

TABLE 2308.4.1.1(1)
HEADER AND GIRDER SPANS^{a, b} FOR EXTERIOR BEARING WALLS
 (Maximum spans for Douglas fir-larch, hem-fir, Southern pine and spruce-pine-fir and required number of jack studs)

| GIRDERS AND HEADERS SUPPORTING | SIZE | GROUND SNOW LOAD (psf) ^o | | | | | | | | | | | | | | | | | |
|--|----------|-------------------------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| | | 30 | | | | | | 50 | | | | | | 70 | | | | | |
| | | Building width ^c (feet) | | | | | | | | | | | | | | | | | |
| | | 12 | | 24 | | 36 | | 12 | | 24 | | 36 | | 12 | | 24 | | 36 | |
| | | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d | Span ^f | NJ ^d |
| Roof and ceiling | 1-2 × 6 | 4-0 | 1 | 3-1 | 2 | 2-7 | 2 | 3-5 | 1 | 2-8 | 2 | 2-3 | 2 | 3-0 | 2 | 2-4 | 2 | 2-0 | 2 |
| | 1-2 × 8 | 5-1 | 2 | 3-11 | 2 | 3-3 | 2 | 4-4 | 2 | 3-4 | 2 | 2-10 | 2 | 3-10 | 2 | 3-0 | 2 | 2-6 | 3 |
| | 1-2 × 10 | 6-0 | 2 | 4-8 | 2 | 3-11 | 2 | 5-2 | 2 | 4-0 | 2 | 3-4 | 3 | 4-7 | 2 | 3-6 | 3 | 3-0 | 3 |
| | 1-2 × 12 | 7-1 | 2 | 5-5 | 2 | 4-7 | 3 | 6-1 | 2 | 4-8 | 3 | 3-11 | 3 | 5-5 | 2 | 4-2 | 3 | 3-6 | 3 |
| | 2-2 × 4 | 4-0 | 1 | 3-1 | 1 | 2-7 | 1 | 3-5 | 1 | 2-7 | 1 | 2-2 | 1 | 3-0 | 1 | 2-4 | 1 | 2-0 | 1 |
| | 2-2 × 6 | 6-0 | 1 | 4-7 | 1 | 3-10 | 1 | 5-1 | 1 | 3-11 | 1 | 3-3 | 2 | 4-6 | 1 | 3-6 | 2 | 2-11 | 2 |
| | 2-2 × 8 | 7-7 | 1 | 5-9 | 1 | 4-10 | 2 | 6-5 | 1 | 5-0 | 2 | 4-2 | 2 | 5-9 | 1 | 4-5 | 2 | 3-9 | 2 |
| | 2-2 × 10 | 9-0 | 1 | 6-10 | 2 | 5-9 | 2 | 7-8 | 2 | 5-11 | 2 | 4-11 | 2 | 6-9 | 2 | 5-3 | 2 | 4-5 | 2 |
| | 2-2 × 12 | 10-7 | 2 | 8-1 | 2 | 6-10 | 2 | 9-0 | 2 | 6-11 | 2 | 5-10 | 2 | 8-0 | 2 | 6-2 | 2 | 5-2 | 3 |
| | 3-2 × 8 | 9-5 | 1 | 7-3 | 1 | 6-1 | 1 | 8-1 | 1 | 6-3 | 1 | 5-3 | 2 | 7-2 | 1 | 5-6 | 2 | 4-8 | 2 |
| | 3-2 × 10 | 11-3 | 1 | 8-7 | 1 | 7-3 | 2 | 9-7 | 1 | 7-4 | 2 | 6-2 | 2 | 8-6 | 1 | 6-7 | 2 | 5-6 | 2 |
| | 3-2 × 12 | 13-2 | 1 | 10-1 | 2 | 8-6 | 2 | 11-3 | 2 | 8-8 | 2 | 7-4 | 2 | 10-0 | 2 | 7-9 | 2 | 6-6 | 2 |
| | 4-2 × 8 | 10-11 | 1 | 8-4 | 1 | 7-0 | 1 | 9-4 | 1 | 7-2 | 1 | 6-0 | 1 | 8-3 | 1 | 6-4 | 1 | 5-4 | 2 |
| | 4-2 × 10 | 12-11 | 1 | 9-11 | 1 | 8-4 | 1 | 11-1 | 1 | 8-6 | 1 | 7-2 | 2 | 9-10 | 1 | 7-7 | 2 | 6-4 | 2 |
| | 4-2 × 12 | 15-3 | 1 | 11-8 | 1 | 9-10 | 2 | 13-0 | 1 | 10-0 | 2 | 8-5 | 2 | 11-7 | 1 | 8-11 | 2 | 7-6 | 2 |
| Roof, ceiling and one center-bearing floor | 1-2 × 6 | 3-3 | 1 | 2-7 | 2 | 2-2 | 2 | 3-0 | 2 | 2-4 | 2 | 2-0 | 2 | 2-9 | 2 | 2-2 | 2 | 1-10 | 2 |
| | 1-2 × 8 | 4-1 | 2 | 3-3 | 2 | 2-9 | 2 | 3-9 | 2 | 3-0 | 2 | 2-6 | 3 | 3-6 | 2 | 2-9 | 2 | 2-4 | 3 |
| | 1-2 × 10 | 4-11 | 2 | 3-10 | 2 | 3-3 | 3 | 4-6 | 2 | 3-6 | 3 | 3-0 | 3 | 4-1 | 2 | 3-3 | 3 | 2-9 | 3 |
| | 1-2 × 12 | 5-9 | 2 | 4-6 | 3 | 3-10 | 3 | 5-3 | 2 | 4-2 | 3 | 3-6 | 3 | 4-10 | 3 | 3-10 | 3 | 3-3 | 4 |
| | 2-2 × 4 | 3-3 | 1 | 2-6 | 1 | 2-2 | 1 | 3-0 | 1 | 2-4 | 1 | 2-0 | 1 | 2-8 | 1 | 2-2 | 1 | 1-10 | 1 |
| | 2-2 × 6 | 4-10 | 1 | 3-9 | 1 | 3-3 | 2 | 4-5 | 1 | 3-6 | 2 | 3-0 | 2 | 4-1 | 1 | 3-3 | 2 | 2-9 | 2 |
| | 2-2 × 8 | 6-1 | 1 | 4-10 | 2 | 4-1 | 2 | 5-7 | 2 | 4-5 | 2 | 3-9 | 2 | 5-2 | 2 | 4-1 | 2 | 3-6 | 2 |
| | 2-2 × 10 | 7-3 | 2 | 5-8 | 2 | 4-10 | 2 | 6-8 | 2 | 5-3 | 2 | 4-5 | 2 | 6-1 | 2 | 4-10 | 2 | 4-1 | 2 |
| | 2-2 × 12 | 8-6 | 2 | 6-8 | 2 | 5-8 | 2 | 7-10 | 2 | 6-2 | 2 | 5-3 | 3 | 7-2 | 2 | 5-8 | 2 | 4-10 | 3 |
| | 3-2 × 8 | 7-8 | 1 | 6-0 | 1 | 5-1 | 2 | 7-0 | 1 | 5-6 | 2 | 4-8 | 2 | 6-5 | 1 | 5-1 | 2 | 4-4 | 2 |
| | 3-2 × 10 | 9-1 | 1 | 7-2 | 2 | 6-1 | 2 | 8-4 | 1 | 6-7 | 2 | 5-7 | 2 | 7-8 | 2 | 6-1 | 2 | 5-2 | 2 |
| | 3-2 × 12 | 10-8 | 2 | 8-5 | 2 | 7-2 | 2 | 9-10 | 2 | 7-8 | 2 | 6-7 | 2 | 9-0 | 2 | 7-1 | 2 | 6-1 | 2 |
| | 4-2 × 8 | 8-10 | 1 | 6-11 | 1 | 5-11 | 1 | 8-1 | 1 | 6-4 | 1 | 5-5 | 2 | 7-5 | 1 | 5-11 | 1 | 5-0 | 2 |
| | 4-2 × 10 | 10-6 | 1 | 8-3 | 2 | 7-0 | 2 | 9-8 | 1 | 7-7 | 2 | 6-5 | 2 | 8-10 | 1 | 7-0 | 2 | 6-0 | 2 |
| | 4-2 × 12 | 12-4 | 1 | 9-8 | 2 | 8-3 | 2 | 11-4 | 2 | 8-11 | 2 | 7-7 | 2 | 10-4 | 2 | 8-3 | 2 | 7-0 | 2 |
| Roof, ceiling and one clear span floor | 1-2 × 6 | 2-11 | 2 | 2-3 | 2 | 1-11 | 2 | 2-9 | 2 | 2-1 | 2 | 1-9 | 2 | 2-7 | 2 | 2-0 | 2 | 1-8 | 2 |
| | 1-2 × 8 | 3-9 | 2 | 2-10 | 2 | 2-5 | 3 | 3-6 | 2 | 2-8 | 2 | 2-3 | 3 | 3-3 | 2 | 2-6 | 3 | 2-2 | 3 |
| | 1-2 × 10 | 4-5 | 2 | 3-5 | 3 | 2-10 | 3 | 4-2 | 2 | 3-2 | 3 | 2-8 | 3 | 3-11 | 2 | 3-0 | 3 | 2-6 | 3 |
| | 1-2 × 12 | 5-2 | 2 | 4-0 | 3 | 3-4 | 3 | 4-10 | 3 | 3-9 | 3 | 3-2 | 4 | 4-7 | 3 | 3-6 | 3 | 3-0 | 4 |
| | 2-2 × 4 | 2-11 | 1 | 2-3 | 1 | 1-10 | 1 | 2-9 | 1 | 2-1 | 1 | 1-9 | 1 | 2-7 | 1 | 2-0 | 1 | 1-8 | 1 |
| | 2-2 × 6 | 4-4 | 1 | 3-4 | 2 | 2-10 | 2 | 4-1 | 1 | 3-2 | 2 | 2-8 | 2 | 3-10 | 1 | 3-0 | 2 | 2-6 | 2 |
| | 2-2 × 8 | 5-6 | 2 | 4-3 | 2 | 3-7 | 2 | 5-2 | 2 | 4-0 | 2 | 3-4 | 2 | 4-10 | 2 | 3-9 | 2 | 3-2 | 2 |
| | 2-2 × 10 | 6-7 | 2 | 5-0 | 2 | 4-2 | 2 | 6-1 | 2 | 4-9 | 2 | 4-0 | 2 | 5-9 | 2 | 4-5 | 2 | 3-9 | 3 |
| | 2-2 × 12 | 7-9 | 2 | 5-11 | 2 | 4-11 | 3 | 7-2 | 2 | 5-7 | 2 | 4-8 | 3 | 6-9 | 2 | 5-3 | 3 | 4-5 | 3 |
| | 3-2 × 8 | 6-11 | 1 | 5-3 | 2 | 4-5 | 2 | 6-5 | 1 | 5-0 | 2 | 4-2 | 2 | 6-1 | 1 | 4-8 | 2 | 4-0 | 2 |
| | 3-2 × 10 | 8-3 | 2 | 6-3 | 2 | 5-3 | 2 | 7-8 | 2 | 5-11 | 2 | 5-0 | 2 | 7-3 | 2 | 5-7 | 2 | 4-8 | 2 |
| | 3-2 × 12 | 9-8 | 2 | 7-5 | 2 | 6-2 | 2 | 9-0 | 2 | 7-0 | 2 | 5-10 | 2 | 8-6 | 2 | 6-7 | 2 | 5-6 | 3 |
| | 4-2 × 8 | 8-0 | 1 | 6-1 | 1 | 5-1 | 2 | 7-5 | 1 | 5-9 | 2 | 4-10 | 2 | 7-0 | 1 | 5-5 | 2 | 4-7 | 2 |
| | 4-2 × 10 | 9-6 | 1 | 7-3 | 2 | 6-1 | 2 | 8-10 | 1 | 6-10 | 2 | 5-9 | 2 | 8-4 | 1 | 6-5 | 2 | 5-5 | 2 |
| | 4-2 × 12 | 11-2 | 2 | 8-6 | 2 | 7-2 | 2 | 10-5 | 2 | 8-0 | 2 | 6-9 | 2 | 9-10 | 2 | 7-7 | 2 | 6-5 | 2 |

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