

SIMPLIFIED BRACING METHOD FOR ONE AND TWO FAMILY DWELLINGS WHEN THE ENTIRE STRUCTURE IS SHEATHED WITH WOOD STRUCTURAL PANELS:

The Design Professional does not have to define the brace wall line locations and identify the percentage of braced wall panels with respect to a braced wall line if all of the following criteria are met:

1. The building exterior walls are sheathed with 7/16" or thicker wood structural panels (plywood or OSB). The wood structural panels shall be applied to all exterior walls, gable ends, and band boards. All vertical joints between panels shall be blocked. Horizontal joints between panels on detached dwellings may remain unblocked.
2. Braced wall panels are located in every exterior braced wall line in accordance with the following criteria:
 - a. The edge of the first braced wall panel meeting the width established in the table below is located 12'-6" or less from each end of the braced wall line.
Exception: The edge of the first braced wall panel may be located more than 12'-6" and up to 20'-0" from the end of the braced wall line if the collector system "Panel Offset" criteria on p.9 of Appendix A, One and Two Family Wind Bracing Guidelines is adhered to and detailed on the construction documents or when the Engineer or Architect provides calculations and details for an alternate collector system.
 - b. The centerline spacing of braced wall panels in a braced wall line may not exceed 25'.
3. Braced wall panel locations are shown on the floor plans or the elevation views and meet the widths established in the following table:

		WIDTH OF SOLID PANEL ^{a, b}			
		8' wall height	9' wall height	10' wall height	12' wall height
Plywood/OSB Panel	3:1	32"	36"	40"	48"
APA Narrow Portal Wall ^c	6:1	16" ^d	18" ^d	20" ^d	24" ^d

^aLinear interpolation is permitted

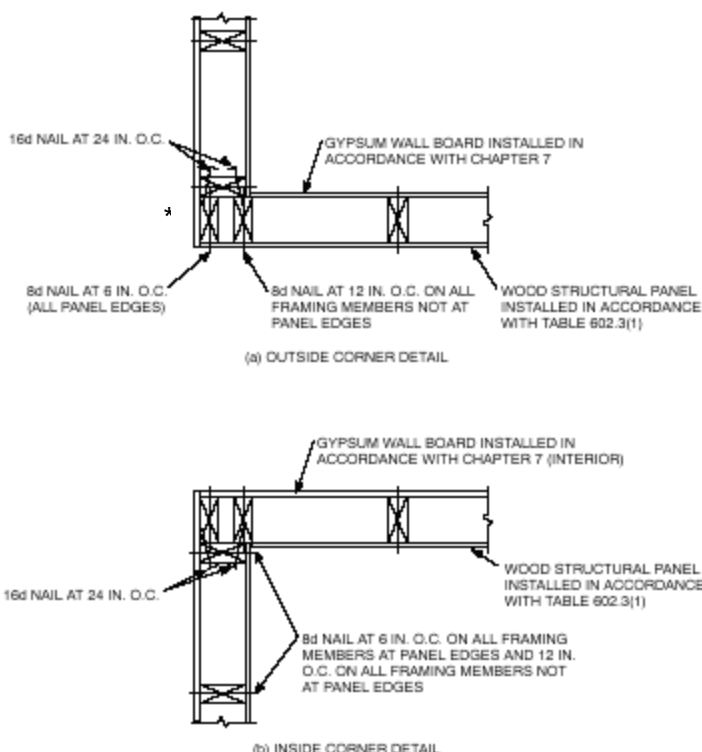
^bWall height is the vertical distance from the bottom of the sole/sill plate to the top of the double top plate. An additional 2" variation in height is allowed for pre cut stud framing.

^cThe APA Narrow-Wall Panel, if applicable, shall be constructed in accordance with Figure 11 in the St. Louis County Appendix A One and Two Family Wind Bracing Guideline. The Design Professional shall provide this detail on the construction documents.

^dThis APA Narrow Portal Wall width assumes the beam is placed under the top plate of the wall. One may compute the required width based on a 6:1 height to width ratio for a top of beam height located lower in the wall (i.e.: 20" Portal Wall can be used when the top of beam is at 10'-0" in a 12'-0" tall wall).

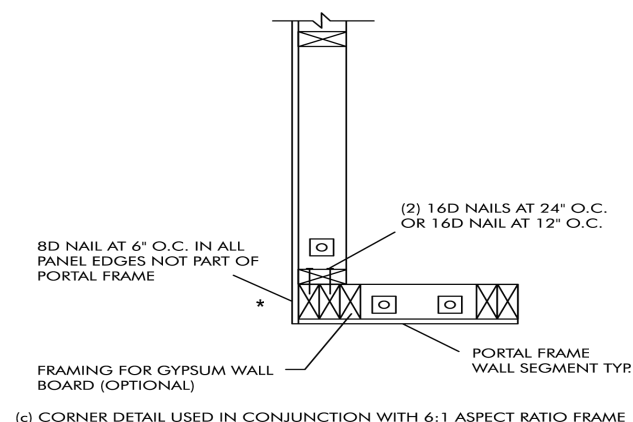
4. The exterior wall corners shall be constructed in accordance with Figures 10 and 12 in the St. Louis County Appendix A One and Two Family Wind Bracing Guideline. The Design Professional shall provide these details on the construction documents.
5. When the perpendicular distance between the exterior braced wall lines exceeds 50', the Design Professional shall include the following certification on the drawings:
The interior and exterior wall configuration braces the structure in accordance with or equivalent to the lateral bracing provisions of Section R602.10 of the 2003 edition of the IRC or Section 2305 of the 2003 edition of the IBC.
6. Wall height may not exceed 12' (12'-2" actual). Walls greater than 12' shall be designed and detailed by the engineer or architect to resist wind loads in both the longitudinal and transverse directions.

Figure 10



For SI: 1 inch = 25.4 mm.

Figure 12



*End stud on the above details may be shifted 7/16" to allow stud face to be aligned with sheathing.

Revised 12/23/05