

## Additional Rafter Span Tables for Code Check Building 5th edition (per note on page 37)

**IRC Rafter Span Tables:** The IRC provides 8 tables for rafter spans using common lumber species. Spans are measured as the horizontal distance between supports, including purlins. Each IRC table has separate sections for 10 psf and 20 psf dead load. Most roofing materials (including 2 layers of asphalt shingle) have a weight less than 10 psf, and the tables on the left side of these pages are used. Framing for tile or slate roofs weighing more than 10 psf should be sized using the 20 psf dead load columns on the right side of the page. The tables below are based on #2 grade lumber because it is the most common choice; the full IRC tables include other grades, including SS (select structural), #1, and #3. There are separate tables for 20 psf live loads, and for 30, 50, and 70 psf snow loads (see **Table 2**). There are also separate tables based on whether or not the ceiling is directly attached to the rafters. **Table 3** limits ceiling deflection to 1/240<sup>th</sup> the span, and the allowable spans in those tables are less than the tables that allow 1/180<sup>th</sup> deflection. If there is no tie at the bottom to connect the rafters, adjustment in accord with **Table 44** must be applied (Table note A).

TABLE 45		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(1) 20 PSF LIVE LOAD 10 PSF DEAD LOAD CEILING NOT ATTACHED TO RAFTERS, L/Δ=180							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	10-10	9-10	9-1	8-2	10-1	9-2	8-8	7-11	
2×6	16-10	14-7	13-3	11-11	15-11	14-2	12-11	11-7	
2×8	21-4	18-5	16-10	15-1	20-8	17-11	16-4	14-8	
2×10	26-0	22-6	20-7	18-5	25-3	21-11	20-0	17-10	
2×12	B	26-0	23-10	21-4	B	25-5	23-2	20-9	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	10-4	9-0	8-2	7-4	10-4	9-5	8-10	8-0	
2×6	15-7	13-6	12-3	11-0	16-3	14-4	13-1	11-9	
2×8	19-8	17-1	15-7	13-11	21-0	18-2	16-7	14-10	
2×10	23-5	20-3	18-6	16-6	25-8	22-3	20-3	18-2	
2×12	B	23-10	21-9	19-6	B	25-9	23-6	21-0	

TABLE 45B		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(1) 20 PSF LIVE LOAD 20 PSF DEAD LOAD CEILING NOT ATTACHED TO RAFTERS, L/Δ=180							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	10-0	8-7	7-10	7-0	9-8	8-5	7-8	6-10	
2×6	14-7	12-7	11-6	10-4	14-2	12-3	11-2	10-0	
2×8	18-5	16-0	14-7	13-0	17-11	15-6	14-2	12-8	
2×10	22-6	19-6	17-10	15-11	21-11	18-11	17-4	15-6	
2×12	26-0	22-7	20-8	18-6	25-5	22-0	20-1	17-11	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	9-0	7-9	7-1	6-4	9-10	8-6	7-9	6-11	
2×6	13-6	11-8	10-8	9-6	14-4	12-5	11-4	10-2	
2×8	17-1	14-9	13-6	12-1	18-2	15-9	14-4	12-10	
2×10	20-3	17-6	16-0	14-4	22-3	19-3	17-7	15-8	
2×12	23-10	20-8	18-10	16-10	25-9	22-4	20-4	18-3	

TABLE 45C		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(2) 20 PSF LIVE LOAD 10 PSF DEAD LOAD CEILING ATTACHED TO RAFTERS, L/Δ=240							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	9-10	8-11	8-5	7-10	9-2	8-4	7-10	7-3	
2×6	15-6	14-1	13-3	11-11	14-5	13-1	12-4	11-5	
2×8	20-5	18-5	16-10	15-1	19-0	17-3	16-3	14-8	
2×10	26-0	22-6	20-7	18-5	24-3	21-11	20-0	17-10	
2×12	B	26-0	23-10	21-4	B	25-5	23-2	20-9	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	9-5	8-7	8-1	7-4	9-5	8-7	8-1	7-6	
2×6	14-9	13-5	12-3	11-0	14-9	13-5	12-8	11-9	
2×8	19-6	17-1	15-7	13-11	19-6	17-9	16-7	14-10	
2×10	23-5	20-3	18-6	16-6	24-10	22-3	20-3	18-2	
2×12	B	23-10	21-9	19-6	B	25-9	23-6	21-0	

TABLE 45D		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(2) 20 PSF LIVE LOAD 20 PSF DEAD LOAD CEILING ATTACHED TO RAFTERS, L/Δ=240							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	9-10	8-7	7-10	7-0	9-2	8-4	7-8	6-10	
2×6	14-7	12-7	11-6	10-4	14-2	12-3	11-2	10-0	
2×8	18-5	16-0	14-7	13-0	17-11	15-6	14-2	12-8	
2×10	22-6	19-6	17-10	15-11	21-11	18-11	17-4	15-6	
2×12	26-0	22-7	20-8	18-6	25-5	22-0	20-1	17-11	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)								
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	9-0	7-9	7-1	6-4	9-5	8-6	7-9	6-11	
2×6	13-6	11-8	10-8	9-6	14-4	12-5	11-4	10-2	
2×8	17-1	14-9	13-6	12-1	18-2	15-9	14-4	12-10	
2×10	20-3	17-6	16-0	14-4	22-3	19-3	17-7	15-8	
2×12	23-10	20-8	18-10	16-10	25-9	22-4	20-4	18-3	

<b>TABLE 45E</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(3)</b> <b>30 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD</b> <b>CEILING NOT ATTACHED TO RAFTERS, L/Δ=180</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	9-6	8-3	7-7	6-9	8-10	8-0	7-4	6-7	
2×6	14-0	12-1	11-0	9-10	13-7	11-9	10-9	9-7	
2×8	17-8	15-4	14-0	12-6	17-2	14-11	13-7	12-2	
2×10	21-7	18-9	17-1	15-3	21-0	18-2	16-7	14-10	
2×12	25-1	21-8	19-10	17-9	24-4	21-1	19-3	17-3	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	8-7	7-6	6-10	6-1	9-1	8-2	7-5	6-8	
2×6	12-11	11-2	10-2	9-2	13-9	11-11	10-11	9-9	
2×8	16-4	14-2	12-11	11-7	17-5	15-1	13-9	12-4	
2×10	19-5	16-10	15-4	13-9	21-4	18-5	16-10	15-1	
2×12	22-10	19-10	18-1	16-2	24-8	21-5	19-6	17-6	

<b>TABLE 45F</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(3)</b> <b>30 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD</b> <b>CEILING NOT ATTACHED TO RAFTERS, L/Δ=180</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	8-6	7-5	6-9	6-0	8-4	7-2	6-7	5-10	
2×6	12-6	10-10	9-10	8-10	12-2	10-6	9-7	8-7	
2×8	15-10	13-8	12-6	11-2	15-4	13-4	12-2	10-10	
2×10	19-4	16-9	15-3	13-8	18-9	16-3	14-10	13-3	
2×12	22-5	19-5	17-9	15-10	21-9	18-10	17-3	15-5	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	7-8	6-8	6-1	5-5	8-5	7-3	6-8	5-11	
2×6	11-7	10-0	9-2	8-28	12-4	10-8	9-9	8-8	
2×8	14-8	12-8	11-7	10-4	15-7	13-6	12-4	11-0	
2×10	17-4	15-1	13-9	12-3	19-1	16-6	15-1	13-6	
2×12	20-5	17-9	16-2	14-6	22-1	19-2	17-6	15-7	

<b>TABLE 45G</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(4)</b> <b>30 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD</b> <b>CEILING ATTACHED TO RAFTERS, L/Δ=240</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	8-7	7-10	7-4	6-9	8-0	7-3	6-10	6-4	
2×6	13-6	12-1	11-0	9-10	12-7	11-5	10-9	9-7	
2×8	17-8	15-4	14-0	12-6	16-7	14-11	13-7	12-2	
2×10	21-7	18-9	17-1	15-3	21-0	18-2	16-7	14-10	
2×12	25-1	21-8	19-10	17-9	24-4	21-1	19-3	17-3	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	8-3	7-6	6-10	6-1	8-3	7-6	7-0	6-6	
2×6	12-11	11-2	10-2	9-2	12-11	11-9	10-11	9-9	
2×8	16-4	14-2	12-11	11-7	17-0	15-1	13-9	12-4	
2×10	19-5	16-10	15-4	13-9	21-4	18-5	16-10	15-1	
2×12	22-10	19-10	18-1	16-2	24-8	21-5	19-6	17-6	

<b>TABLE 45H</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(4)</b> <b>30 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD</b> <b>CEILING ATTACHED TO RAFTERS, L/Δ=240</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	8-6	7-5	6-9	6-0	8-0	7-2	6-7	5-10	
2×6	12-6	10-10	9-1	8-10	12-2	10-6	9-7	8-7	
2×8	15-10	13-8	12-6	11-2	15-4	13-4	12-2	10-10	
2×10	19-4	16-9	15-3	13-8	18-9	16-3	14-10	13-3	
2×12	22-5	19-5	17-9	15-10	21-9	18-10	17-3	15-5	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	7-8	6-8	6-1	5-5	8-3	7-3	6-8	5-11	
2×6	11-7	10-0	9-2	8-2	12-4	10-8	9-9	8-8	
2×8	14-8	12-8	11-7	10-4	15-7	13-6	12-4	11-0	
2×10	17-4	15-1	13-9	12-3	19-1	16-6	15-1	13-6	
2×12	20-5	17-9	16-2	14-6	22-1	19-2	17-6	15-7	

TABLE 45I		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(5) 50 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD CEILING NOT ATTACHED TO RAFTERS, L/Δ=180							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	7-10	6-9	6-2	5-6	7-5	6-7	6-0	5-4	
2×6	11-5	9-10	9-0	8-1	11-1	9-7	8-9	7-10	
2×8	14-5	12-6	11-5	10-3	14-0	12-2	11-1	9-11	
2×10	17-8	15-3	13-11	12-6	17-2	14-10	13-7	12-1	
2×12	20-5	17-9	16-2	14-6	19-11	17-3	15-9	14-1	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	7-0	6-1	5-7	5-0	7-8	6-8	6-1	5-5	
2×6	10-6	9-2	8-4	7-5	11-3	9-9	8-11	7-11	
2×8	13-4	11-7	10-7	9-5	14-3	12-4	11-3	10-1	
2×10	15-10	13-9	12-6	11-3	17-5	15-1	13-9	12-4	
2×12	18-8	16-2	14-9	13-2	20-2	17-6	15-11	14-3	

TABLE 45J		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(5) 50 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD CEILING NOT ATTACHED TO RAFTERS, L/Δ=180							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	7-3	6-3	5-8	5-1	7-0	6-1	5-7	4-11	
2×6	10-7	9-2	8-4	7-6	10-3	8-11	8-1	7-3	
2×8	13-4	11-7	10-9	9-5	13-0	11-3	10-3	9-2	
2×10	16-4	14-2	12-11	11-7	15-10	13-9	12-7	11-3	
2×12	18-11	16-5	15-0	13-5	18-5	15-11	14-7	13-0	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	6-6	5-8	5-2	4-7	7-1	6-2	5-7	5-0	
2×6	9-9	8-5	7-9	6-11	10-5	9-0	8-3	7-4	
2×8	12-4	10-9	9-9	8-9	13-2	11-5	10-5	9-4	
2×10	14-8	12-9	11-7	10-5	16-1	13-11	12-9	11-5	
2×12	17-3	15-0	13-8	12-3	18-8	16-2	14-9	13-2	

TABLE 45K		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(6) 50 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD CEILING ATTACHED TO RAFTERS, L/Δ=240							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	7-3	6-7	6-2	5-6	6-9	6-2	5-9	5-4	
2×6	11-5	9-10	9-0	8-1	10-8	9-7	8-9	7-10	
2×8	14-5	12-6	11-5	10-3	14-0	12-2	11-1	9-11	
2×10	17-8	15-3	13-11	12-6	17-2	14-10	13-7	12-1	
2×12	20-5	17-9	16-2	14-6	19-11	17-3	15-9	14-1	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	6-11	6-1	5-7	5-0	6-11	6-4	5-11	5-5	
2×6	10-6	9-2	8-4	7-5	10-11	9-9	8-11	7-11	
2×8	13-4	11-7	10-7	9-5	14-3	12-4	11-3	10-1	
2×10	15-10	13-9	12-6	11-3	17-5	15-1	13-9	12-4	
2×12	18-8	16-2	14-9	13-2	20-2	17-6	15-11	14-3	

TABLE 45L		RAFTER SPANS <sup>A</sup> ♦ T802.4.1(6) 50 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD CEILING ATTACHED TO RAFTERS, L/Δ=240							
Rafter Nominal Size	Douglas Fir-Larch #2				Hem-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	7-3	6-3	5-8	5-1	6-9	6-1	5-7	4-11	
2×6	10-7	9-2	8-4	7-6	10-3	8-11	8-1	7-3	
2×8	13-4	11-7	10-7	9-5	13-0	11-3	10-3	9-2	
2×10	16-4	14-2	12-11	11-7	15-10	13-9	12-7	11-3	
2×12	18-11	16-5	15-0	13-5	18-5	15-11	14-7	13-0	
Rafter Nominal Size	Southern Pine #2				Spruce-Pine-Fir #2				
	Rafter Spacing (in. o.c.)				Rafter Spacing (in. o.c.)				
	12	16	19.2	24	12	16	19.2	24	
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	
2×4	6-6	5-8	5-2	4-7	6-11	6-2	5-7	5-0	
2×6	9-9	8-5	7-9	6-11	10-5	9-0	8-3	7-4	
2×8	12-4	10-9	9-9	8-9	13-2	11-5	10-5	9-4	
2×10	14-8	12-9	11-7	10-5	16-1	13-11	12-9	11-5	
2×12	17-3	15-0	13-8	12-3	18-8	16-2	14-9	13-2	

<b>TABLE 45M</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(7)</b> <b>70 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD</b> <b>CEILING NOT ATTACHED TO RAFTERS, L/Δ=180</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-9	5-10	5-4	4-9	6-7	5-8	5-2	4-8	
2×6	9-10	8-7	7-10	7-0	9-7	8-4	7-7	6-9	
2×8	12-6	10-10	9-11	8-10	12-2	10-6	9-7	8-7	
2×10	15-3	13-3	12-1	10-10	14-10	12-10	11-9	10-6	
2×12	17-9	15-4	14-0	12-6	17-3	14-11	13-7	12-2	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-1	5-3	4-10	4-4	6-8	5-9	5-3	4-8	
2×6	9-2	7-11	7-3	6-5	9-9	8-5	7-8	6-11	
2×8	11-7	10-0	9-2	8-2	12-4	10-8	9-9	8-9	
2×10	13-9	11-11	10-10	9-9	15-1	13-1	11-11	10-8	
2×12	16-2	14-0	12-9	11-5	17-6	15-2	13-10	12-4	

<b>TABLE 45N</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(7)</b> <b>70 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD</b> <b>CEILING NOT ATTACHED TO RAFTERS, L/Δ=180</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-4	5-6	5-0	4-6	6-2	5-4	4-11	4-4	
2×6	9-4	8-1	7-4	6-7	9-1	7-10	7-2	6-5	
2×8	11-9	10-3	9-4	8-4	11-5	9-11	9-1	8-1	
2×10	14-5	12-6	11-5	10-2	14-0	12-1	11-1	9-11	
2×12	16-8	14-6	13-2	11-10	16-3	14-1	12-10	11-6	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	5-9	5-0	4-6	4-1	6-3	5-5	5-0	4-5	
2×6	8-7	7-5	6-10	6-1	9-2	7-11	7-3	6-6	
2×8	10-11	9-5	8-8	7-9	11-8	10-1	9-2	8-3	
2×10	12-11	11-3	10-3	9-2	14-2	12-4	11-3	10-0	
2×12	15-3	13-2	12-1	10-9	16-6	14-3	13-0	11-8	

<b>TABLE 45O</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(8)</b> <b>70 PSF GROUND SNOW LOAD 10 PSF DEAD LOAD</b> <b>CEILING ATTACHED TO RAFTERS, L/Δ=240</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-6	5-10	5-4	4-9	6-1	5-6	5-2	4-8	
2×6	9-10	8-7	7-10	7-0	9-6	8-4	7-7	6-9	
2×8	12-6	10-10	9-11	8-10	12-2	10-6	9-7	8-7	
2×10	15-3	13-3	12-1	10-10	14-10	12-10	11-9	10-6	
2×12	17-9	15-4	14-0	12-6	17-3	14-11	13-7	12-2	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-1	5-3	4-10	4-4	6-2	5-8	5-3	4-8	
2×6	9-2	7-11	7-3	6-5	9-9	8-5	7-8	6-11	
2×8	11-7	10-0	9-2	8-2	12-4	10-8	9-9	8-9	
2×10	13-9	11-11	10-10	9-9	15-1	13-1	11-11	10-8	
2×12	16-2	14-0	12-9	11-5	17-6	15-2	13-10	12-4	

<b>TABLE 45P</b>		<b>RAFTER SPANS<sup>A</sup> ♦ T802.4.1(8)</b> <b>70 PSF GROUND SNOW LOAD 20 PSF DEAD LOAD</b> <b>CEILING ATTACHED TO RAFTERS, L/Δ=240</b>							
<b>Rafter Nominal Size</b>	<b>Douglas Fir-Larch #2</b>				<b>Hem-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	6-4	5-6	5-0	4-6	6-1	5-4	4-11	4-4	
2×6	9-4	8-1	7-4	6-7	9-1	7-10	7-2	6-5	
2×8	11-9	10-3	9-4	8-4	11-5	9-11	9-1	8-1	
2×10	14-5	12-6	11-5	10-2	14-0	12-1	11-1	9-11	
2×12	16-8	14-6	13-2	11-10	16-3	14-1	12-10	11-6	
<b>Rafter Nominal Size</b>	<b>Southern Pine #2</b>				<b>Spruce-Pine-Fir #2</b>				
	<b>Rafter Spacing (in. o.c.)</b>				<b>Rafter Spacing (in. o.c.)</b>				
	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>19.2</b>	<b>24</b>	
	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	<b>ft.-in.</b>	
2×4	5-9	5-0	4-6	4-1	6-2	5-5	5-0	4-5	
2×6	8-7	7-5	6-10	6-1	9-2	7-11	7-3	6-6	
2×8	10-11	9-5	8-8	7-9	11-8	10-1	9-2	8-3	
2×10	12-11	11-3	10-3	9-2	14-2	12-4	11-3	10-0	
2×12	15-3	13-2	12-1	10-9	16-6	14-3	13-0	11-8	