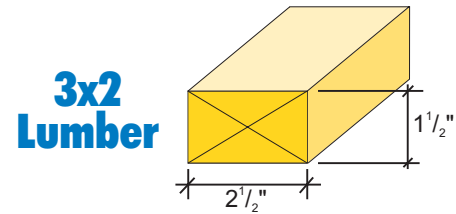
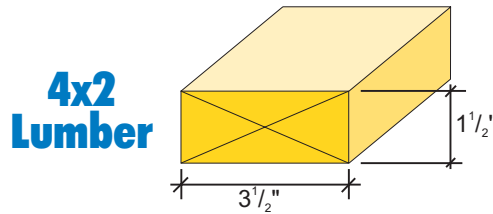


These allowable spans are based on NDS 2001. Maximum deflection is limited by L/360 or L/480¹ under live load. Basic Lumber Design Values are $F_{(b)}=2000$ psi $F_{(c)}=1100$ psi $F_{(d)}=2000$ psi $E=1,800,000$ psi Duration Of Load = 1.00. Spacing of trusses are center to center (in inches). Top Chord

Dead Load = 10 psf. Bottom Chord Dead Load = 5 psf. Center Line Chase = 24" max. Trusses must be designed for any special loading, such as concentrated loads. Other floor and roof loading conditions, a variety of species and other lumber grades are available.



Center Spacing	Deflection Limit	40 PSF Live Load 55 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	22'2"	24'11"	26'10"	28'8"	30'4"	31'11"
	L/480	20'2"	22'7"	24'11"	27'2"	29'4"	31'5"
19.2" o.c.	L/360	20'9"	22'8"	24'4"	26'0"	27'6"	29'0"
	L/480	18'11"	21'3"	23'6"	25'7"	27'6"	29'0"
24" o.c.	L/360	18'5"	20'1"	21'7"	23'1"	24'5"	25'9"
	L/480	17'7"	19'9"	21'7"	23'1"	24'5"	25'9"

Center Spacing	Deflection Limit	40 PSF Live Load 55 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	19'0"	20'9"	22'4"	23'10"	25'3"	26'7"
	L/480	18'0"	20'2"	22'4"	23'10"	25'3"	26'7"
19.2" o.c.	L/360	17'3"	18'9"	20'3"	21'7"	22'10"	24'1"
	L/480	16'11"	18'9"	20'3"	21'7"	22'10"	24'1"
24" o.c.	L/360	15'2"	16'7"	17'10"	19'1"	20'2"	21'3"
	L/480	15'2"	16'7"	17'10"	19'1"	20'2"	21'3"

Center Spacing	Deflection Limit	60 PSF Live Load 75 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	19'4"	21'4"	23'0"	24'6"	26'0"	27'4"
	L/480	17'7"	19'9"	21'10"	23'9"	25'8"	27'4"
19.2" o.c.	L/360	17'9"	19'4"	20'10"	22'3"	23'7"	24'10"
	L/480	16'7"	18'7"	20'6"	22'3"	23'7"	24'10"
24" o.c.	L/360	15'9"	17'2"	18'6"	19'9"	20'11"	22'0"
	L/480	15'4"	17'2"	18'6"	19'9"	20'11"	22'0"

Center Spacing	Deflection Limit	60 PSF Live Load 75 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	16'3"	17'9"	19'2"	20'5"	21'8"	22'9"
	L/480	15'9"	17'8"	19'2"	20'5"	21'8"	22'9"
19.2" o.c.	L/360	14'9"	16'1"	17'4"	18'6"	19'7"	20'7"
	L/480	14'9"	16'1"	17'4"	18'6"	19'7"	20'7"
24" o.c.	L/360	13'0"	14'2"	15'3"	16'4"	17'3"	18'2"
	L/480	13'0"	14'2"	15'3"	16'4"	17'3"	18'2"

Center Spacing	Deflection Limit	85 PSF Live Load 100 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	16'11"	18'6"	19'11"	21'3"	22'6"	23'8"
	L/480	15'8"	17'7"	19'5"	21'2"	22'6"	23'8"
19.2" o.c.	L/360	15'4"	16'9"	18'1"	19'3"	20'5"	21'6"
	L/480	14'9"	16'6"	18'1"	19'3"	20'5"	21'6"
24" o.c.	L/360	13'8"	14'10"	16'0"	17'1"	18'1"	19'1"
	L/480	13'8"	14'10"	16'0"	17'1"	18'1"	19'1"

Center Spacing	Deflection Limit	85 PSF Live Load 100 PSF Total Load					
		12"	14"	16"	18"	20"	22"
16" o.c.	L/360	14'1"	15'5"	16'7"	17'8"	18'9"	19'9"
	L/480	14'0"	15'5"	16'7"	17'8"	18'9"	19'9"
19.2" o.c.	L/360	12'9"	13'11"	15'0"	16'0"	16'11"	17'10"
	L/480	12'9"	13'11"	15'0"	16'0"	16'11"	17'10"
24" o.c.	L/360	11'3"	12'3"	13'3"	14'1"	14'11"	15'9"
	L/480	11'3"	12'3"	13'3"	14'1"	14'11"	15'9"

(1) Vibration Control -- Research by Virginia Tech indicates that L/480 live load deflection criteria provides a high degree of resistance to floor vibration (bounce). The building designer

desiring this benefit may choose to specify an L/480 live load deflection criteria to be used for the floor trusses.