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

NICK ZVACEK HOMES ANDERSON III LOT 149 MONTICELLO 4728 NE FREEHOLD DR LEE SUMMIT MO

> SCALE 1/4" = 1-0

> > DATE

9-20-21

PLAN NO.

3526

SHEET NO.

2 OF 6

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

09/21/2021

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

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3 OF 6

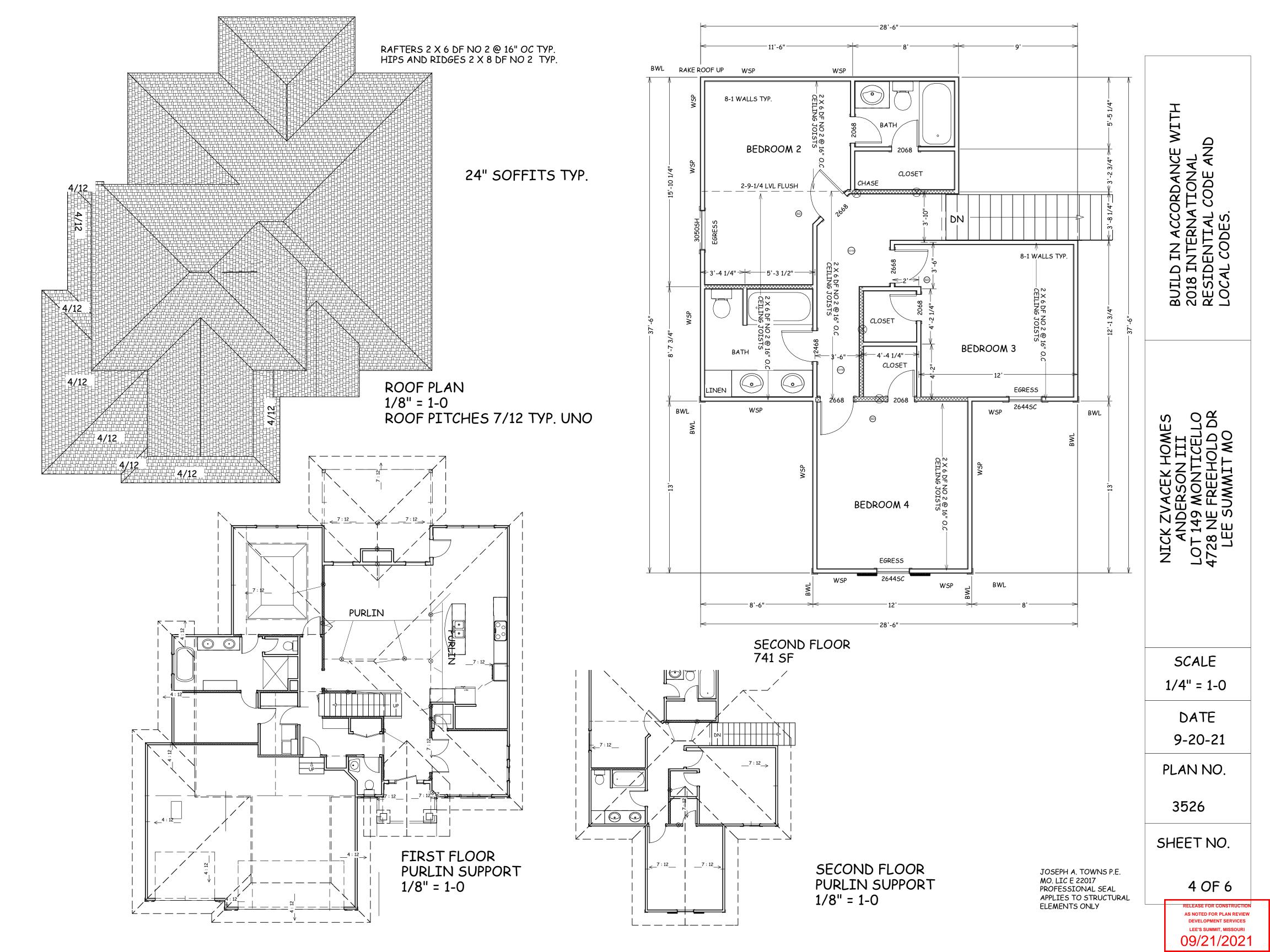
JOSEPH A. TOWNS P.E.

PROFESSIONAL SEAL

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MO. LIC E 22017

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OPENING OF EGRESS WINDOW NOT MORE THAN 42"

FROM THE FLOOR

THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF

EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A

WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED.

WINDOWS ARE TO HAVE FALL

PROTECTION PER IRC 312.2

THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM

ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED OTHERWISE

WITHLADDER

PER SECTION 308 MIN 3-0 X 3-0

IN ACCORDANCE WIT ITERNATIONAL INTIAL CODE AND

MVM

UILI 018

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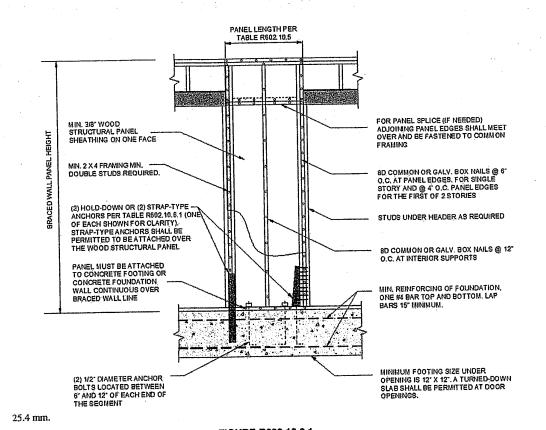
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	!	T/ BRACING REQUIR	ABLE R602.10.3(1) EMENTS BASED (ON WIND SPEED				
EXPOSURE CA SI-FOOT MEAN 10-FOOT WAL 2 BRACED WA	N ROOF HEIGHT L HEIGHT		MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE					
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing* (feet)	Method LIB ^b	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		
	<u> </u>	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		
≤ 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		
	A	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		



METHOD ABW-ALTERNATE BRACED WALL PANEL

- EXTENT OF HEADER WITH DOUBLE PORTAL FRAMES (I WU BRAUED WALL PAMEL PONY WALL HEIGHT PLATE TO HEADER WITH TWO ROWS OF 16D SINKER NAILS AT 3' O.C. TYP. *********** HEADER TO JACK-STUD STRAP PER TABLE
 R602.10.6.4 ON BOTH SIDES OF OPENING
 OPPOSITE SIDE OF SHEATHING MIN. DOUBLE 2x4 FRAMING COVERED WITH MIN. % THICK WOOD STRUCTURAL PANEL SHEATHING WITH BD COMMON OR GALVANIZED BOX NAILS AT 3° O.C. IN ALL FRAMING (STUDS, BLOCKING, AND MIN. DOUBLE 2x4 POST (KING AND JACK STUD) NUMBER OF JACK STUDS PER TABLES R602.7(1) & AIN. LENGTH OF PANEL PER TABLE R602.10.5 IN. (2) 3500 LB STRAP-TYPE HOLD-DOWNS MBEDDED INTO CONCRETE AND NAILED INTO MIN. 1000 LB. HOLD-DOWN DEVICE (EMBEDDED INTO CONCRETE AND NAILED INTO FRAMING). MIN. FOOTING SIZE UNDER OPENING IS 12"x12". A TURNED-DOWN SLAB SHALL BE PERMITTED AT DOOR OPENINGS. -MIN. (1) % DIAMETER ANCHOR BOLT INSTALLED PER SECTION R403.1.6 - WITH 2"x 2" x316" PLATE WASHER SECTION

4 mm, 1 foot = 304.8 mm.

FRONT ELEVATION

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

			TABLE R602.10 BRACING METHO				
				CONNECTION CRITERIA*			
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB	1 × 4 wood or approved metal straps			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 $(2^{1}/_{2}^{"} \log \times 0.113^{"} \text{ dia.})$ nails or $2 - 1^{3}/_{4}^{"} \log \text{ staples}$	Per stud		
	WSP Wood			Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	³/ ₈ "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
ethods	BV-WSP* Wood structural panels with stone or masonry veneer (See Section R602, 10.6.5)	7/ ₁₆ "	See Figure R602.10.6.5	8d common $(2^{1}/_{2}^{"} \times 0.131)$ 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 ²⁵ / ₃₂ " for maximum 16" stud spacing		$1^{1}J_{2}^{"}$ long × 0.12" dia. (for $^{1}J_{2}^{"}$ thick sheathing) $1^{3}J_{4}^{"}$ long × 0.12" dia. (for $^{25}J_{32}^{"}$ thick sheathing) galvanized roofing nails	3" edges 6" field		
Intermittent	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" 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 ³ / ₈ ", 6d common (2" long × 0.113" dia.) nails For ¹ / ₂ ", 8d common (2 ¹ / ₂ " long × 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	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 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.		

MINIMUM LEN			MIN	(inches)		CONTRIBUTING LENGTH		
(See Table R602.10.4)				Wall Height			(monos)	
		8 feet	9 feet	10 feet	11 feet	12 feet	Actual ^b	
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP		48	48	48	53	58	Double sided = Actual	
	GB	48	48	48	53	58	Single sided = 0.5 × Actual Actual ⁶	
	LIB	55	62	69	NP	NP	Acmar	
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48	
Abti	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 ^b	
	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		
	92	43	37	35	35	36		
	96	48	41	38	36	36	Actual ^b	
CS-WSP, CS-SFB	100		44	40	38	38		
	104		49	43	40	39 41		
	108		54	46	43	41		
	112			50	45	45		
	116			55	52	48		
	120		1-	60	56	51	-	
	124	<u> </u>	+=	 -	61	54	-	
	128	 	 	+=	66	58	-	
	132		 			62	-	
	136 140	 -	 	 		66	-	
	144	 	+=		+	72	=	
	IETHOD	 	F	ortal heads	r height			
	ble R602,10.4)	8 feet	9 feet	10 feet	11 feet	12 feet		
(560 76	Supporting roof only	16	16	16	Note c	Note o	48	
PFH	Supporting one story and roo	f 24	24	24	Note c	Note o		
	PFG	24	27	30	Note d	Note o	1.5 × Actual ^h	
	SDC A, B and C	16	18	20	Note e	Note e		
CS-PF	SDC D ₀ , D ₁ and D ₂	16	18	20	Note e	Note 6	Actual ^b	
= Not Permitted. Linear interpolation shall Use the actual length who	foot = 304.8 mm, 1 mile per hour =	ninimum le	ength.	but wall hele	rht shall be ne	rmitted to b	e increased to 12 feet with pony	

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

			TABLE R602.10.4—con			
				CONNECTION CRITERIA'		
N	ETHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Specing	
, Methods	PFH Portal frame with hold-downs	³/ ₈ ″		See Section R602.10.6.2	See Section R602.10.6.2	
Intermittent Bracing Methods	PRG Portal frame at garage	⁷ / ₁₆ "		See Section R602,10.6.3	See Section R602.10.6.3	
	CS-WSP	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field	
.so	Continuously sheathed wood structural panel			Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener	
Sheathing ?	CS-G ^{b,c} Continuously sheathed wood structural panel adjacent to garage openings	3/8"		See Method CS-WSP	See Method CS-WSP	
	CS-PF Continuously sheathed	7/16"		See Section R602.10.6.4	See Section R602.10.6.4	
Conti	CS-SFB ^d Continuously sheathed	1/2" or ²⁵ / ₃₂ " 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 $\frac{25}{12}$ " thick sheathing)	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, D₀, D₁ and D₂.

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 D₀, D₁ and D₂ toof covering dead load shall not exceed 3 psf.

c. Garage openings adjacent to a Method CS-Q 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 D₀, D₁ and D₂.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D₀ through D₂ only.

- EXTENT OF HEADER WITH DOUBLE FORTAL FRAMES (TWO BRACED WALL F EXTENT OF HEADER WITH SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) 2'-18' FINISHED WIDTH OF OPENIN FOR SINGLE OR DOUBLE PORTAL MIN. 3"x11"// NET HEADER STEEL HEADER PROHIBITED F 1/2" SPACER IS USED, PLACE ON BACK-SIDE OF HEADE OVER CONCRETE OR MASONRY BLOCK FOUNDATION WOOD STRUCTURAL PANEL SHEATHING OVE.

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 PORTAL SHEATHING LAPS OVER BAND OR RIM ROADIN) SECTION FRONT ELEVATION

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

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

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ACCORDANCE WITH CODE A BUILD IN ACCOR 2018 INTERNATI RESIDENTIAL CC LOCAL CODES.

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