

Alternate Bracing Wall Panel Design #2

City of Kingman Policy 2005-2 IRC 2003

RE: Fully Sheathed Residential Narrow Wall Bracing Design #2
Fully Sheathed Structure Required-HOLD DOWN DEVICES NOT REQUIRED
See Construction Detail Drawings Design #2
Ref: 2003 IRC Section R602.10.5
Ref: APA Form E425B found at www.apawood.org
Design Detail #2 and this document are available for downloading at <http://cityofkingman.gov>

When fully sheathing all exterior walls with wood structural panel sheathing with a thickness not less than 5/16 inch for 16 inch stud spacing and not less than 3/8 inch for 24 inch stud spacing, Alternate Bracing Wall Panel Design #2 may be used without hold down devices on these panels.

The height of the wall from floor slab elevation to top of plate is a design control factor. On 8 foot high walls the narrow wall can be as narrow as 16 inches wide, on 9 foot walls the width minimum for the wall is 18 inches and on a 10 foot wall the narrow bracing wall must be at least 20 inches wide.

The total opening width must be at least 2 feet wide to a maximum of 18 feet wide.

City of Kingman will accept the use of Section R602.10.5 without calculation or an engineer's design provided that:

- the construction method is clearly identified on the plan sheets, including all relevant construction details,
- as well as a reference to this policy as an alternate method of constructing an acceptable braced wall panel

The Code Text: R602.10.5 Continuous structural panel sheathing.

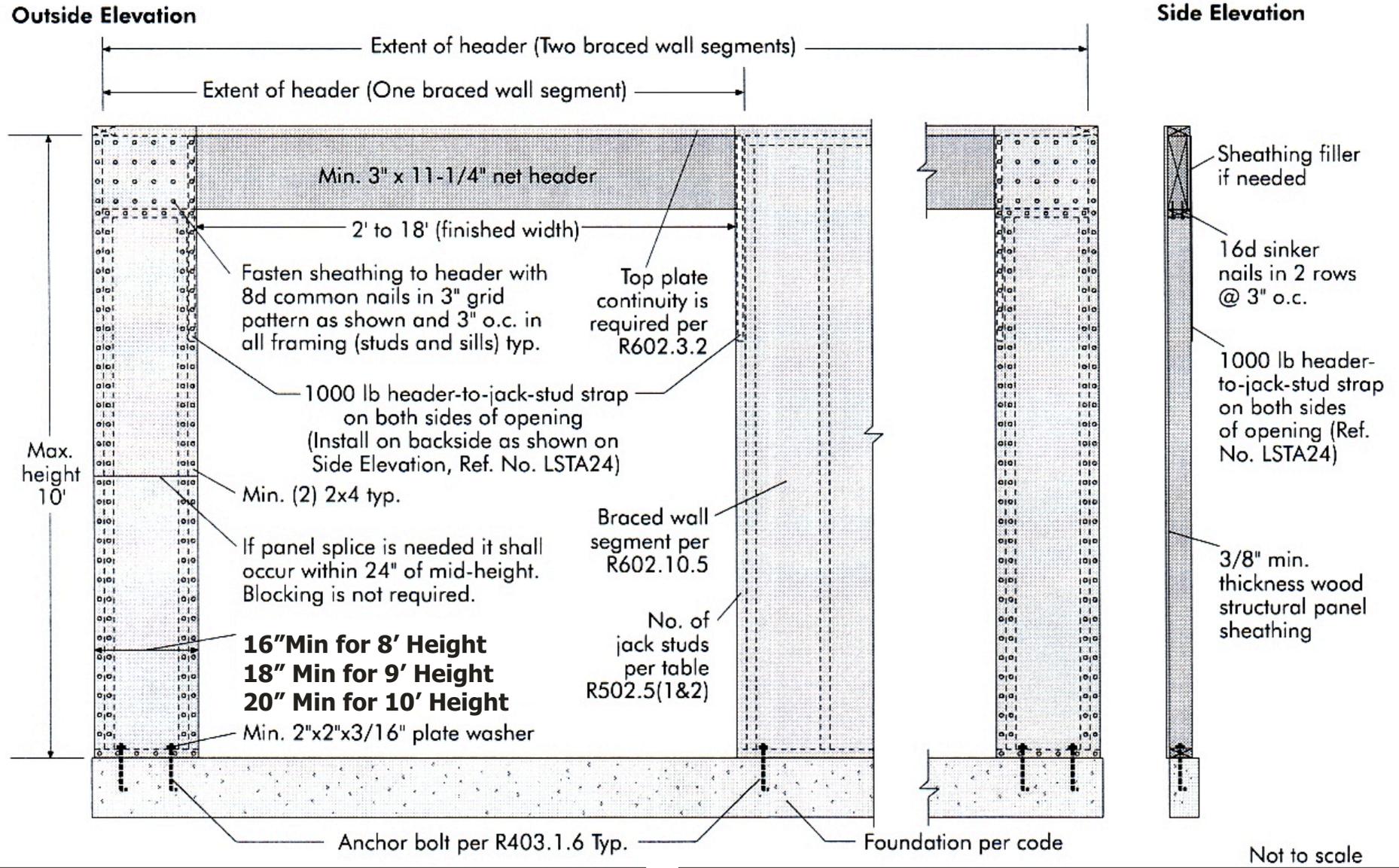
When continuous wood structural panel sheathing is provided in accordance with Method 3 of R602.10.3 on all sheathable areas of all exterior walls, and interior braced wall lines, where required, including areas above and below openings, braced wall panel lengths shall be in accordance with Table R602.10.5.

Wood structural panel sheathing shall be installed at corners in accordance with Figure R602.10.5.

The bracing amounts in Table R602.10.1 for Method 3 shall be permitted to be multiplied by a factor of 0.9 for walls with a maximum opening height that does not exceed 85 percent of the wall height or a factor of 0.8 for walls with a maximum opening height that does not exceed 67 percent of the wall height.

FIGURE 1

CONSTRUCTION DETAILS FOR THE APA NARROW WALL BRACING METHOD WITHOUT HOLD-DOWNS ON FULLY SHEATHED STRUCTURES OVER CONCRETE FOUNDATION



City of Kingman DESIGN #2
2003 IRC Residential Code

Figure R602.10.5 Narrow Wall Bracing Wall
Panel for Fully Sheathed Structure