

TABLE RB02.5(1) GIDER SPANS AND HEADER SPANS FOR EXTERIOR BEARING WALLS (Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir and requires number of jack studs)									
GIDERS AND HEADERS SUPPORTING	SIZE: GROUND SNOW (GAS) (psf)				Building Width (feet)				
	20				28				
	SIZE	Span	N ^o 4	Span	N ^o 4	Span	N ^o 4	Span	N ^o 4
Roof and ceiling	2-2x4	3-2	1	2-3	1	2-6	1	2-6	1
	2-2x6	5-4	2	4-2	1	4-3	2	4-3	2
	2-2x8	5-11	3	4-7	2	4-5	2	4-5	2
	2-2x10	7-3	2	6-3	2	5-7	2	5-7	2
	2-2x12	8-5	2	7-3	2	6-6	2	6-6	2
	3-2x4	4-11	2	3-10	2	3-10	2	3-10	2
	3-2x6	6-5	2	5-3	2	5-3	2	5-3	2
	3-2x8	8-2	2	6-10	2	6-10	2	6-10	2
	3-2x10	9-2	2	8-0	2	7-3	2	7-3	2
	3-2x12	10-7	2	8-7	2	8-2	2	8-2	2
Roof ceiling and over center-sheathing floor	4-2x6	8-4	1	7-3	1	6-8	1	6-8	1
	4-2x8	10-2	2	10-7	2	9-6	2	9-6	2
	4-2x10	12-2	2	12-7	2	12-2	2	12-2	2
	4-2x12	14-1	2	14-1	2	14-1	2	14-1	2
	2-2x4	2-9	1	2-3	1	2-2	1	2-2	1
	2-2x6	4-1	1	3-3	2	3-3	2	3-3	2
	2-2x8	5-1	2	4-3	2	4-3	2	4-3	2
	2-2x10	6-4	2	5-6	2	5-0	2	5-0	2
	2-2x12	7-4	2	6-3	2	5-9	2	5-9	2
	3-2x4	4-11	2	3-10	2	3-10	2	3-10	2
Roof ceiling and one clear span floor	2-2x6	5-10	2	4-7	2	3-9	2	3-9	2
	2-2x8	6-10	2	5-11	2	5-4	2	5-4	2
	2-2x10	8-1	2	6-13	2	6-8	2	6-8	2
	2-2x12	9-2	2	7-3	2	6-10	2	6-10	2
	3-2x4	5-1	2	4-3	2	4-3	2	4-3	2
	3-2x6	6-7	2	5-3	2	5-3	2	5-3	2
	3-2x8	8-1	2	6-1	2	5-5	2	5-5	2
	3-2x10	9-2	2	7-3	2	6-10	2	6-10	2
	3-2x12	10-7	2	8-0	2	7-3	2	7-3	2
	4-2x6	7-4	1	6-1	2	5-5	2	5-5	2
Roof ceiling and two center-sheathing floor	2-2x4	3-8	2	2-3	2	2-10	2	2-10	2
	2-2x6	4-7	2	4-3	2	3-8	2	3-8	2
	2-2x8	5-11	2	4-7	2	4-7	2	4-7	2
	2-2x10	7-1	2	6-2	2	5-7	2	5-7	2
	2-2x12	8-2	2	7-1	2	6-2	2	6-2	2
	3-2x4	4-8	2	3-7	2	3-7	2	3-7	2
	3-2x6	5-9	2	5-1	2	4-7	2	4-7	2
	3-2x8	6-8	2	5-10	2	5-3	2	5-3	2
	3-2x10	7-1	2	6-2	2	5-7	2	5-7	2
	3-2x12	8-2	2	7-1	2	6-2	2	6-2	2
Roof ceiling and two clear span floor	4-2x6	8-2	2	7-2	2	6-5	2	6-5	2
	4-2x8	10-1	2	9-1	2	8-5	2	8-5	2
	4-2x10	12-1	2	11-1	2	10-1	2	10-1	2
	4-2x12	14-1	2	13-1	2	12-1	2	12-1	2
	2-2x4	3-2	1	2-3	1	2-6	1	2-6	1
	2-2x6	5-2	2	4-3	2	4-3	2	4-3	2
	2-2x8	6-2	2	5-3	2	5-3	2	5-3	2
	2-2x10	7-2	2	6-3	2	6-3	2	6-3	2
	2-2x12	8-2	2	7-3	2	7-3	2	7-3	2
	3-2x4	4-2	2	3-3	2	3-3	2	3-3	2
	3-2x6	5-2	2	4-3	2	4-3	2	4-3	2

For S: 1 inch=25.4mm, 1 pound per square foot=0.04789kN/m²

- Spans are given in feet and inches.
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- Tabulated values assume #2 grade lumber.
- Balading with is measured perpendicular to the edge. For walls between those shown, spans are permitted to be interpolated.
- N^o Number of jack studs required to support each end. When the number of studs is not a whole number, the number of studs shall be rounded up by an approved framing anchor attached to the full-height wall stud and to the header.
- Use 100# ground snow load for areas in which ground snow load is less than 100# and the roof live load is equal to or less than 20#.

TABLE RB02.5(2) GIDER SPANS AND HEADER SPANS 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 GIDERS SUPPORTING	SIZE				Building Width (feet)				
	20				28				
	SIZE	Span	N ^o 4	Span	N ^o 4	Span	N ^o 4	Span	N ^o 4
One floor only	2-2x4	3-2	1	2-3	1	2-6	1	2-6	1
	2-2x6	5-4	2	4-2	1	4-3	2	4-3	2
	2-2x8	5-11	3	4-7	2	4-5	2	4-5	2
	2-2x10	7-3	2	6-3	2	5-7	2	5-7	2
	2-2x12	8-5	2	7-3	2	6-6	2	6-6	2
	3-2x4	4-11	2	3-10	2	3-10	2	3-10	2
	3-2x6	6-5	2	5-3	2	5-3	2	5-3	2
	3-2x8	8-2	2	6-10	2	6-10	2	6-10	2
	3-2x10	9-2	2	8-0	2	7-3	2	7-3	2
	3-2x12	10-7	2	8-7	2	8-2	2	8-2	2
Two floor only	4-2x6	8-4	1	7-3	1	6-8	1	6-8	1
	4-2x8	10-2	2	10-7	2	9-6	2	9-6	2
	4-2x10	12-2	2	12-7	2	12-2	2	12-2	2
	4-2x12	14-1	2	14-1	2	14-1	2	14-1	2
	2-2x4	2-9	1	2-3	1	2-2	1	2-2	1
	2-2x6	4-1	1	3-3	2	3-3	2	3-3	2
	2-2x8	5-1	2	4-3	2	4-3	2	4-3	2
	2-2x10	6-4	2	5-6	2	5-0	2	5-0	2
	2-2x12	7-4	2	6-3	2	5-9	2	5-9	2
	3-2x4	4-11	2	3-10	2	3-10	2	3-10	2
	3-2x6	6-5	2	5-3	2	5-3	2	5-3	2
	3-2x8	8-2	2	6-10	2	6-10	2	6-10	2
	3-2x10	9-2	2	8-0	2	7-3	2	7-3	2
	3-2x12	10-7	2	8-7	2	8-2	2	8-2	2
	4-2x6	8-4	1	7-3	1	6-8	1	6-8	1
	4-2x8	10-2	2	10-7	2	9-6	2	9-6	2
	4-2x10	12-2	2	12-7	2	12-2	2	12-2	2
	4-2x12	14-1	2	14-1	2	14-1	2	14-1	2

TABLE RB02.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS				
DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER *****	SPACING OF FASTENERS		Intermediate support **
		Edges (inches)	Intermediate support (inches)	
wood structural joists, subfloor, roof and wall sheathing to framing and partitionboard wall sheathing to framing	6d common nail (subfloor, wall)	6	12 *	
5/16" - 1/2"	6d common nail (roof)	6	12 *	
19/32" - 1"	10d common nail or 6d deformed nail	6	12	
1-1/8" - 1-1/4"	10d common nail or 6d deformed nail	6	12	
Other wall sheathing **				
1/2" regular cellularose fiberboard sheathing	1-1/2" galvanized roofing nail 6d common nail slope 18deg, 1-1/2" long	3	6	
1/2" regular cellularose fiberboard sheathing	1-1/2" galvanized roofing nail 6d common nail slope 18deg, 1-1/2" long	3	6	
1/2" regular cellularose fiberboard sheathing	1-3/4" galvanized roofing nail 6d common nail slope 18deg, 1-3/4" long	3	6	
25/32" structural cellularose fiberboard sheathing	1-1/2" galvanized roofing nail 6d common nail slope 18deg, 1-1/2" long	3	6	
1/2" gypsum sheathing	1-1/2" galvanized roofing nail 6d common nail slope 18deg, 1-1/2" long	4	8	
5/8" gypsum sheathing	1-1/2" galvanized roofing nail 6d common nail slope 18deg, 1-1/2" long	4	8	
wood structural joists, combination subfloor and partitionboard wall sheathing to framing	6d deformed nail or 6d common nail	6	12	
5/4" and less	6d common nail or 6d deformed nail	6	12	
7/8" - 1"	10d common nail or 6d deformed nail	6	12	

- For S: 1 inch = 25.4mm, 1 foot = 304.8mm, 1 mile per hour = 1.609km/h.
- All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 30ksi (207 MPa) for shank diameter of 18gauge (20d common nail), 50ksi (345 MPa) for shank diameter larger than 0.142inch but not larger than 0.171inch, and 100ksi (689 MPa) for shank diameter of 0.142inch less.
 - Staples are 16 gauge wire and have a minimum 7/16-inch on diameter crown width.
 - Nails shall be spaced at not more than 6inches on center at all supports where spans are 6inches or greater.
 - Four-toe—By 6-toe or 4-toe—By 3-toe panels shall be applied vertically.
 - Spacing of fasteners not included in this table shall be based on table RB02.3(1).
 - For regions having basic wind speed of 110mph or greater, 6d deformed nails shall be used for attaching plywood and wood structural panel roof sheathing to minimum 46-inch distance from gable end walls, 1" mean roof height is more than 25feet, up to 25feet maximum.
 - For regions having basic wind speed of 100mph or less, nails for attaching wood structural panel roof sheathing to gable end walls shall be spaced 6inches on center, when basic wind speed is greater than 100mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6inches on center for minimum 46-inch distance from ridges, eaves and gable end walls and 6inches on center to gable end wall framing.
 - Gypsum sheathing shall conform to ASTM C79 and shall be installed in accordance with 6A 253. Fiberboard sheathing shall conform to either ASTM 194.1 or ASTM C 208.
 - 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.



Gider Spans & Fastener Schedule Portland Remodel Portland, ME

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