



Maximum spans in feet-inches

Table	1 Floc	or Joist	s – 30 p	osf live	load, 1	0 psf de	ead loa	d, 360 d	deflecti	on				Part	1 of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	8-7	8-6	7-10	8-4	8-3	7-10	8-1	7-11	7-10	7-8	7-4	7-8	7-6	7-8
2x4	16	7-10	7-8	7-1	7-7	7-6	7-1	7-4	7-3	7-1	7-0	6-8	7-0	6-10	7-0
	24	6-10	6-9	6-2	6-8	6-6	6-2	6-5	6-4	6-2	6-1	5-10	6-1	6-0	6-1
	12	13-6	13-4	12-3	13-1	12-11	12-3	12-9	12-6	12-3	12-0	11-7	12-0	11-10	12-0
2x6	16	12-3	12-1	11-2	11-11	11-9	11-2	11-7	11-4	11-2	10-11	10-6	10-11	10-9	10-11
	24	10-9	10-7	9-9	10-5	10-3	9-9	10-1	9-11	9-9	9-7	9-2	9-7	9-4	9-7
	12	17-10	17-7	16-2	17-4	17-0	16-2	16-9	16-6	16-2	15-10	15-3	15-10	15-7	15-10
2x8	16	16-2	15-11	14-8	15-9	15-6	14-8	15-3	15-0	14-8	14-5	13-10	14-5	14-2	14-5
	24	14-2	13-11	12-10	13-9	13-6	12-10	13-4	13-1	12-10	12-7	12-1	12-7	12-4	12-7
	12	22-9	22-5	20-8	22-1	21-9	20-8	21-5	21-0	20-8	20-3	19-5	20-3	19-10	20-3
2x10	16	20-8	20-4	18-9	20-1	19-9	18-9	19-5	19-1	18-9	18-5	17-8	18-5	18-0	18-5
	24	18-0	17-9	16-5	17-6	17-3	16-5	17-0	16-8	16-5	16-1	15-5	16-1	15-9	16-1
	12	26-0*	26-0*	25-1	26-0*	26-0*	25-1	26-0	25-7	25-1	24-8	23-7	24-8	24-2	24-8
2x12	16	25-1	24-9	22-10	24-5	24-0	22-10	23-7	23-3	22-10	22-5	21-6	22-5	21-11	22-5
	24	21-11	21-7	19-11	21-4	21-0	19-11	20-8	20-3	19-11	19-7	18-9	19-7	19-2	19-7

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	1 Floo	or Joist	s – 30 p	osf live	load, 1	0 psf de	ead loa	d, 360 c	deflecti	on				Part	2 of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	7-4	7-8	7-6	7-4	7-0	7-2	7-6	7-6	7-0	7-6	6-10	7-6	7-1	6-8
2x4	16	6-8	7-0	6-10	6-8	6-4	6-6	6-10	6-10	6-4	6-10	6-2	6-7	6-1	5-9
	24	5-10	6-1	6-0	5-10	5-7	5-8	6-0	5-11	5-7	5-7	5-5	5-4	5-0	4-8
	12	11-7	12-0	11-10	11-7	11-0	11-3	11-10	11-10	11-0	11-10	10-9	11-10	11-1	10-5
2x6	16	10-6	10-11	10-9	10-6	10-0	10-3	10-9	10-9	10-0	10-8	9-9	10-4	9-7	9-0
	24	9-2	9-7	9-4	9-2	8-9	8-11	9-4	9-4	8-9	8-9	8-6	8-5	7-10	7-4
	12	15-3	15-10	15-7	15-3	14-6	14-11	15-7	15-7	14-6	15-7	14-2	15-7	14-8	13-9
2x8	16	13-10	14-5	14-2	13-10	13-2	13-6	14-2	14-2	13-2	14-1	12-10	13-7	12-8	11-11
	24	12-1	12-7	12-4	12-1	11-6	11-10	12-4	12-4	11-6	11-6	11-3	11-1	10-4	9-9
	12	19-5	20-3	19-10	19-5	18-6	19-0	19-10	19-10	18-6	19-10	18-0	19-10	18-8	17-6
2x10	16	17-8	18-5	18-0	17-8	16-10	17-3	18-0	18-0	16-10	18-0	16-5	17-4	16-2	15-2
	24	15-5	16-1	15-9	15-5	14-8	15-1	15-9	15-8	14-8	14-8	14-4	14-2	13-2	12-5
	12	23-7	24-8	24-2	23-7	22-6	23-1	24-2	24-2	22-6	24-2	21-11	24-2	22-8	21-4
2x12	16	21-6	22-5	21-11	21-6	20-6	21-0	21-11	21-11	20-6	21-10	19-11	21-1	19-8	18-6
	24	18-9	19-7	19-2	18-9	17-11	18-4	19-2	19-1	17-11	17-10	17-5	17-2	16-1	15-1

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	2 Floo	or Joist	s – 40 p	osf live	load, 1	0 psf de	ead loa	d, 360 d	deflecti	on				Part	1 of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	7-10	7-8	7-1	7-7	7-6	7-1	7-4	7-3	7-1	7-0	6-8	7-0	6-10	7-0
2x4	16	7-1	7-0	6-5	6-11	6-9	6-5	6-8	6-7	6-5	6-4	6-1	6-4	6-2	6-4
	24	6-2	6-1	5-8	6-0	5-11	5-8	5-10	5-9	5-8	5-6	5-4	5-6	5-5	5-6
	12	12-3	12-1	11-2	11-11	11-9	11-2	11-7	11-4	11-2	10-11	10-6	10-11	10-9	10-11
2x6	16	11-2	11-0	10-2	10-10	10-8	10-2	10-6	10-4	10-2	9-11	9-6	9-11	9-9	9-11
	24	9-9	9-7	8-10	9-6	9-4	8-10	9-2	9-0	8-10	8-8	8-4	8-8	8-6	8-8
	12	16-2	15-11	14-8	15-9	15-6	14-8	15-3	15-0	14-8	14-5	13-10	14-5	14-2	14-5
2x8	16	14-8	14-6	13-4	14-3	14-1	13-4	13-10	13-7	13-4	13-1	12-7	13-1	12-10	13-1
	24	12-10	12-8	11-8	12-6	12-3	11-8	12-1	11-11	11-8	11-5	11-0	11-5	11-3	11-5
	12	20-8	20-4	18-9	20-1	19-9	18-9	19-5	19-1	18-9	18-5	17-8	18-5	18-0	18-5
2x10	16	18-9	18-6	17-0	18-3	17-11	17-0	17-8	17-4	17-0	16-9	16-0	16-9	16-5	16-9
	24	16-5	16-2	14-11	15-11	15-8	14-11	15-5	15-2	14-11	14-7	14-0	14-7	14-4	14-7
	12	25-1	24-9	22-10	24-5	24-0	22-10	23-7	23-3	22-10	22-5	21-6	22-5	21-11	22-5
2x12	16	22-10	22-6	20-9	22-2	21-10	20-9	21-6	21-1	20-9	20-4	19-6	20-4	19-11	20-4
	24	19-11	19-8	18-1	19-4	19-1	18-1	18-9	18-5	18-1	17-9	17-0	17-9	17-5	17-9

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	2 Floc	or Joist	s – 40 p	osf live	load, 1	0 psf de	ead loa	d, 360 d	deflecti	on				Part	2 of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	6-8	7-0	6-10	6-8	6-4	6-6	6-10	6-10	6-4	6-10	6-2	6-9	6-4	5-11
2x4	16	6-1	6-4	6-2	6-1	5-9	5-11	6-2	6-2	5-9	6-1	5-8	5-10	5-6	5-2
	24	5-4	5-6	5-5	5-4	5-1	5-2	5-5	5-4	5-1	5-0	4-11	4-9	4-6	4-2
	12	10-6	10-11	10-9	10-6	10-0	10-3	10-9	10-9	10-0	10-9	9-9	10-8	9-11	9-4
2x6	16	9-6	9-11	9-9	9-6	9-1	9-4	9-9	9-9	9-1	9-7	8-10	9-3	8-7	8-1
	24	8-4	8-8	8-6	8-4	7-11	8-2	8-6	8-4	7-11	7-10	7-9	7-6	7-0	6-7
	12	13-10	14-5	14-2	13-10	13-2	13-6	14-2	14-2	13-2	14-2	12-10	14-0	13-1	12-4
2x8	16	12-7	13-1	12-10	12-7	12-0	12-3	12-10	12-10	12-0	12-7	11-8	12-2	11-4	10-8
	24	11-0	11-5	11-3	11-0	10-6	10-9	11-3	11-0	10-6	10-3	10-2	9-11	9-3	8-8
	12	17-8	18-5	18-0	17-8	16-10	17-3	18-0	18-0	16-10	18-0	16-5	17-11	16-8	15-8
2x10	16	16-0	16-9	16-5	16-0	15-3	15-8	16-5	16-5	15-3	16-1	14-11	15-6	14-6	13-7
	24	14-0	14-7	14-4	14-0	13-4	13-8	14-4	14-0	13-4	13-1	13-0	12-8	11-10	11-1
	12	21-6	22-5	21-11	21-6	20-6	21-0	21-11	21-11	20-6	21-11	19-11	21-9	20-4	19-1
2x12	16	19-6	20-4	19-11	19-6	18-7	19-1	19-11	19-11	18-7	19-7	18-1	18-10	17-7	16-6
	24	17-0	17-9	17-5	17-0	16-3	16-8	17-5	17-1	16-3	16-0	15-10	15-5	14-4	13-6

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	12 We	t-Servi	ce Floo	r Joists	s (MC>19	9%) – 40) psf liv	e load,	10 psf	dead lo	oad, 36) defled	ction	Part	1 of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	7-6	7-5	6-10	7-4	7-3	6-10	7-1	7-0	6-10	6-9	6-5	6-9	6-7	6-9
2x4	16	6-10	6-9	6-3	6-8	6-7	6-3	6-5	6-4	6-3	6-1	5-10	6-1	6-0	6-1
	24	6-0	5-11	5-5	5-10	5-9	5-5	5-8	5-6	5-5	5-4	5-1	5-4	5-3	5-4
	12	11-10	11-8	10-9	11-6	11-4	10-9	11-2	11-0	10-9	10-7	10-2	10-7	10-4	10-7
2x6	16	10-9	10-7	9-9	10-5	10-4	9-9	10-2	10-0	9-9	9-7	9-2	9-7	9-5	9-7
	24	9-5	9-3	8-7	9-2	9-0	8-7	8-10	8-8	8-7	8-5	8-0	8-5	8-3	8-5
	12	15-7	15-5	14-2	15-2	14-11	14-2	14-8	14-5	14-2	13-11	13-4	13-11	13-8	13-11
2x8	16	14-2	14-0	12-11	13-9	13-7	12-11	13-4	13-2	12-11	12-8	12-2	12-8	12-5	12-8
	24	12-5	12-3	11-3	12-1	11-10	11-3	11-8	11-6	11-3	11-1	10-7	11-1	10-10	11-1
	12	19-11	19-8	18-1	19-4	19-1	18-1	18-9	18-5	18-1	17-9	17-0	17-9	17-5	17-9
2x10	16	18-1	17-10	16-5	17-7	17-4	16-5	17-0	16-9	16-5	16-2	15-6	16-2	15-10	16-2
	24	15-10	15-7	14-4	15-4	15-2	14-4	14-11	14-8	14-4	14-1	13-6	14-1	13-10	14-1
	12	24-3	23-11	22-0	23-7	23-2	22-0	22-10	22-5	22-0	21-7	20-9	21-7	21-2	21-7
2x12	16	22-0	21-9	20-0	21-5	21-1	20-0	20-9	20-4	20-0	19-8	18-10	19-8	19-3	19-8
	24	19-3	19-0	17-6	18-8	18-5	17-6	18-1	17-10	17-6	17-2	16-5	17-2	16-10	17-2

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	e 12 We	t-Servi	ce Floo	or Joist	s (MC>1	9%) – 4(0 psf liv	ve load,	, 10 psf	dead l	oad, 36	0 defle	ction	Part	2of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	6-5	6-9	6-7	6-5	6-2	6-4	6-7	6-7	6-2	6-7	6-0	6-7	6-4	5-11
2x4	16	5-10	6-1	6-0	5-10	5-7	5-9	6-0	6-0	5-7	6-0	5-5	5-10	5-6	5-2
	24	5-1	5-4	5-3	5-1	4-11	5-0	5-0	4-11	4-11	5-0	4-9	4-9	4-6	4-2
	12	10-2	10-7	10-4	10-2	9-8	9-11	10-4	10-4	9-8	10-4	9-5	10-4	9-11	9-4
2x6	16	9-2	9-7	9-5	9-2	8-9	9-0	9-5	9-5	8-9	9-5	8-7	9-3	8-7	8-1
	24	8-0	8-5	8-3	8-0	7-8	7-10	7-10	7-8	7-8	7-10	7-6	7-6	7-0	6-7
	12	13-4	13-11	13-8	13-4	12-9	13-1	13-8	13-8	12-9	13-8	12-5	13-8	13-1	12-4
2x8	16	12-2	12-8	12-5	12-2	11-7	11-10	12-5	12-5	11-7	12-5	11-3	12-2	11-4	10-8
	24	10-7	11-1	10-10	10-7	10-1	10-4	10-4	10-2	10-1	10-3	9-10	9-11	9-3	8-8
	12	17-0	17-9	17-5	17-0	16-3	16-8	17-5	17-5	16-3	17-5	15-10	17-5	16-8	15-8
2x10	16	15-6	16-2	15-10	15-6	14-9	15-2	15-10	15-10	14-9	15-10	14-4	15-6	14-6	13-7
	24	13-6	14-1	13-10	13-6	12-11	13-3	13-2	12-11	12-11	13-1	12-7	12-8	11-10	11-1
	12	20-9	21-7	21-2	20-9	19-9	20-3	21-2	21-2	19-9	21-2	19-3	21-2	20-3	19-1
2x12	16	18-10	19-8	19-3	18-10	17-11	18-5	19-3	19-3	17-11	19-3	17-6	18-10	17-7	16-6
	24	16-5	17-2	16-10	16-5	15-8	16-1	16-1	15-9	15-8	16-0	15-3	15-5	14-4	13-6

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	15 Cei	ling Jo	ists – 1	0 psf li	ve load	, 5 psf	dead Ic	ad, 240) deflec	tion				Part	1 of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	14-2	14-0	12-11	13-9	13-7	12-11	13-4	13-2	12-11	12-8	12-2	12-8	12-5	12-8
2x4	16	12-11	12-9	11-9	12-6	12-4	11-9	12-2	11-11	11-9	11-6	11-0	11-6	11-3	11-6
	24	11-3	11-1	10-3	10-11	10-9	10-3	10-7	10-5	10-3	10-0	9-8	10-0	9-10	10-0
	12	22-4	22-0	20-3	21-8	21-4	20-3	21-0	20-8	20-3	19-11	19-1	19-11	19-6	19-11
2x6	16	20-3	20-0	18-5	19-8	19-5	18-5	19-1	18-9	18-5	18-1	17-4	18-1	17-8	18-1
	24	17-8	17-5	16-1	17-2	16-11	16-1	16-8	16-4	16-1	15-9	15-2	15-9	15-6	15-9
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-2	26-0*	25-8	26-0*
2x8	16	26-0*	26-0*	24-3	25-11	25-7	24-3	25-2	24-8	24-3	23-10	22-10	23-10	23-4	23-10
	24	23-4	23-0	21-2	22-8	22-4	21-2	21-11	21-7	21-2	20-10	19-11	20-10	20-5	20-10
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x10	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-5	26-0*	26-0	26-0*
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	15 Ceil	ing Joi	sts – 1() psf liv	e load,	5 psf d	ead loa	id, 240	deflect	ion				Part 2	2 of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	12-2	12-8	12-5	12-2	11-7	11-10	12-5	12-5	11-7	12-5	11-3	12-4	11-6	10-10
2x4	16	11-0	11-6	11-3	11-0	10-6	10-9	11-3	11-3	10-6	11-1	10-3	10-8	10-0	9-5
	24	9-8	10-0	9-10	9-8	9-2	9-5	9-10	9-8	9-2	9-1	8-11	8-9	8-2	7-8
	12	19-1	19-11	19-6	19-1	18-2	18-8	19-6	19-6	18-2	19-6	17-8	19-5	18-2	17-0
2x6	16	17-4	18-1	17-8	17-4	16-6	16-11	17-8	17-8	16-6	17-5	16-1	16-10	15-8	14-9
	24	15-2	15-9	15-6	15-2	14-5	14-9	15-6	15-3	14-5	14-3	14-1	13-9	12-10	12-0
	12	25-2	26-0*	25-8	25-2	24-0	24-7	25-8	25-8	24-0	25-8	23-4	25-7	23-11	22-5
2x8	16	22-10	23-10	23-4	22-10	21-9	22-4	23-4	23-4	21-9	23-0	21-2	22-2	20-8	19-5
	24	19-11	20-10	20-5	19-11	19-0	19-6	20-5	20-1	19-0	18-9	18-6	18-1	16-11	15-10
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x10	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	24-10
	24	25-5	26-0*	26-0	25-5	24-3	24-10	26-0	25-7	24-3	23-11	23-8	23-1	21-7	20-3
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	24-8

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	e 16 Ce	iling Jo	oists – 2	20 psf l	ive load	d, 10 ps	f dead	load, 24	40 defle	ection				Part	1 of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	11-3	11-1	10-3	10-11	10-9	10-3	10-7	10-5	10-3	10-0	9-8	10-0	9-10	10-0
2x4	16	10-3	10-1	9-4	9-11	9-9	9-4	9-8	9-6	9-4	9-1	8-9	9-1	8-11	9-1
	24	8-11	8-10	8-1	8-8	8-7	8-1	8-5	8-3	8-1	8-0	7-8	8-0	7-10	8-0
	12	17-8	17-5	16-1	17-2	16-11	16-1	16-8	16-4	16-1	15-9	15-2	15-9	15-6	15-9
2x6	16	16-1	15-10	14-7	15-7	15-5	14-7	15-2	14-11	14-7	14-4	13-9	14-4	14-1	14-4
	24	14-1	13-10	12-9	13-8	13-5	12-9	13-3	13-0	12-9	12-6	12-0	12-6	12-3	12-6
	12	23-4	23-0	21-2	22-8	22-4	21-2	21-11	21-7	21-2	20-10	19-11	20-10	20-5	20-10
2x8	16	21-2	20-11	19-3	20-7	20-3	19-3	19-11	19-7	19-3	18-11	18-2	18-11	18-6	18-11
	24	18-6	18-3	16-10	18-0	17-9	16-10	17-5	17-2	16-10	16-6	15-10	16-6	16-2	16-6
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-5	26-0*	26-0	26-0*
2x10	16	26-0*	26-0*	24-7	26-0*	25-10	24-7	25-5	25-0	24-7	24-1	23-2	24-1	23-8	24-1
	24	23-8	23-4	21-6	22-11	22-7	21-6	22-3	21-10	21-6	21-1	20-2	21-1	20-8	21-1
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-7	24-7	25-7	25-1	25-7

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	16 Ceil	ing Joi	sts – 2() psf liv	e load,	10 psf	dead lo	ad, 240) deflec	tion				Part 2	2 of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	9-8	10-0	9-10	9-8	9-2	9-5	9-10	9-8	9-2	9-1	8-11	8-9	8-2	7-8
2x4	16	8-9	9-1	8-11	8-9	8-4	8-7	8-7	8-5	8-4	7-10	7-10	7-7	7-1	6-8
	24	7-8	7-8	7-8	7-8	7-3	7-3	7-0	6-10	6-10	6-5	6-5	6-2	5-9	5-5
	12	15-2	15-9	15-6	15-2	14-5	14-9	15-6	15-3	14-5	14-3	14-1	13-9	12-10	12-0
2x6	16	13-9	14-4	14-1	13-9	13-1	13-5	13-6	13-2	13-1	12-4	12-4	11-11	11-1	10-5
	24	12-0	12-0	12-0	12-0	11-5	11-5	11-0	10-9	10-9	10-1	10-1	9-8	9-1	8-6
	12	19-11	20-10	20-5	19-11	19-0	19-6	20-5	20-1	19-0	18-9	18-6	18-1	16-11	15-10
2x8	16	18-2	18-11	18-6	18-2	17-3	17-9	17-9	17-5	17-3	16-3	16-3	15-8	14-8	13-9
	24	15-10	15-10	15-10	15-10	15-1	15-1	14-6	14-2	14-2	13-3	13-3	12-10	11-11	11-3
	12	25-5	26-0*	26-0	25-5	24-3	24-10	26-0	25-7	24-3	23-11	23-8	23-1	21-7	20-3
2x10	16	23-2	24-1	23-8	23-2	22-1	22-7	22-8	22-2	22-1	20-9	20-9	20-0	18-8	17-6
	24	20-2	20-3	20-3	20-2	19-3	19-3	18-6	18-1	18-1	16-11	16-11	16-4	15-3	14-4
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	24-8
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-3	25-3	24-4	22-8	21-4
	24	24-7	24-8	24-8	24-7	23-5	23-4	22-6	22-0	22-0	20-7	20-7	19-10	18-6	17-5

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	17 Raf	ters – 2	20 psf li	ive loac	l, 10 ps	f dead	load, 24	l0 defle	ction, (C _D = 1.1	5			Part 1	of 2
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	11-3	11-1	10-3	10-11	10-9	10-3	10-7	10-5	10-3	10-0	9-8	10-0	9-10	10-0
2x4	16	10-3	10-1	9-4	9-11	9-9	9-4	9-8	9-6	9-4	9-1	8-9	9-1	8-11	9-1
	24	8-11	8-10	8-1	8-8	8-7	8-1	8-5	8-3	8-1	8-0	7-8	8-0	7-10	8-0
	12	17-8	17-5	16-1	17-2	16-11	16-1	16-8	16-4	16-1	15-9	15-2	15-9	15-6	15-9
2x6	16	16-1	15-10	14-7	15-7	15-5	14-7	15-2	14-11	14-7	14-4	13-9	14-4	14-1	14-4
	24	14-1	13-10	12-9	13-8	13-5	12-9	13-3	13-0	12-9	12-6	12-0	12-6	12-3	12-6
	12	23-4	23-0	21-2	22-8	22-4	21-2	21-11	21-7	21-2	20-10	19-11	20-10	20-5	20-10
2x8	16	21-2	20-11	19-3	20-7	20-3	19-3	19-11	19-7	19-3	18-11	18-2	18-11	18-6	18-11
	24	18-6	18-3	16-10	18-0	17-9	16-10	17-5	17-2	16-10	16-6	15-10	16-6	16-2	16-6
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-5	26-0*	26-0	26-0*
2x10	16	26-0*	26-0*	24-7	26-0*	25-10	24-7	25-5	25-0	24-7	24-1	23-2	24-1	23-8	24-1
	24	23-8	23-4	21-6	22-11	22-7	21-6	22-3	21-10	21-6	21-1	20-2	21-1	20-8	21-1
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-7	24-7	25-7	25-1	25-7

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table	17 Raft	ters – 2	0 psf liv	ve load	, 10 psf	dead l	oad, 24	0 defle	ction, C	C _D = 1.1	5			Part 2	of 2
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	9-8	10-0	9-10	9-8	9-2	9-5	9-10	9-10	9-2	9-9	8-11	9-4	8-9	8-3
2x4	16	8-9	9-1	8-11	8-9	8-4	8-7	8-11	8-11	8-4	8-5	8-1	8-1	7-7	7-1
	24	7-8	8-0	7-10	7-8	7-3	7-6	7-6	7-4	7-3	6-10	6-10	6-7	6-2	5-10
	12	15-2	15-9	15-6	15-2	14-5	14-9	15-6	15-6	14-5	15-3	14-1	14-9	13-9	12-11
2x6	16	13-9	14-4	14-1	13-9	13-1	13-5	14-1	14-1	13-1	13-3	12-9	12-9	11-11	11-2
	24	12-0	12-6	12-3	12-0	11-5	11-9	11-9	11-7	11-5	10-10	10-10	10-5	9-9	9-2
	12	19-11	20-10	20-5	19-11	19-0	19-6	20-5	20-5	19-0	20-2	18-6	19-5	18-1	17-0
2x8	16	18-2	18-11	18-6	18-2	17-3	17-9	18-6	18-6	17-3	17-5	16-10	16-10	15-8	14-9
	24	15-10	16-6	16-2	15-10	15-1	15-6	15-6	15-3	15-1	14-3	14-3	13-9	12-10	12-0
	12	25-5	26-0*	26-0	25-5	24-3	24-10	26-0	26-0	24-3	25-8	23-8	24-9	23-1	21-9
2x10	16	23-2	24-1	23-8	23-2	22-1	22-7	23-8	23-8	22-1	22-3	21-6	21-5	20-0	18-10
	24	20-2	21-1	20-8	20-2	19-3	19-9	19-10	19-5	19-3	18-2	18-2	17-6	16-4	15-4
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	24-4	22-10
	24	24-7	25-7	25-1	24-7	23-5	24-0	24-1	23-7	23-5	22-1	22-1	21-3	19-11	18-8

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table 41Rafters – 20 psf live load, 10 psf dead load, 240 deflection, $C_D = 1.25$ Particular													Part 1	of 2	
Size	Spacing In. o.c.	3000f- 2.4E	2850f- 2.3E	2850f- 1.8E	2700f- 2.2E	2550f- 2.1E	2550f- 1.8E	2400f- 2.0E	2250f- 1.9E	2100f- 1.8E	1950f- 1.7E	1950f- 1.5E	1850f- 1.7E	1800f- 1.6E	1650f- 1.7E
	12	11-3	11-1	10-3	10-11	10-9	10-3	10-7	10-5	10-3	10-0	9-8	10-0	9-10	10-0
2x4	16	10-3	10-1	9-4	9-11	9-9	9-4	9-8	9-6	9-4	9-1	8-9	9-1	8-11	9-1
	24	8-11	8-10	8-1	8-8	8-7	8-1	8-5	8-3	8-1	8-0	7-8	8-0	7-10	8-0
	12	17-8	17-5	16-1	17-2	16-11	16-1	16-8	16-4	16-1	15-9	15-2	15-9	15-6	15-9
2x6	16	16-1	15-10	14-7	15-7	15-5	14-7	15-2	14-11	14-7	14-4	13-9	14-4	14-1	14-4
	24	14-1	13-10	12-9	13-8	13-5	12-9	13-3	13-0	12-9	12-6	12-0	12-6	12-3	12-6
	12	23-4	23-0	21-2	22-8	22-4	21-2	21-11	21-7	21-2	20-10	19-11	20-10	20-5	20-10
2x8	16	21-2	20-11	19-3	20-7	20-3	19-3	19-11	19-7	19-3	18-11	18-2	18-11	18-6	18-11
	24	18-6	18-3	16-10	18-0	17-9	16-10	17-5	17-2	16-10	16-6	15-10	16-6	16-2	16-6
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-5	26-0*	26-0	26-0*
2x10	16	26-0*	26-0*	24-7	26-0*	25-10	24-7	25-5	25-0	24-7	24-1	23-2	24-1	23-8	24-1
	24	23-8	23-4	21-6	22-11	22-7	21-6	22-3	21-10	21-6	21-1	20-2	21-1	20-8	21-1
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
	24	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-7	24-7	25-7	25-1	25-7

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.





Maximum spans in feet-inches

Table 41 Rafters – 20 psf live load, 10 psf dead load, 240 deflection, $C_D = 1.25$													Part 2	Part 2 of 2	
Size	Spacing In. o.c.	1650f- 1.5E	1500f- 1.7E	1500f- 1.6E	1500f- 1.5E	1450f- 1.3E	1350f- 1.4E	1250f- 1.6E	1200f- 1.6E	1200f- 1.3E	1050f- 1.6E	1050f- 1.2E	975f- 1.6E	850f- 1.4E	750f- 1.4E
	12	9-8	10-0	9-10	9-8	9-2	9-5	9-10	9-10	9-2	9-10	8-11	9-9	9-1	8-7
2x4	16	8-9	9-1	8-11	8-9	8-4	8-7	8-11	8-11	8-4	8-9	8-1	8-5	7-11	7-5
	24	7-8	8-0	7-10	7-8	7-3	7-6	7-10	7-8	7-3	7-2	7-1	6-11	6-5	6-1
	12	15-2	15-9	15-6	15-2	14-5	14-9	15-6	15-6	14-5	15-6	14-1	15-4	14-4	13-6
2x6	16	13-9	14-4	14-1	13-9	13-1	13-5	14-1	14-1	13-1	13-10	12-9	13-3	12-5	11-8
	24	12-0	12-6	12-3	12-0	11-5	11-9	12-3	12-0	11-5	11-3	11-2	10-10	10-2	9-6
	12	19-11	20-10	20-5	19-11	19-0	19-6	20-5	20-5	19-0	20-5	18-6	20-3	18-11	17-9
2x8	16	18-2	18-11	18-6	18-2	17-3	17-9	18-6	18-6	17-3	18-2	16-10	17-6	16-4	15-4
	24	15-10	16-6	16-2	15-10	15-1	15-6	16-2	15-10	15-1	14-10	14-8	14-4	13-4	12-7
	12	25-5	26-0*	26-0	25-5	24-3	24-10	26-0	26-0	24-3	26-0	23-8	25-10	24-1	22-8
2x10	16	23-2	24-1	23-8	23-2	22-1	22-7	23-8	23-8	22-1	23-2	21-6	22-4	20-10	19-7
	24	20-2	21-1	20-8	20-2	19-3	19-9	20-8	20-3	19-3	18-11	18-9	18-3	17-0	16-0
	12	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*
2x12	16	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	26-0*	25-5	23-10
	24	24-7	25-7	25-1	24-7	23-5	24-0	25-1	24-8	23-5	23-0	22-10	22-2	20-9	19-6

Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360 or 240 and is based on live load only. The load duration factor, C_D , is 1.0 unless shown as 1.15 for snow loads or 1.25 for construction loads. Not all of the possible lumber grades will be produced. The marketplace will eventually determine the most common grades. An asterisk (*) indicates the listed span has been limited to 26'-0" based on availability; check sources of supply for lumber longer than 20'.