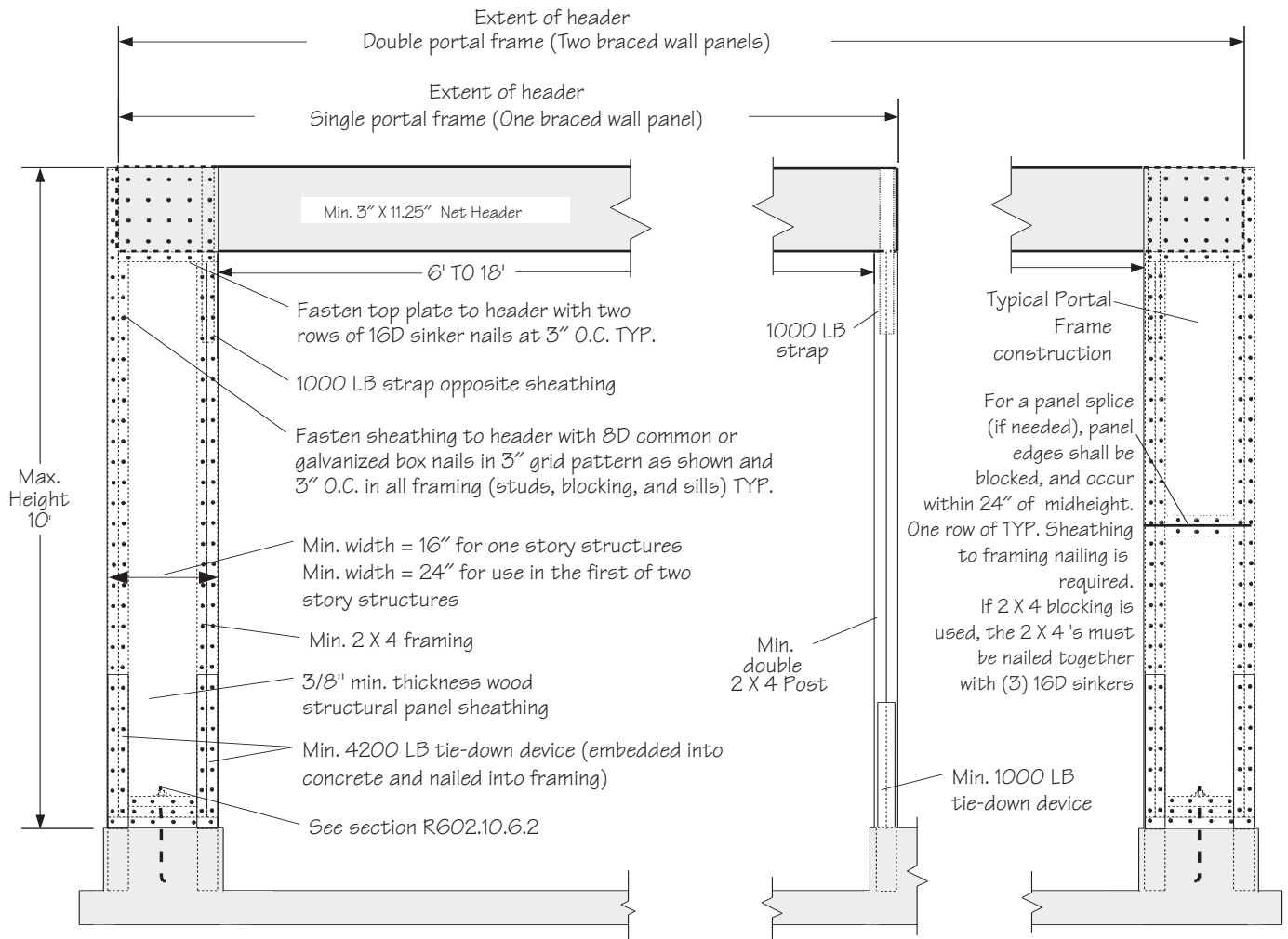


# CONNECTORS FOR USE WITH APA'S PORTAL FRAME

The International Residential Code (IRC) and the prescriptive portion for conventional construction in the International Building Code (IBC 2308) allow a builder to construct wood frame buildings by simply following the code. Lateral wall bracing requirements of the code prescribe bracing of each exterior wall using braced wall panels at or near the corners and at prescribed intervals throughout the structure. The construction options of these braced wall panels are outlined in IBC 2308.9.3 and IRC 602.10.3. The most commonly used of those options are 4 foot wood structural panels or 8 foot gypsum panels with prescribed fastening. A common issue when following the code requirements is proper bracing around garage doors. These return walls or side panels are typically narrower than 4 feet.

## New Narrow Wall Bracing Option

There is a new bracing option which allows a narrower section of braced wall. APA – The Engineered Wood Association technical bulletin *Narrow Wall Bracing using Wood Structural Panel Portal Frames with Hold Downs* outlines a new, code approved alternative for bracing walls as narrow as 16 inches. This alternative is described in the 2004 Supplement to the IBC Section 2308.9.3.2 and 2004 Supplement to the IRC Section R602.10.6.2. This system can be used with prescriptive provisions and engineered plans are not required. However, there are design limitations when using prescriptive provisions. These limitations are called out in the 2003 IBC 2308.2 and the IRC R301. Check with a local building official if you are unsure which provisions apply to your area.

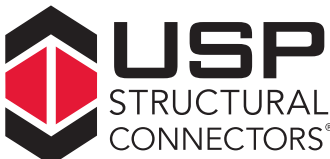


### Portal Frame

Reprinted courtesy of the APA

ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING  
(IBC Figure R602.10.6.2)

Hardware options for the specified connectors and connection details are given on the back side of this document.

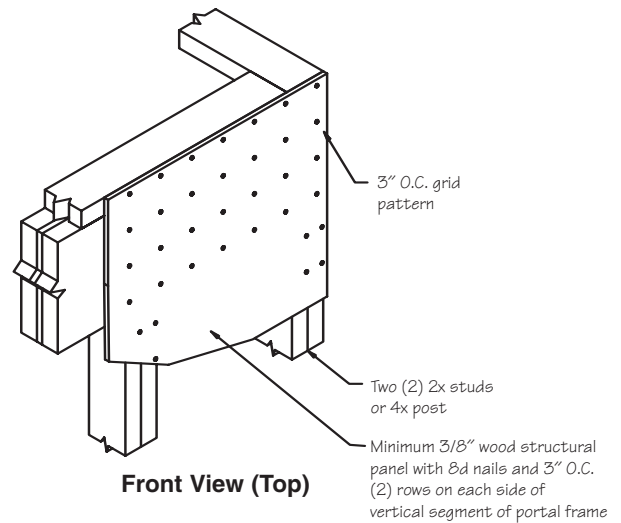
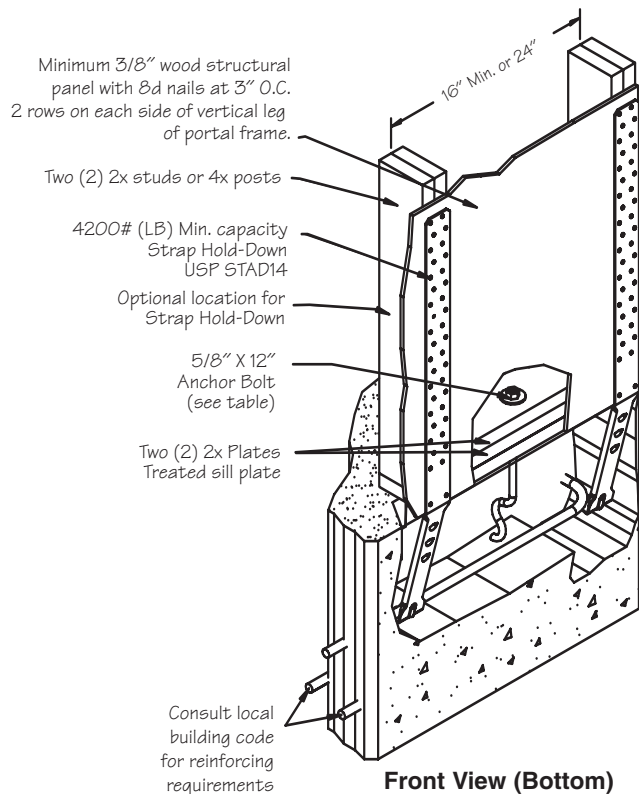


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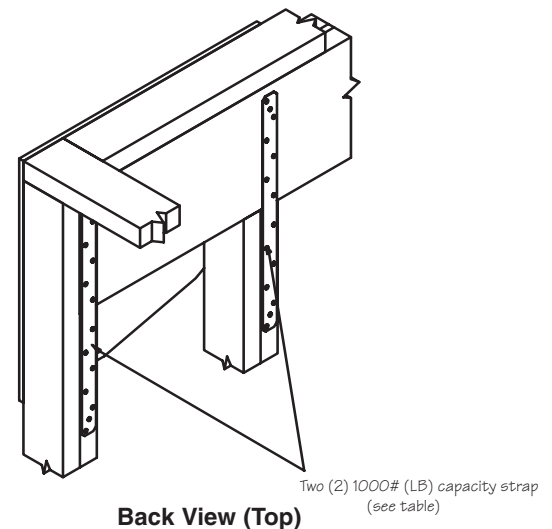
USP999-061  
Information valid until December 31, 2006.

# CONNECTORS FOR USE WITH APA'S PORTAL FRAME CONT.



Portal Frame Connection Options

Connector as Called Out in Portal Frame Drawing	USP Stock No.	Fastener Schedule <sup>1,2,3</sup>
4200 LB Tie-Down Device	STAD14	(38) 16d Sinker
1000 LB Tie-Down Device for APA Single Portal Frame	PAHD42	(18) 16d Sinker
	MPAHD	(18) 16d Sinker
1000 LB Strap	LSTA18	(14) 10d
	LSTA21	(16) 10d
	ST18	(14) 16d
	ST22	(14) 16d
5/8" Anchor Bolt	STB16	--
2" x 2" x 3/16" Bearing Plate	BP582	--
8d Common	8d Common	--
16d Sinker	16d Sinker	--



- 1) Minimum nail embedment shall be 1-5/8" for 16d nails and 1-1/2" for 10d nails.
- 2) Minimum quantity of fasteners to be installed with equal fasteners at each end of the connection.
- 3) 10d x 1-1/2" nails are 9 gauge (0.148" diameter) by 1-1/2" long.

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