2009 International Residential Code Errata (Portions of text and tables not shown are unaffected by the errata)

1st through 10th PRINTING (April 15, 2014)

CHAPTER 6 WALLS

_			TABLE R602.3(5) SIZE, HEIGHT AND SPACING OF WOOD STUDS ^a					
				BEARING WALLS			NONBEAR	NG WALLS
	STUD SIZE (inches)	Laterally unsupported stud height ^a (feet)	Maximum spacing when supporting a roof-ceiling assembly or a habitable attic assembly, only (inches)	Maximum spacing when supporting one floor, plus a roof-ceiling assembly or a habitable attic assembly (inches)	Maximum spacing when supporting two floors, plus a roof-ceiling assembly or a habitable attic assembly (inches)	Maximum spacing when supporting one floor height ^a (inches)	Laterally unsupported stud height ^a (feet)	Maximum spacing (inches)

(Portions of text and tables not shown are unaffected by the errata)

1st through 7th PRINTING (Posted: October 3, 2012)

CHAPTER 6 WALL CONSTRUCTION

TABLE R611.7(1C)

TABLE R611.7(1C) UNREDUCED LENGTH, UR, OF SOLID WALL REQUIRED IN EACH EXTERIOR SIDEWALL FOR WIND PARALLEL TO RIDGE**.0.4.9.3.8

	1		UNREDUCE	D LENGTH, UR, C	F SOLID WALL R	EQUIRED IN SIDE	WALLS FOR WIN	D PARALLEL TO	RIDGE (feet)	
					Basic Wi	nd Speed (mph)	Exposure		65	
			85B	90B	100B	110B	120B	130B		
			- 22		85C	90C	100C	110C		
LENGTH	LENGTH	ROOF				85D	90D	100D		
(feet)	(feet)	SLOPE			One story or top story of two-story					
		< 1:12	0.95	1.06	1.31	1.59	1.89	2.22	0.90	

TABLE R611.7(1C)—continued UNREDUCED LENGTH, UR, OF SOLID WALL REQUIRED IN EACH EXTERIOR SIDEWALL FOR WIND PARALLEL TO RIDGE FIRST STORY OF TWO-STORY a,c,d,a,f,g

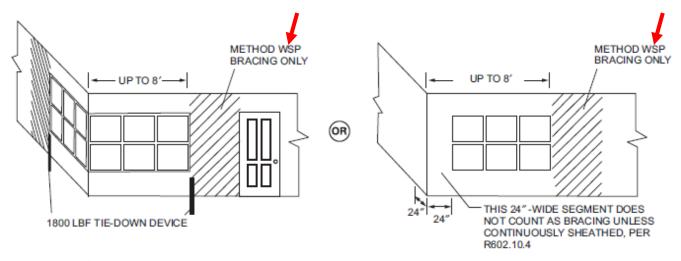
			UNREDUCE	D LENGTH, UR, O	F SOLID WALL RI	EQUIRED IN SIDE	WALLS FOR WIN	ID PARALLEL TO	RIDGE (feet)	
				Basic Wind Speed (mph) Exposure						
olbenia.			85B	90B	100B	110B	120B	130B		
SIDEWALL	LENGTH	ROOF			85C	90C	100C	110C]	
(feet)	(feet)	SLOPE				85D	90D	100D	Minimumb	
		< 1:12	7.34	8.22	10.17	12.29	14.62	17.16	7.85	

(Portions of text and tables not shown are unaffected by the errata)

1st through 5th PRINTING (February 28, 2012)

CHAPTER 6 WALL CONSTRUCTION

FIGURE R602.10.1.4.1

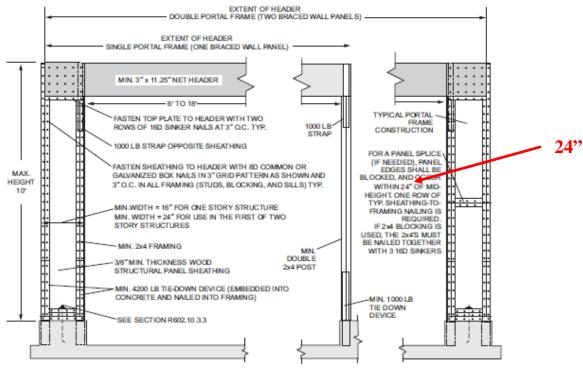


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound force = 4,448 N.

FIGURE R602.10.1.4.1 BRACED WALL PANELS AT ENDS OF BRACED WALL LINES IN SEISMIC DESIGN CATEGORIES D_0 , D_1 AND D_2

(Portions of text and tables not shown are unaffected by the errata)

FIGURE R602.10.3.4



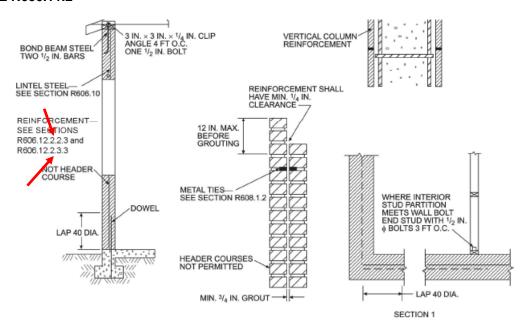
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound force = 4.448 N.

FIGURE R602.10.3.3
METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS

(Portions of text and tables not shown are unaffected by the errata)

FIGURE R603.6(2)

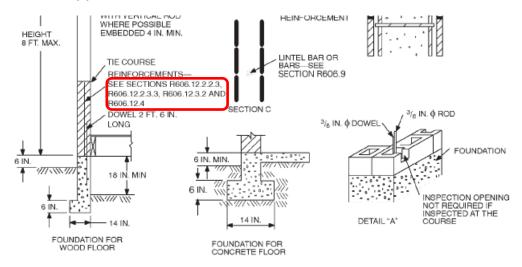
FIGURE R606.11.2



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

FIGURE R606.11(2)
REQUIREMENTS FOR REINFORCED GROUTED MASONRY CONSTRUCTION IN SEISMIC DESIGN CATEGORY C

FIGURE R606.11(3)



NOTE: A full bed joint must be provided. All cells containing vertical bars are to be filled to the top of wall and provide inspection opening as shown on detail "A."

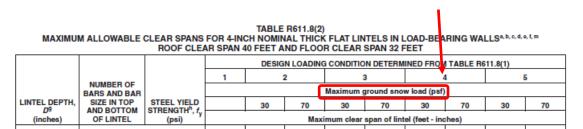
Horizontal bars are to be laid as shown on detail "B." Lintel bars are to be laid as shown on Section C.

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

FIGURE R606.11(3) REQUIREMENTS FOR REINFORCED MASONRY CONSTRUCTION IN SEISMIC DESIGN CATEGORY D₀, D₁, OR D₂

(Portions of text and tables not shown are unaffected by the errata)

TABLE R611.8(2)



(Portions of text and tables not shown are unaffected by the errata)

1st through 4th PRINTING (Posted: 11-29-2011)

CHAPTER 6 WALL CONSTRUCTION

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

		Other wall sheathing ^h			
24	½" structural cellulosic	1 1/2" galvanized roofing nail, 7/16" crown	2	6	
34	fiberboard sheathing	or 1" crown staple 16 ga., 1 1/4" long	3	0	

(Portions of text and tables not shown are unaffected by the errata)

1st through 4th PRINTING (Posted: August 11, 2011)

CHAPTER 6 WALL CONSTRUCTION

Table R602.3(1)

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

	DESCRIPTION		SPACING OF FASTENERS			
ITEM	OF BUILDING MATERIALS	DESCRIPTION OF FASTENER ^{b,c,e}	Edges (inches) ⁱ	Intermediate supports ^{c,e} (inches)		
Wood structural pane framing	ls, subfloor, roof an	d interior wall sheathing to fra	ming and particle bo	pard wall sheathing to		
30	3/8" – 1/2"	6d common (2"x 0.113") nail (subfloorwall) ⁱ 8d common (2 ½" x 0.131") nail (roof) ^f	6	12 ^g		

(Portions of text and tables not shown are unaffected by the errata)

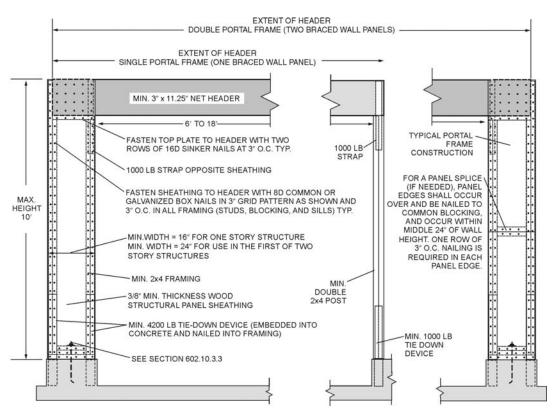
1st through 4th PRINTING (JULY 14, 2011)

CHAPTER 6 WALL CONSTRUCTION

TABLE R602.3(2)....

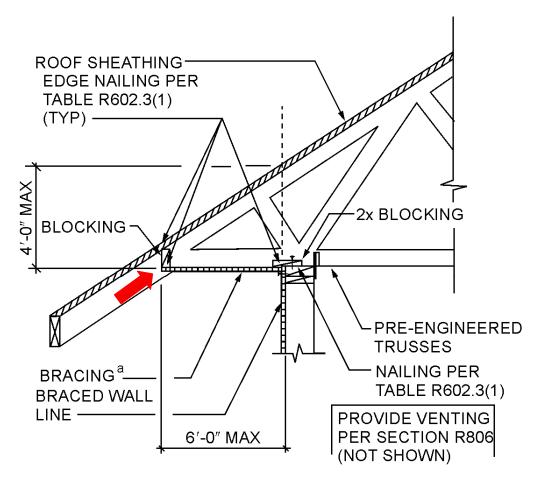
Note f. Hardboard underlayment shall conform to CPA/ANSI/AHA A135.4

FIGURE R602.10.3.3 METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS



(Portions of text and tables not shown are unaffected by the errata)

FIGURE R602.10.6.2(2) BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES



a. METHODS OF BRACING SHALL BE AS DESCRIBED IN SECTION R602.10.2 METHOD DWB, WSP, SFT, BG, PBS, PCP OR HPS

TABLE R611.8(2) MAXIMUM ALLOWABLE CLEAR SPANS FOR 4-INCH NOMINAL THICK FLAT LINTELS IN LOAD-BEARING WALLS^{a, b, c, d, e, f, m}

ROOF	OUF CLEAR SPAN 40 FEET AND FLOOR CLEAR SPAN 32 FEET										
	NUMBER OF BARS AND BAR	STEEL YIELD STRENGTH ^h , f _y (psi)		DESIGN LOADING CONDITION DETERMINED FROM TABLE R611.8(1)							
LINTEL			1 2		;	3		ı		5	
DEPTH,	SIZE IN TOP			MAXIMUM GROUND SNOW LOAD (psf)							
(inches)	AND BOTTOM			30	70	30	70	30	70	30	70
` ′	OF LINTEL		Maximum clear span of lintel (feet - inches)								

(Portions of text and tables not shown are unaffected by the errata)

1st through 4th PRINTING (SEPTEMBER 14, 2009)

CHAPTER 6 WALL CONSTRUCTION

TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	SPACING OF FASTENERS
Wall			
13	Double top plates, minimum 48 <u>24</u> -inch offset of end joints, face nail in lapped area	8-16d (3 ½" x 0.135")	_

(Portions of text and tables not shown are unaffected by the errata)

1st through 3rd PRINTING (JULY 14, 2011)

CHAPTER 6 WALL CONSTRUCTION

TABLE R602.10.1.2(3)

ADJUSTMENT FACTORS TO THE LENGTH OF REQUIRED SEISMIC WALL BRACING^a

	ADJUSTMENT BASED ON:		MULTIPLY LENGTH OF BRACING PER WALL LINE BY:	APPLIES TO:		
Roof/ceiling dead load for	roof only or roof plus one story	≤ 15 psf	1.0			
wall supporting ^b	roof only	<15 psf ≤ 25 psf	1.1 _ <u>1.2</u>			
	roof plus one story	<15 psf ≤ 25 psf	1.2 <u>1.1</u>			
Walls with stone or masonry	veneer in SDC-C-D ₂	See Section R703.7				
Cripple walls		See Section R602.10.9				

(Portions of text and tables not shown are unaffected by the errata)

1st and 2nd PRINTING (JULY 14, 2011)

CHAPTER 6 WALL CONSTRUCTION

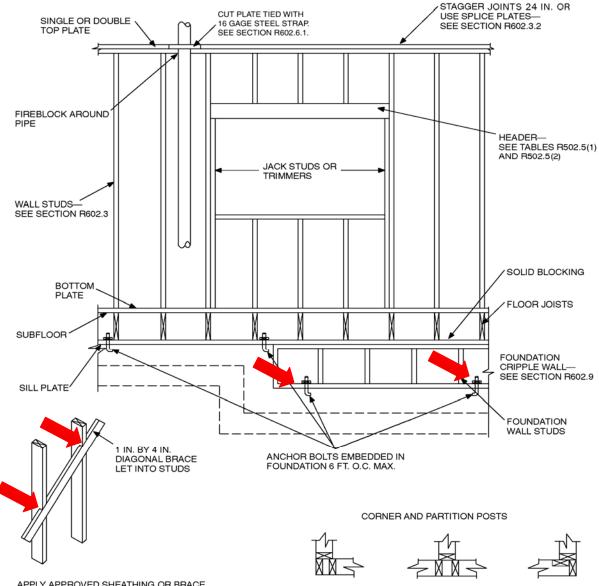
TABLE R602.3(1)

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

	DESCRIPTION OF	DESCRIPTION OF FASTENER	SPACING C	F FASTENERS
	BUILDING MATERIALS		Edges (inches) ⁱ	Intermediate supports ^{c,e} (inches)
ITEM				(inches)
	Wood s	0		
31	5/16" ½"	6dcommon (2" x 0.113) nail (subfloor, wall)	6	12 ⁹
		8d common (2 ½" – 0.131") nail (roof) f		
32 <u>31</u>				
33 -32				
34 <u>33</u>				
35 <u>34</u>				
36 <u>35</u>				
37 <u>36</u>				
38 <u>37</u>				
39 <u>38</u>				
4 0 39				

(Portions of text and tables not shown are unaffected by the errata)

FIGURE R602.3(2) FRAMING DETAILS



APPLY APPROVED SHEATHING OR BRACE EXTERIOR WALLS WITH 1 IN. BY 4 IN. BRACES LET INTO STUDS AND PLATES AND EXTENDING FROM BOTTOM PLATE TO TOP PLATE, OR OTHER APPROVED METAL STRAP DEVICES INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, SEE SECTION R602.10.

NOTE: A THIRD STUD AND/OR PARTITION INTERSECTION BACKING STUDS SHALL BE PERMITTED TO BE OMITTED TO HAVE THE USE OF WOOD BACKUP CLEATS, METAL DRYWALL CLIPS OR OTHER APPROVED DEVICES THAT WILL SERVE AS ADEQUATE BACKING FOR THE FACING MATERIALS

(Portions of text and tables not shown are unaffected by the errata)

FIGURER602.6.1 TOP PLATE FRAMING TO ACCOMMODATE PIPING

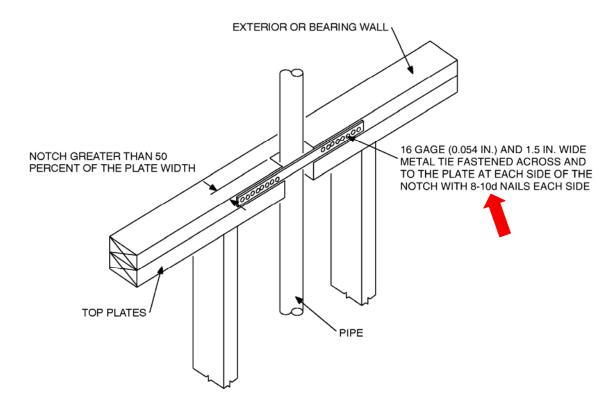


TABLE R602.10.1.2(1)^{a,b,c,d,e} BRACING REQUIREMENTS BASED ON WIND SPEED

(as a function of braced wall line spacing)

ĺ	EXPOSURE CATI	EGORY B, 30 FT MEA	N ROOF HEIGHT,							
	10 FT	EAVE TO RIDGE HE	IGHT,							
		10 FT WALL HEIGHT	,	MINIMUM TOTAL LE	MINIMUM TOTAL LENGTH (feet) OF BRACED WALL PANELS REQUIRED ALONG					
	2	BRACED WALL LINE	S	EACH BRACED WALL LINE						
		Braced Wall				Methods DWB,				
	Basic Wind Line Spacing				Method GB	WSP, SFB, PBS,	Continuous			
	Speed (mph)	Story Location	(feet)	Method LIB ^{, h}	(double sided) ^a	PCP, HPS ^f ,	Sheathing			

For SI: 1 foot = 304.8 mm, 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s, 1 pound force = 4.448 N.

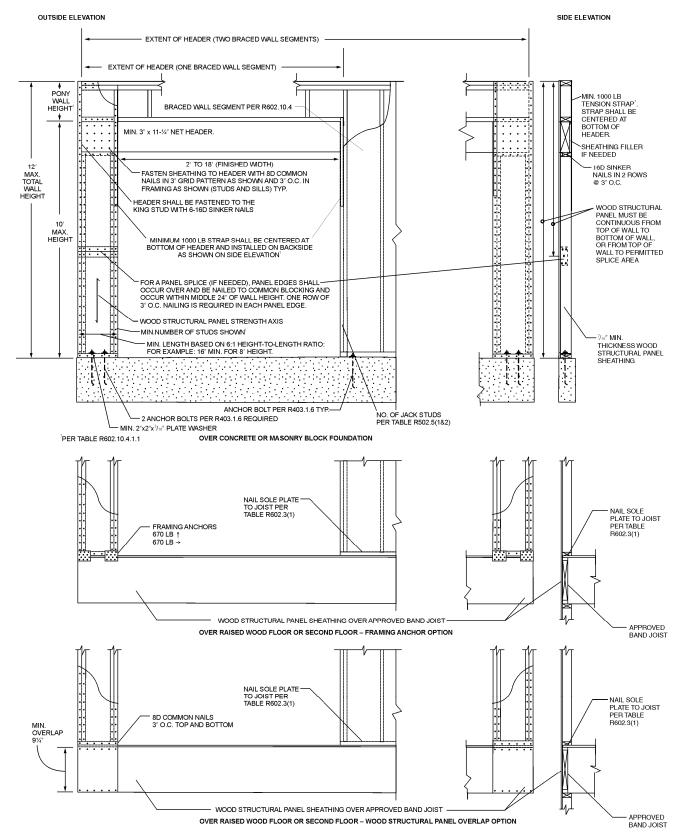
a. Tabulated bracing lengths are based on Wind Exposure Category B, a 30-ft mean roof height, a 10-ft eave to ridge height, a 10-ft wall height, and two braced wall lines sharing load in a given plan direction on a given story level. Methods of bracing shall be as described in Sections R602.10.2, R602.10.4 and R602.10.5. Interpolation shall be permitted.

b. For other mean roof heights and exposure categories, the required bracing length shall be multiplied by the appropriate factor from the following table:

(Portions of text and tables not shown are unaffected by the errata)

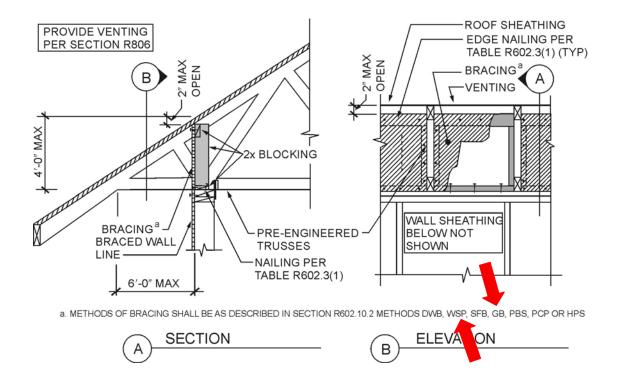
Figure R602.10.4.1.1 METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION

REPLACE FIGURE IN ITS ENTIRETY WITH THE FOLLOWING:



(Portions of text and tables not shown are unaffected by the errata)

FIGURE R602.10.6.2(3) BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES



R603.3.3 Stud bracing.....

3. Sheathing on one side and strapping on the other side fastened in accordance with Figure R603.3.3(2). Sheathing shall be installed in accordance with Item 1. Steel straps shall be installed in accordance with Item 2.

TABLE R603.3.2(30)
40-FOOT-WIDE BUILDING SUPPORTING TWO FLOORS, ROOF AND CEILING^{a,b,c}
33 ksi STEEL

Figure 601.6(2) R603.6(2) BACK-TO-BACK HEADER

TABLE R603.6(23)
BACK-TO-BACK HEADER
Headers Supporting Two Floors, Roof and Ceiling (50 33 ksi steel)^{a,b}

R604.3 Installation. Wood structural....in accordance with Table R602.3(1) or Table R602.3(3). Wood panels....

TABLE R607.1 MORTAR PROPORTIONS^{a,b}

Note c. Hydrated lime conforming to the requirements of ASTM C 270.

(Portions of text and tables not shown are unaffected by the errata)

R608.2.2 Masonry laid in stack bond. Where unit masonry is laid with less head joint offset that in Section R607.2.1 R608.2.1. the minimum area......

R613.5 Wall construction. Exterior walls......Framing shall be attached in accordance with Section Table R602.3(1) unless

FIGURE R613.5(3) TRUSSED ROOF TO TOP PLATE CONNECTION

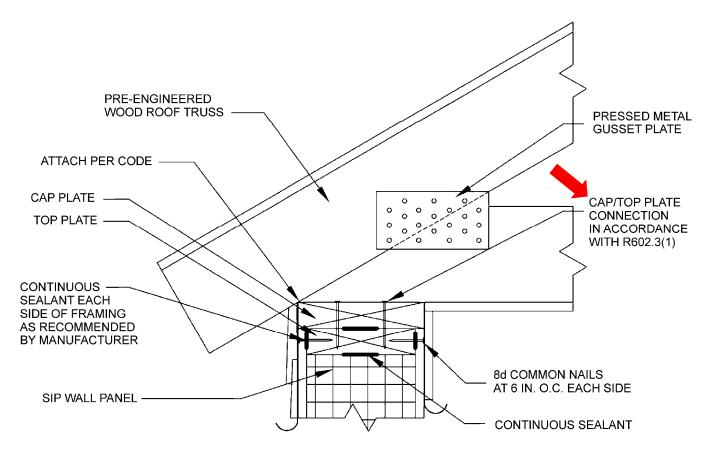


TABLE R614.10 R613.10 MAXIMUM SPANS FOR 11-7/8 DEEP SIP HEADERS (feet)

(Portions of text and tables not shown are unaffected by the errata)

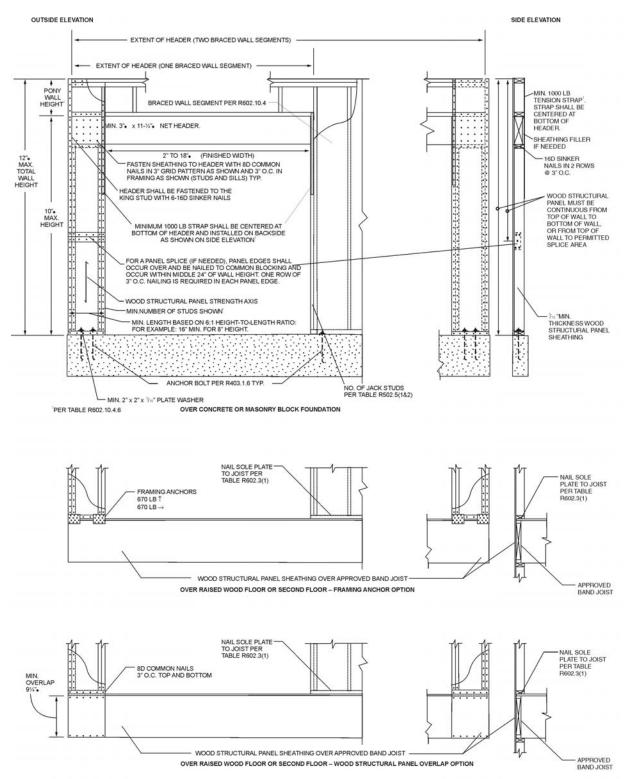
1st and 2nd PRINTING (SEPTEMBER 14, 2009)

CHAPTER 6 WALL CONSTRUCTION

FIGURER602.10.4.1.1

METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION

REPLACE FIGURE IN ITS ENTIRETY WITH THE FOLLOWING:



(Portions of text and tables not shown are unaffected by the errata)

R606.1 General. Masonry construction shall be designed and constructed in accordance with the provisions of this section or in accordance with the provisions of ACI 530/ASCE 5/TMS 402/ACI 530/ASCE 5.

R606.1.1 Professional registration not required. When the empirical design provisions of ACI 530/ASCE 5/TMS 402 TMS 402/ACI 530/ASCE 5 Chapter 5 or the provisions of this section are used to design masonry, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the *jurisdiction* having authority.

R606.12.1 General. Masonry structures and masonry elements shall comply with the requirements of Sections R606.12.2 through R606.12.4 based on the seismic design category established in Table R301.2(1). Masonry structures and masonry elements shall comply with the requirements of Section R606.12 and Figures R606.11(1), R606.11(2) and R606.11(3) or shall be designed in accordance with ACI 530/ASCE 5/TMS 402 TMS 402/ACI 530/ASCE 5.

R606.12.2.3.1 Connections to masonry shear walls. Connectors shall be provided to transfer forces between masonry walls and horizontal elements in accordance with the requirements of Section 2.1.8 of ACI 530/ASCE 5/TMS 402 Section 1.7.4 of TMS 402/ACI 530/ASCE 5. Connectors shall be designed

R606.12.2.3.2 Connections to masonry columns. Connectors shall be provided to transfer forces between masonry columns and horizontal elements in accordance with the requirements of Section 2.1.8 of ACI 530/ASCE 5/TMS 402 Section 1.7.4 of TMS 402/ACI 530/ASCE 5. Where anchor bolts are used to

R606.12.3.1 Design requirements. Masonry elements other than those covered by Section R606.12.2.2.2 shall be designed in accordance with the requirements of Chapter 1 and Sections 2.1 and 2.3 of ACI 530/ASCE 5/TMS 402 TMS 402/ACI 530/ASCE 5 and shall meet the minimum

TABLE R614.10 R613.10 MAXIMUM SPANS FOR 11-7/8 INCH DEEP SIP HEADERS (feet)

(Portions of text and tables not shown are unaffected by the errata)

1st PRINTING (SEPTEMBER 14, 2009)

CHAPTER 6 WALL CONSTRUCTION

TABLE R602.10.1.5 ADJUSTMENTS OF BRACING LENGTH FOR BRACED WALL LINES SPACING GREATER THAN 25 FEET^{a,b}

TABLE R602.10.4.1.1 TENSION STRAP CAPACITY REQUIRED FOR RESISTING WIND PRESSURES PERPENDICULAR TO 6:1 ASPECT RATIO WALLS^{a,b}

LIVI ENDIGOL											
MINIMUM	MAXIMUM	MAXIMUM	MAXIMUM		BASIC WIND S			PEED (mph)			
WALL STUD	PONY	TOTAL	OPENING	85	90	100	85	90	100		
FRAMING	WALL HEGHT (feet)	WALL HEIGHT (feet)	WIDTH (feet)		Exposure B			Exposure C			
NOMINAL SIZE AND GRADE					Tens	ion strap capa	city required ((lbf) ^{a,b}			
2x4	4	40	9	1775	2350	500 - <u>3500</u>	3550	DR	DR		
No. 2 Grade	4	12	16	4175	DR	DR	DR	DR	DR		

TABLE R602.12(2)

STONE OR MASONRY VENEER WALL BRACING REQUIREMENTS,

ONE- AND TWO-FAMILY DETACHED DWELLINGS, SEISMIC DESIGN CATEGORIES Do, D1 and D2

			MINIMUM SHEATHING			
SEISMIC	NUMBER		AMOUNT (length percent of	MINIMUM SHEATHING	SINGLE STORY	CUMULATIVE
DESIGN	OF		braced wall line length in	THICKNESS AND	HOLD DOWN	HOLD DOWN
CATEGORY	STORIES ^a	STORY	feet) ^b	FASTENING	FORCE (lb) ^c	FORCE (lb)d