



Two-story and balloon framing applications also require the number of braced-wall panels to be based on the minimum percentages of wall bracing and spacing per the IRC. The two-story application requires both the upper story and first story of a two story to be evaluated. Simpson Strong-Tie recommends that balloon-framing applications use the first story of a two story bracing percentages specified in the IRC. The required length of wall-bracing panels shall be determined by using the formula:

Wall Length x Wall-Bracing Percentage = Wall-Bracing Panels Required (*examples below*)

Balloon Framing Example:

Seismic SDC-C, first story of two story – 30% wall bracing required per IRC table R602.10.11

Wall length = 16', 19' plate height, 12' clear opening, slab-on-grade foundation

Balloon wall: 16' x 30% = 4.8'

Use Strong Frame ordinary moment frame equivalent to 8'-0" substitution: OMF1212-12x19 (see page 48)

Footing: minimum width = 32"

minimum depth = 16"

3-#4 rebar in the bottom (see page 59)

Grade beam: 12" x 12" grade beam with 2-#4 rebar top and bottom (see page 59)

Anchorage: OMFSL9-24 (see page 48)

4½" minimum end distance

1¼" minimum edge distance