



Gider Spans & Fastener Schedule Portland Remodel Portland, ME

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| REVISIONS: | DATE |
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Date : 04/16/15
Scale : 1/4"=1'-0"
Drawn By: JTM
Project: A041014
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5 of 5

TABLE R02.5(1)
GIDER SPANS AND HEADERS 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) | | | |
|---------------------------------------|------------------------------|------|------|------|
| | 20 | 28 | 36 | 50 |
| Roof ceiling and one clear span floor | 2-2x4 | 3-2 | 2-3 | 1-2 |
| | 2-2x6 | 4-1 | 3-1 | 2-1 |
| | 2-2x8 | 5-1 | 4-1 | 3-1 |
| | 2-2x10 | 7-1 | 6-1 | 5-1 |
| | 2-2x12 | 8-5 | 7-5 | 6-6 |
| | 3-2x6 | 9-1 | 8-0 | 7-0 |
| | 3-2x8 | 10-7 | 9-7 | 8-7 |
| | 4-2x6 | 8-4 | 7-5 | 6-8 |
| | 4-2x10 | 10-2 | 10-7 | 9-6 |
| | 4-2x12 | 12-2 | 11-7 | 10-7 |
| Roof ceiling and one clear span floor | 2-2x4 | 3-2 | 2-3 | 1-2 |
| | 2-2x6 | 4-1 | 3-1 | 2-1 |
| | 2-2x8 | 5-1 | 4-1 | 3-1 |
| | 2-2x10 | 7-4 | 6-3 | 5-3 |
| | 2-2x12 | 7-4 | 6-3 | 5-3 |
| | 3-2x6 | 8-5 | 7-5 | 6-6 |
| | 3-2x8 | 9-2 | 8-0 | 7-1 |
| | 4-2x6 | 7-5 | 6-6 | 5-11 |
| | 4-2x10 | 10-1 | 9-3 | 8-2 |
| | 4-2x12 | 12-1 | 11-3 | 10-2 |
| Roof ceiling and two clear span floor | 2-2x4 | 3-10 | 2-4 | 1-3 |
| | 2-2x6 | 4-10 | 3-4 | 2-3 |
| | 2-2x8 | 5-10 | 4-4 | 3-4 |
| | 2-2x10 | 6-10 | 5-11 | 4-8 |
| | 2-2x12 | 8-1 | 6-11 | 5-4 |
| | 3-2x6 | 9-1 | 7-5 | 6-8 |
| | 3-2x8 | 9-8 | 8-2 | 7-1 |
| | 4-2x6 | 7-0 | 6-1 | 5-5 |
| | 4-2x10 | 10-1 | 9-3 | 8-2 |
| | 4-2x12 | 12-1 | 11-3 | 10-2 |

TABLE R02.5(2)
GIDER SPANS AND HEADERS FOR INTERIOR BEARING WALLS
(Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir and required number of jack studs)

| HEADERS AND GIRDERS SUPPORTING | BUILDING WIDTH (feet) | | | |
|--------------------------------|-----------------------|------|-----|-----|
| | 20 | 28 | 36 | 50 |
| One floor only | 2-2x4 | 2-4 | 1-4 | 1-4 |
| | 2-2x6 | 3-4 | 2-4 | 1-4 |
| | 2-2x8 | 4-4 | 3-4 | 2-4 |
| | 2-2x10 | 5-4 | 4-4 | 3-4 |
| | 2-2x12 | 6-4 | 5-4 | 4-4 |
| | 3-2x6 | 7-4 | 6-4 | 5-4 |
| | 3-2x8 | 8-4 | 7-4 | 6-4 |
| | 4-2x6 | 6-4 | 5-4 | 4-4 |
| | 4-2x10 | 8-4 | 7-4 | 6-4 |
| | 4-2x12 | 10-4 | 9-4 | 8-4 |
| Two floor only | 2-2x4 | 2-2 | 1-2 | 1-2 |
| | 2-2x6 | 3-2 | 2-2 | 1-2 |
| | 2-2x8 | 4-2 | 3-2 | 2-2 |
| | 2-2x10 | 5-2 | 4-2 | 3-2 |
| | 2-2x12 | 6-2 | 5-2 | 4-2 |
| | 3-2x6 | 7-2 | 6-2 | 5-2 |
| | 3-2x8 | 8-2 | 7-2 | 6-2 |
| | 4-2x6 | 6-2 | 5-2 | 4-2 |
| | 4-2x10 | 8-2 | 7-2 | 6-2 |
| | 4-2x12 | 10-2 | 9-2 | 8-2 |

TABLE R02.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

| DESCRIPTION OF BUILDING MATERIALS | DESCRIPTION OF FASTENERS | SPACING OF FASTENERS | INTERMEDIATE SUPPORT |
|---|---|----------------------|----------------------|
| wood structural panels, sillflox, roof and wall sheathing to framing, and particleboard wall sheathing to framing | 6d common nail (sillflox, wall) | 6 | 12 * |
| 5/16" - 1/2" | 8d common nail (roof) | 6 | 12 * |
| 1-1/8" - 1-1/4" | 10d common nail or 8d deflected nail | 6 | 12 |
| Other wall sheathing " | 1-1/2" galvanized roofing nail 6d | 3 | 6 |
| 1/2" regular cellular sheathing | common nail 18ga., 1-1/2" long | 3 | 6 |
| 1/2" regular cellular sheathing | 1-3/4" galvanized roofing nail 6d | 3 | 6 |
| 25/32" structural cellular sheathing | 1-1/2" galvanized roofing nail 6d | 3 | 6 |
| 1/2" gypsum sheathing | 1-1/2" long 1-1/4" x 1/4" long common nail 18ga., 1-1/2" long | 4 | 8 |
| 5/8" gypsum sheathing | 1-1/2" galvanized roofing nail 6d | 4 | 8 |
| wood structural panels, combination sillflox and particleboard wall sheathing to framing | 8d deflected nail or 8d common nail | 6 | 12 |
| 5/16" and less | 8d common nail or 8d deflected nail | 6 | 12 |
| 1-1/8" - 1-1/4" | 10d common nail or 8d deflected nail | 6 | 12 |

For S₁: Inch = 25.4mm, 1 load per square foot=0.0479M/m²

a. All nails are smooth-common, box or deflected shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 50ksi (350 MPa) for shank diameter of .1875in (20d common nail), 50ksi (350 MPa) for shank diameter larger than 0.1423in but not larger than .1171in, and 100ksi (689 MPa) for shank diameter of 0.1423in less.

b. Staples are 16 gauge wire and have a minimum 7/16-inch on diameter crown width.

c. Nails shall be spaced of not more than 16 inches on center of all supports where spans are 48inches or greater.

d. Four-foot—By-8-foot or 4-foot-by-9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on table R02.3(1).

f. For regions having basic wind speed of 110mph or greater, 8d deflected nails shall be used for attaching plywood and wood structural panel roof sheathing to minimum 48-inch distance from gable end walls, if mean roof height is more than 25feet, up to 25feet maximum.

g. For regions having basic wind speed of 100mph or less, nails for attaching wood structural panel roof sheathing to gable end walls framing shall be spaced 9 inches on center, when basic wind speed is greater than 100mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 9 inches on center for minimum 48-inch distance from rafter ends and gable end walls and sections on center to gable end wall framing.

h. Gypsum sheathing shall conform to ASTM C79 and shall be installed in accordance with 6A.253. Fibergord sheathing shall conform to either ASTM 184.1 or ASTM C 208.

i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and at all roof plane perimeters. Blocking of roof or floor sheathing panel edges perpendicular to the framing members shall not be required except at intersection of adjacent roof planes, floor and roof perimeter shall be supported by framing members or solid blocking.

- Fig. S₁ 1 inch=25.4mm, 1 pound per square foot=0.0479M/m²
- Spans are given in feet and inches.
 - Tabulated values assume #2 grade lumber.
 - Blocking with a measured perpendicular to the edges for walls between those shown, spans are permitted to be interpolated.
 - Number of jack studs required to support each end. Where the number of jack studs is not an integer, the number of jack studs shall be rounded up by an approved framing anchor attached to the full-height wall stud and to the header.
 - 10feet ground snow load for cases in which ground snow load is less than 10feet and the roof live load is equal to or less than 20psf