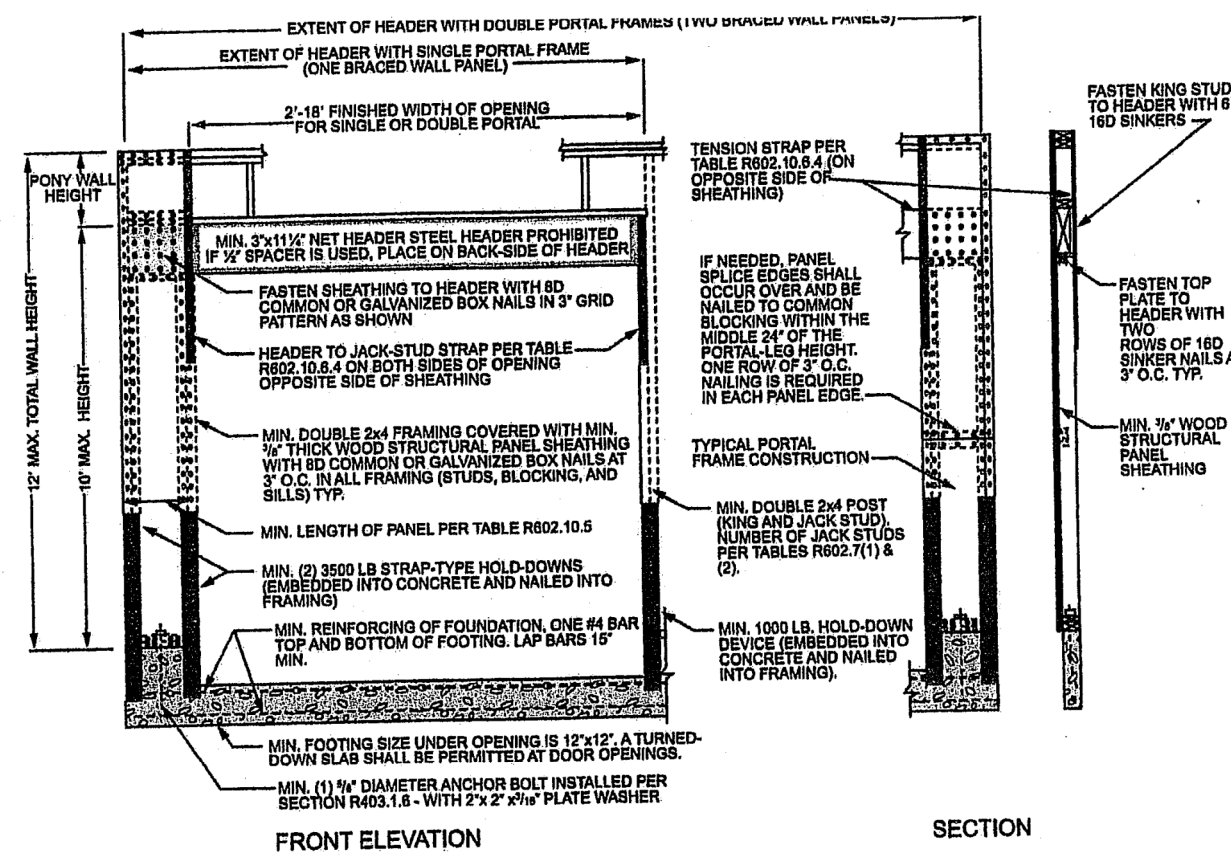


FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA <sup>a</sup>	
			Fasteners	Spacing
LFB 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\" at panel edges 12\" at intermediate supports 4\" at braced wall panel end posts
SFB Structural fiberboard sheathing	1/2\" or 3/8\" for maximum 16\" stud spacing		1 1/2\" long x 0.12\" dia. (for 1/2\" thick sheathing) 1 1/2\" long x 0.12\" dia. (for 3/8\" thick sheathing) galvanized roofing nails	3\" edges 6\" field
GB Gypsum board	1/2\"		Nails or screws per Table R702.3.5 for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7\" edges (including top and bottom plates) 7\" field
PFB Particleboard sheathing (See Section R605)	3/8\" or 1/2\" for maximum 16\" stud spacing		For 1/2\", 6d common (2\" long x 0.131\" dia.) nails For 3/8\", 8d common (2 1/2\" long x 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 7/16\" long, 16 gage staples	6\" o.c. on all framing members
HPS Hardboard panel siding	7/16\" 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	3/8\"		See Section R602.10.6.1	See Section R602.10.6.1

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, PFB, 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
LFB	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
CS-WSP, CS-SFB	≤ 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
METHOD (See Table R602.10.4)	Portal header height					
	8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	16	16	16	Note c	Note c
	Supporting one story and roof	24	24	24	Note c	Note c
PFG		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 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.

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\" edges 12\" field Varies by fastener
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\" or 3/8\" for maximum 16\" stud spacing		1 1/2\" long x 0.12\" dia. (for 1/2\" thick sheathing) 1 1/2\" long x 0.12\" dia. (for 3/8\" thick sheathing) galvanized roofing nails	3\" edges 6\" field

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 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>, 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.

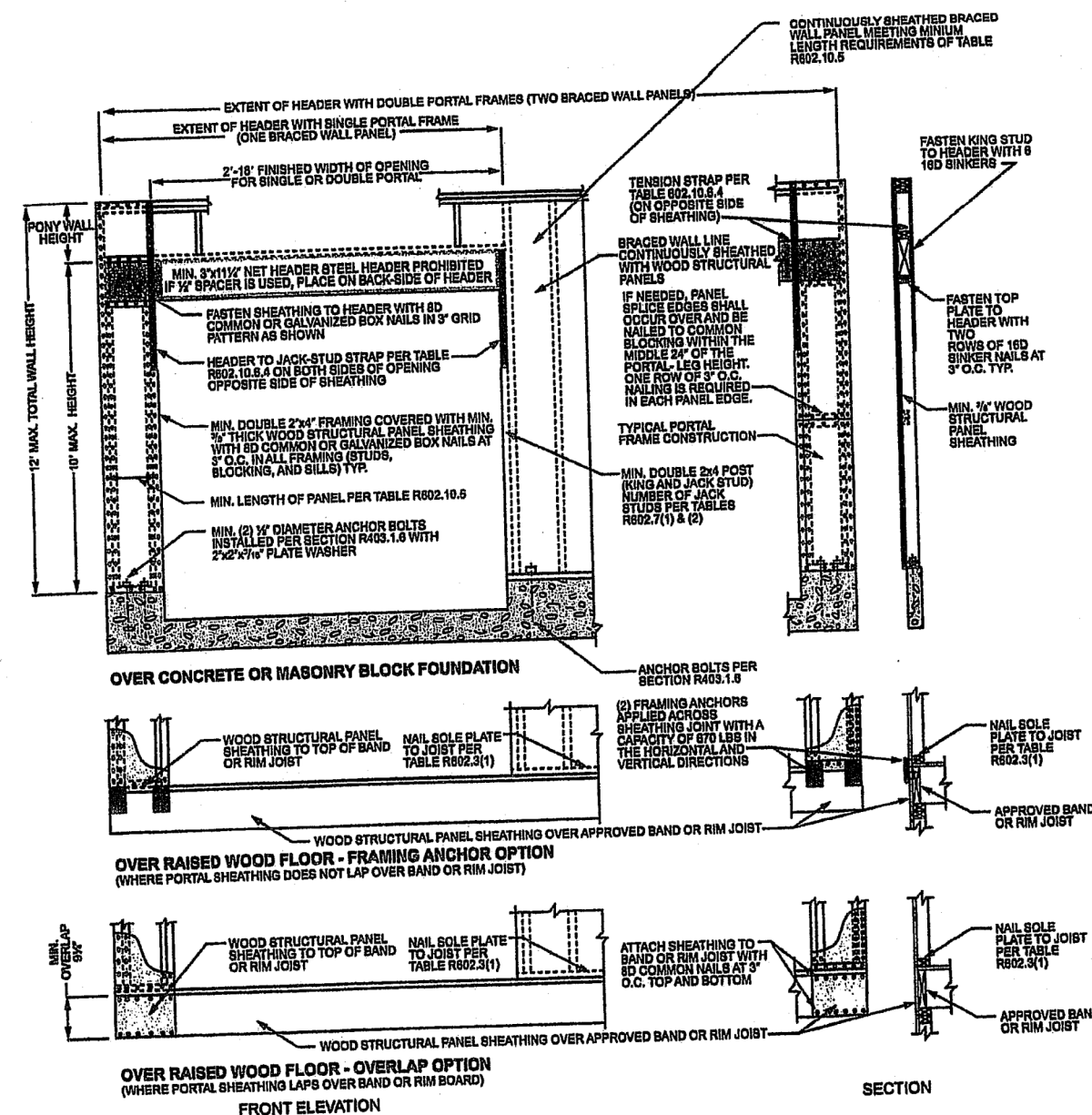


FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



Review and Approval  
Structural Only  
  
David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116

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

BEHOME LLC  
LUETHJE RES.  
LOT 132 MONTICELLO  
4816 NE FREEHOLD CT  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
10-15-22

PLAN NO.

3575

SHEET NO.

5 OF 5

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/09/2022