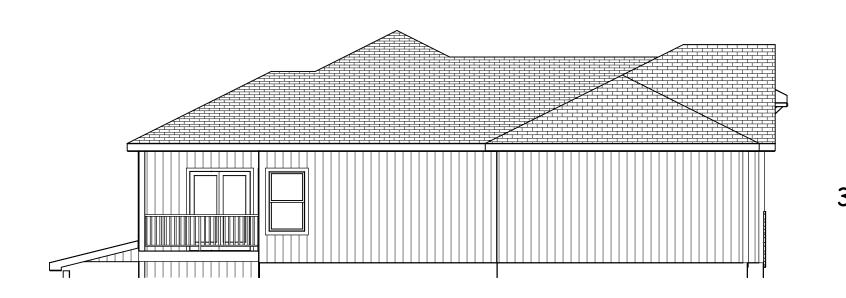
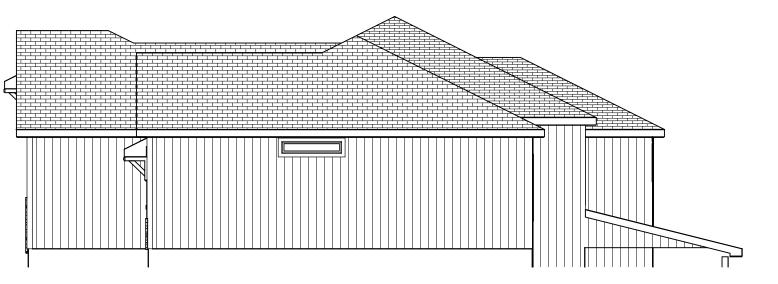


FRONT EL. LAP & STONE



3 SIDES LP PANEL SIDING



RIGHT EL.

1/8 = 1-0

LEFT EL. 1/8 = 1-0



REAR EL. 1/8 = 1-0



David Mezger Engineering LLC 212 NE Circle Dr. Kansas City, MO 64116 Project No. 2135

AS NOTED FOR PLAN REVIEW

08/17/2021

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 8-9-21

PLAN NO.

3575

SHEET NO.

1 OF 5

David Mezger Engineering LLC 212 NE Circle Dr. Kansas City, MO 64116 Project No. 2135 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 8-9-21

PLAN NO.

3575

SHEET NO.

2 OF 5

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 08/17/2021

David Mezger Engineering LLC 212 NE Circle Dr. Kansas City, MO 64116 Project No. 2135 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 8-9-21

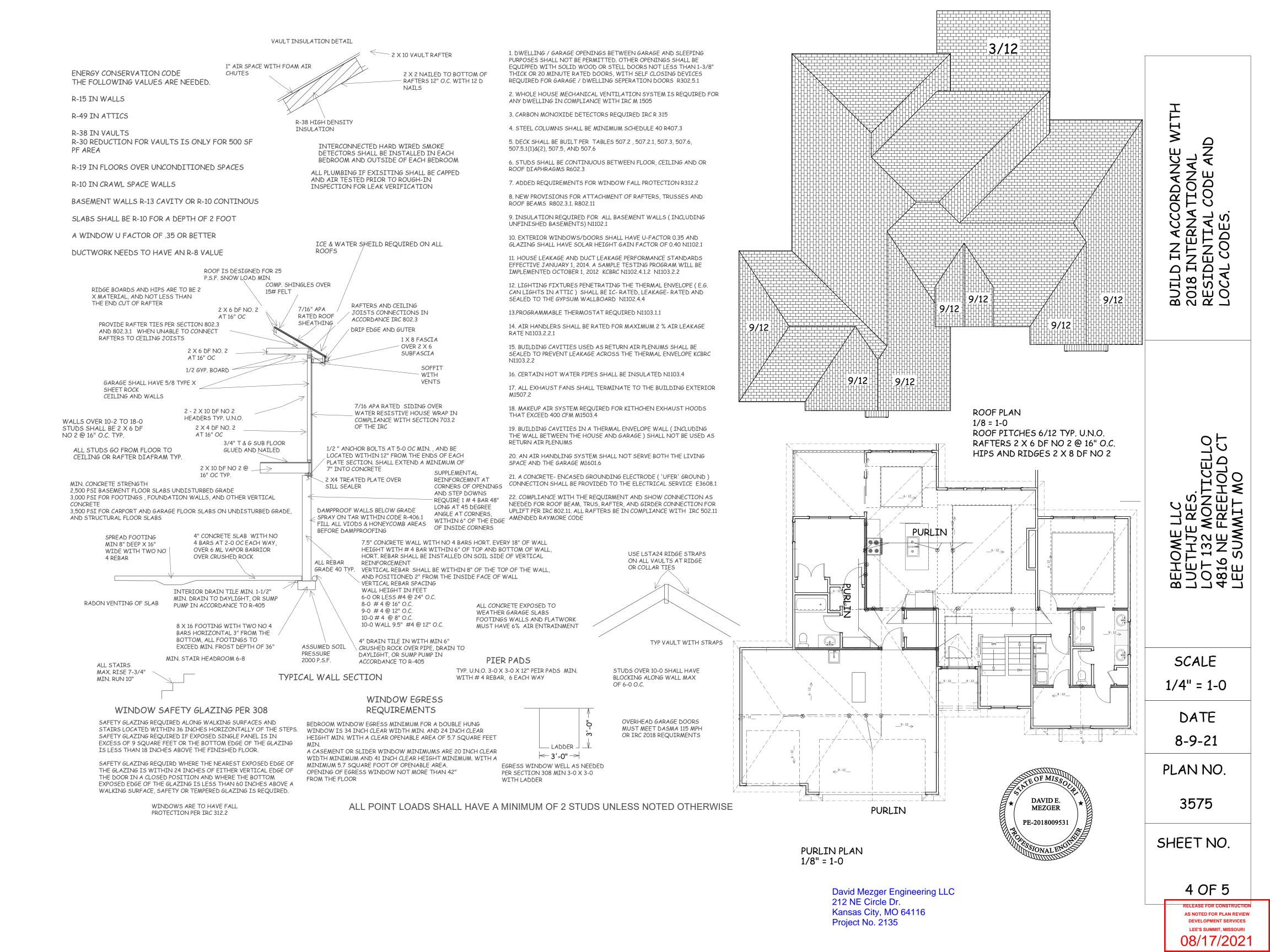
PLAN NO.

3575

SHEET NO.

3 OF 5

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/17/2021



	E	TACING REQUIR	ABLE R602.10.3(1) EMENTS BASED O	N WIND SPEED			
EXPOSURE CA 30-FOOT MEAN 10-FOOT WALI 2 BRACED WA	I ROOF HEIGHT L HEIGHT		MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing <sup>o</sup> (feet)	Method LIB <sup>b</sup>	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Methods CS-WSP, CS-G, CS-PF	
		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	
1		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	
≤ 115		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	

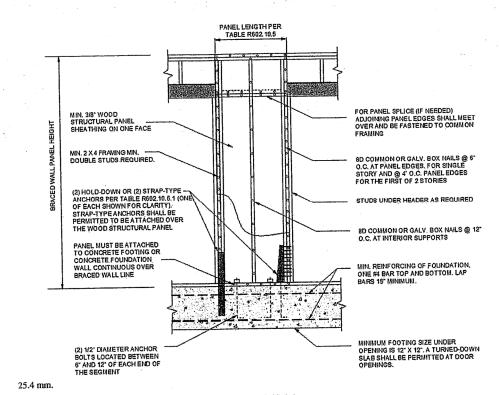
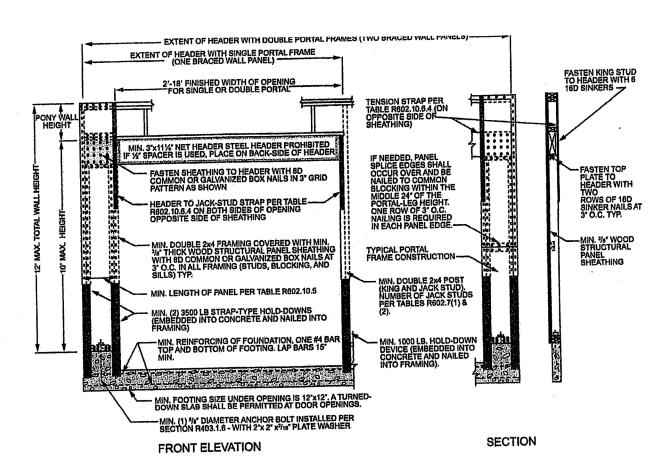


FIGURE R602.10.6.1 METHOD ABW-ALTERNATE BRACED WALL PANEL



4 mm, 1 foot = 304.8 mm.

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

	TABLE ROUSE BRACING METHODS									
			CONNECTION CRITERIA®							
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fasteners	Spacing					
	LIB Let-in-bracing	1 × 4 wood or approved metal straps			Wood: per stud and top and bottom plates					
		at 45° to 60° angles for maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer					
	DWB Diagonal wood boards	<sup>3</sup> / <sub>4</sub> " (1" nominal) for maximum 24" stud spacing		2-8d ( $2^{1}l_{2}^{2}$ " long × 0.113" dia.) nails or 2 - $1^{3}l_{4}^{2}$ " long staples	Per stud					
	WSP Wood	2		Exterior sheathing per Table R602.3(3)	6" edges 12" field					
	structural panel (See Section R604)	<sup>3</sup> / <sub>8</sub> "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener					
Intermittent Bracing Methods	BV-WSP* 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 $(2^{1}l_{2}'' \times 0.131)$ nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts					
	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		$1^1/2^n \log \times 0.12^n$ dia. (for $^1l_2^n$ thick sheathing) $1^3/4^n \log \times 0.12^n$ dia. (for $^{25}l_{32}^n$ thick sheathing) galvanized roofing nails	3" edges 6" field					
				Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top					
	GB Gypsum board	1/2"		Nails or screws per Table R702.3.5 for interior locations	and bottom plates) 7"					
	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 <sup>3</sup> / <sub>8</sub> ", 6d common (2" long × 0.113" dia.) nails For <sup>1</sup> / <sub>2</sub> ", 8d common (2 <sup>1</sup> / <sub>2</sub> " long × 0.131" dia.) nails	3" edges 6" field					
	PCP Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		1 <sup>1</sup> / <sub>2</sub> " long, 11 gage, <sup>7</sup> / <sub>16</sub> " dia. head nails or <sup>7</sup> / <sub>8</sub> " 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 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					

**TABLE R602.10.4** 

METHOD (See Table R602.10.4)			MIN	CONTRIBUTING LENGTH				
				1	(Inches)			
	ţ	8 feet	9 feet	10 feet	11 feet	12 feet	A - L ID	
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP		48	48	48	53	58	Actual <sup>b</sup> Double sided = Actual	
	GB		48	48	53	58	Single sided = $0.5 \times Actual$	
	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	
AD III	SDC D <sub>0</sub> , D <sub>1</sub> and D <sub>2</sub> , 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	4	
	72	27	27	30	33	36	1	
	76	30	29	30	33	36 36		
	80	32	30	30	33	36		
	84	35	32	32	33	36		
	88	38	35	33	33	36		
	92	43	37	35 38	36	36		
	96	48	41	40	38	38	-	
CS-WSP, CS-SFB	100		49	40	40	39	Actual <sup>b</sup>	
	104	<u> </u>	54	46	43	41		
	108		34	50	45	43	-	
	112	<del> </del> -	<b>├</b>	55	48	45	<b>-</b>  .	
	116			60	52	48		
	120	<u> </u>	<u> </u>	1 00	56	51	-	
	124	<del> </del>	<u> </u>	<del>  -</del>	61	54	-	
	128	<del> </del> -	<del> </del> -	+	66	58	-	
	132	<del></del>	<del>  -</del>	+		62	-	
	136	<del> </del>		+=		66	<b>-</b>	
	140	<del> </del>	<del> </del>			72	-	
		<del> </del>	P	ortal heads	r height			
METHOD (See Table R602,10.4)		8 feet	9 feet	10 feet		12 feet		
(366 12	Supporting roof only	16	16	16	Note c	Note c	48	
PFH	Supporting one story and roo		24	24	Note c	Note c		
	PFG	24	27	30	Note d	Note d		
		16	18	20	Note e	Note e		
CS-PF		16	18	20	Note e	Note e	Actual <sup>b</sup>	
or SI: 1 inch = 25.4 mm, I IP = Not Permitted. . Linear interpolation shall	ere it is greater than or equal to the r	16 0.447 m/s. minimum le	18	20	Note e	Note e	Actual <sup>b</sup> Actual <sup>b</sup>	

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

TABLE R602.10.4—continued BRACING METHODS							
				CONNECTION CRITERIA			
N	ETHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Specing		
Methods	PFH Portal frame with hold-downs	3/g"		See Section R602.10.6.2	See Section R602.10.6.2		
Intermittent Bracing Methods	PFG Portal frame at garage	<sup>7</sup> / <sub>16</sub> "		See Section R602.10.6.3	See Section R602.10.6.3		
<b>-</b>	CS-WSP	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field		
50	Continuously sheathed wood structural panel			Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
Sheathing Methods	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		
Continuous Sh	CS-PF Continuously sheathed portal frame	7/ <sub>16</sub> "		See Section R602.10.6.4	See Section R602.10.6.4		
Conti	CS-SFB <sup>d</sup> Continuously sheathed structural fiberboard	1/2" or <sup>25</sup> /32" for maximum 16" stud spacing		1½" long × 0.12" dia. (for ½" thick sheathing) 1½" long × 0.12" dia. (for 2½"," 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/m², 1 mile per hour = 0.447 m/s.

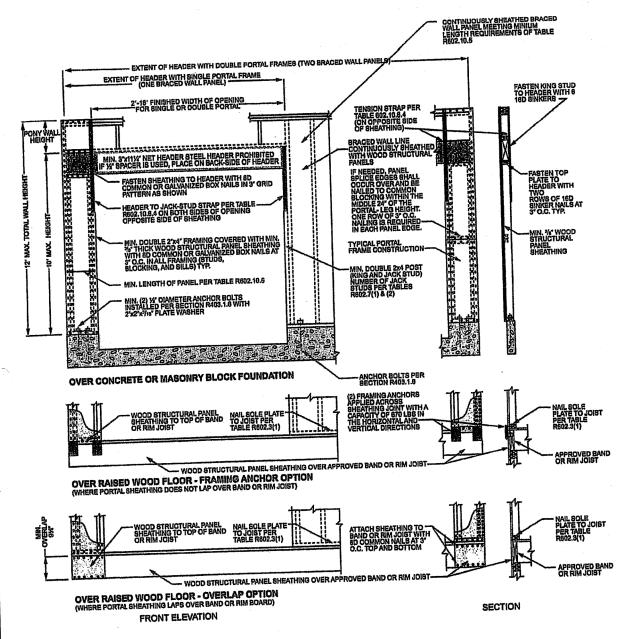
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D<sub>o</sub>, D<sub>1</sub> and D<sub>2</sub>.

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>o</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.

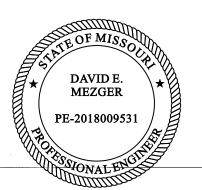
d. Method CS-SFB does not apply in Seismic Design Categories D<sub>o</sub>, D<sub>1</sub> and D<sub>2</sub>,

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



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



David Mezger Engineering LLC 212 NE Circle Dr. Kansas City, MO 64116 Project No. 2135

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

ETHJE RES. T 132 MONTICELLO 6 NE FREEHOLD CT SUMMIT MO BEHOME I LUETHJE LOT 132 A 4816 NE F LEE SUMA

SCALE 1/4" = 1-0

DATE 8-9-21

PLAN NO.

3575

SHEET NO.

5 OF 5

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 08/17/2021