

## CHAPTER 6 WALL CONSTRUCTION

### SECTION R602.10 IRC Interpretation No. 74-05 2003 Edition Issued: 01-11-06

**R602.10 Wall bracing.** All exterior walls shall be braced in accordance with this section. In addition, interior braced wall lines shall be provided in accordance with Section R602.10.1.1. For buildings in Seismic Design Categories D<sub>1</sub> and D<sub>2</sub>, walls shall be constructed in accordance with the additional requirements of R602.10.9, R602.10.11 and R602.11.

#### REFERENCED CODE SECTIONS:

**BRACED WALL LINE.** A series of braced wall panels in a single story constructed in accordance with Section R602.10 for wood framing or Section R603.7 or R301.1.1 for cold-formed steel framing to resist racking from seismic and wind forces.

**R602.10.1.1 Spacing.** Spacing of braced wall lines shall not exceed 35 feet (10,668 mm) on center in both the longitudinal and transverse directions in each story.

**Exception:** Spacing of braced wall lines not exceeding 50 feet shall be permitted where:

1. The wall bracing provided equals or exceeds the amount of bracing required by Table R602.10.1 multiplied by a factor equal to the braced wall line spacing divided by 35 feet, and
2. The length-to-width ratio for the floor or roof diaphragm does not exceed 3:1.

**R602.10.4 Length of braced panels.** For Methods 2, 3, 4, 6, 7 and 8 above, each braced wall panel shall be at least 48 inches (1219 mm) in length, covering a minimum of three stud spaces where studs are spaced 16 inches (406 mm) on center and covering a minimum of two stud spaces where studs are spaced 24 inches (610mm) on center. For Method 5 above, each braced wall panel shall be at least 96 inches (2438 mm) in length where applied to one face of a braced wall panel and at least 48 inches (1219 mm) where applied to both faces.

#### Exceptions:

1. Lengths of braced wall panels for continuous wood structural panel sheathing shall be in accordance with Section R602.10.5.
2. Lengths of alternate braced wall panels shall be in accordance with Section R602.10.6.



**Q:** Is an interior braced wall line permitted to be braced with a single braced wall panel 48 inches in length?

**A:** Yes. Interior braced wall lines must comply with the same provisions as exterior braced wall lines. The amount and location of braced wall panels must comply with Table R602.10.1. The table requires, as a minimum, the wall bracing to be located at each end and at least every 25 feet on center. Section R602.10.1 modifies this by allowing the bwp to "begin" up to 12.5 feet from the end of the braced wall line. Table R602.10.1 specifies the minimum amount of bracing to be provided as a percentage of the wall length based upon the basic wind speed, the seismic design category as well as the condition (location within the structure). If a single braced wall panel is not more than 12.5 feet from each end of the braced wall line and provides the required amount of bracing based on wind speed, seismic design category and condition, then it complies with this section of the code

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