









HEN TICEL , F 0

9-14-20

PLAN NO.

4 OF 5

**CONSTRUCTION** AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 09/15/2020

3204

SHEET NO.

5 OF 5

3-8d (2<sup>1</sup>/<sub>2</sub>" long x 0.113" dia.) nails roved metal straps t 45° to 60° angles for maximum 16" Let-in-bracing

	DWB Diagonal wood boards	"/4" (1" nominal) for maximum 24" stud spacing		2-8d (2 <sup>1</sup> / <sub>2</sub> " long × 0.115" dia.) hans or 2 - 1 <sup>3</sup> / <sub>4</sub> " long staples	Per stud
Intermittent Bracing Methods	WSP Wood structural panel (See Section R604)	_		Exterior sheathing per Table R602.3(3)	6" edges 12" field
		<sup>3</sup> / <sub>8</sub> "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
	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 <sup>1</sup> / <sub>2</sub> " × 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 <sup>25</sup> / <sub>32</sub> " for maximum 16" stud spacing		$1^{1}/_{2}$ " long $\times$ 0.12" dia. (for $^{1}/_{2}$ " thick sheathing) $1^{3}/_{4}$ " long $\times$ 0.12" dia. (for $^{25}/_{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field
mittent	Siteding	1/2"		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7"
Inter	GB Gypsum board			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)	3/8" or 1/2" 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		1½" long, 11 gage, ½" dia. head nails or ½" long, 16 gage staples	6" o.c. on all framing members
	HPS Hardboard panel siding	<sup>7</sup> / <sub>16</sub> " for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 ½" 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

	NGTH OF BRACED WALL PANELS  MINIMUM LENGTH*  (Inches)  Wall Height					CONTRIBUTING LENGTH		
METHOD (See Table R602.10.4)								
(	-	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	
GB LIB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actua	
		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 <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	. 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		
CS-WSP, CS-SFB	100		44	40	38	38		
	104		49	43	43	41		
	108		54		45	43	_	
	112			50	48	45	1	
	116				52	48		
	120		<u> </u>	60	56	51		
	124			<u> </u>	61	54		
	128		<del>  -</del>	1 -	66	58	4	
	132		<del> </del>			62	-	
	136 140	<u> </u>	<del> </del> _	+=	<del> </del>	66	1	
	144		+=		+	72	-	
	METHOD	Portel header height		ــــــــــــــــــــــــــــــــــ				
	able R602,10.4)	8 feet	9 feet	10 feet	11 feet	12 feet		
<u></u>	Supporting roof only	16	16	16	Note c	Note c	48	
PFH	Supporting one story and roof	24	24	24	Note c	Note c	С	
	PFG	24	27	30	Note d	Note d		
	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	Actual <sup>b</sup>	
= Not Permitted.			noth					

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

6" edges 12" field 3/8" Continuously sheathe wood structural pane See Method CS-WSP CS-PF See Section R602.10.6.4 See Section R602.10.6.4  $1^{1}/_{2}^{"}$  long × 0.12" dia. (for  $^{1}/_{2}^{"}$  thick sheathing)  $1^{3}/_{4}^{"}$  long × 0.12" dia. (for  $^{22}/_{12}^{"}$  thick sheathing) galvanized roofing nails 3" edges 6" field For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.1175 md, 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>, toof 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.

See Section R602.10.6.2

See Section R602.10.6.3

See Section R602.10.6.2

See Section R602.10.6.3

	CONTINUOUSLY SHEATHED BRACED WALL PANEL MEETING MINIUM LENGTH REQUIREMENTS OF TABLE RED2.10.6
MIN. 3*X11½* NET HEADER BTEEL HEADER PROHIBITED  MIN. 3*X11½* NET HEADER BTEEL HEADER PROHIBITED  IF Y'S BRACER IS USED, PLACE ON BACK-SIDE OF HEADER  FASTEN S HEATHING TO HEADER WITH 8D  COMMON OR GALVANIZED BOX NAILS IN 3* GRID  ORDING OR GALVANIZED BOX NAILS IN 3* GRID  ORDING OR GALVANIZED BOX NAILS IN 3* GRID  ORDING OR GALVANIZED BOX NAILS IN 3* GRID  MIN. DOUBLE 2*X4* FRAMING COVERED WITH MIN.  W'S THICK WOOD STRUCTURAL PAREL SHEATHING  WITH BD COMMON OR GALVANIZED BOX NAILS AT  3* O.C. IN ALL FRAMING GYIDDS,  BLOCKING, AND SILLS) TYPE,  BLOCKING, AND SILLS) TYPE,  MIN. LENGTH OF PANEL PER TABLE R802.10.5  MIN. DOUBLE 2*X4* FRAMING GYIDDS,  BLOCKING AND SILLS) TYPE,  MIN. LENGTH OF PANEL PER TABLE R802.10.5  MIN. DOUBLE 2*X4* FRAMING GYIDDS,  BLOCKING AND SILLS) TYPE,  MIN. DOUBLE 2*X4* FRAMING GYIDDS,  BLOCKING AND SILLS) TYPE,  BLOCKING AND SILLS) TYPE,  MIN. DOUBLE 2*X4* FRAMING GYIDDS,  BLOCKING AND SILLS) TYPE,  BLOCKING AND SILLS TYPE,  BL	ON STRAP PER 602.10.9.4  ON STRAP PER 602.10.9.4  FASTEN KING STUD TO HEADER WITH 8 (9D SINKERS IDE BATHING)  WALL LINE OUGSLY BHEATHED OF THE COMMON NO WITHIN THE 224 OF THE LEG HEIGHT.  OVER AND BE THE COMMON NO WITHIN THE 224 OF THE LEG HEIGHT.  ON STRAP PER 602.10.9.1  ON STRAP PER 602.10.9.1  ON STRUCTURAL PAREL TO PLATE
1 (2) FRAM	HOR BOLTS PER TION RAIST. IS ING ANCHORS ACROSS NG JOINT WITH A YOF BY LISE IN IZONTAL AND PER TABLE PER TABLE RED2.3(1)
OF THE PARTY OF TH	APPROVED BAND
WOOD STRUCTURAL PANEL SHEATHING OVER APPROVED BAY OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION (WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST)	
0.0.10	SHEATHING TO NAIL SOLE PLATE TO JOIST PER TABLE REGG. 3(1)  APPROVED BAND OR RIM JOIST  APPROVED BAND OR RIM JOIST
WOOD STRUCTURAL FANEL SHEATHING OVER APPROVED BA  OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD)  FRONT ELEVATION	APPROVED EARTH JOIST OR RIM JOIST OR RIM JOIST

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

METHODS, MATERIAL

Portal frame at garage

<sup>7</sup>/16"

top and bottom plate

per manufacturer

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

RELEASE FOR

**CONSTRUCTION** 

**AS NOTED ON PLANS REVIEW** 

LEE'S SUMMIT, MISSOURI

09/15/2020

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4 mm, 1 foot = 304.8 mm.

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

OCUR OVER AND BE NAILED TO COMMON BLOCKING WITHIN THE MIDDLE 24' OF THE PORTAL-LEG HEIGHT. ONE ROW OF 3' O.C. NAILING IS REQUIRED IN EACH PANEL EDGE.

MIN. DOUBLE 2x4 POST (KING AND JACK STUD). NUMBER OF JACK STUDS PER TABLES R602.7(1) &

SECTION

MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE'

3.5

5.5

7.0

9.0

10.5

4.0

7.5

13.5

16.5

6.0

11.0

20.0

24.5

6.5

15.0

18.0

18.0

23.5

29.0

34.5

18.5

27.0

35.0

43.0

6.5

9,5

15.0

12.5

18.0

29.0

34.5

NP NP

FIGURE R602.10.6.1 METHOD ABW---ALTERNATE BRACED WALL PANEL

50

50

20

30

50

(2) HOLD-DOWN OR (2) STRAP-TYPE ANCHORS PER TABLE R602,10.5.1 (ONE) OF EACH SHOWN FOR CLARITY). STRAP-TYPE ANCHORS SHALL BE PERMITTED TO BE ATTACHED OVER THE WOOD STRUCTURAL PANEL

EXTENT OF HEADER WITH SINGLE PORTAL FRAME
(ONE BRACED WALL PANEL)

FRONT ELEVATION

PANEL MUST BE ATTACHED TO CONCRETE FOOTING OR CONCRETE FOUNDATION -WALL CONTINUOUS OVER BRACED WALL LINE

25.4 mm.

PONY WALL HEIGHT

\*\*\*\*\*\*\*\*\*\*\*\*

≤ 115

3.5

4.5

6.0

7.5

9.0

6.5

11.5

14.0

17.0

5.0

13.0

17.0

21.0

25.0