

Size Joists and Girders using Trimax- Commercial



Tables below are for sizing structural joist and Girder members in a typical deck situation. Please confirm with local building codes regarding design and required design Live Loads. Charts assume 90°F working temperature, 243,580 psi Adjusted Mod. of Elasticity, 2,323 psi Adjusted Mod. of Rupture. Blocking between joists must be installed when joists are spanning an excess of 6'-0" All Deck designs should be reviewed by a Professional Engineer.

Maximum Spans for Deck Joists 100 PSF Commercial Live Load Simple Span Condition			
	12"	16"	24"
2x6	4'-0"	3'-9"	3'-3"
2x8	5'-6"	5'-0"	4'-3"
2x10	7'-0"	6'-3"	5'-6"
2x12	8'-6"	7'-9"	6'-9"
3x10	8'-3"	7'-6"	6'-6"
4x6	5'-6"	5'-0"	4'-3"
6x6	6'-6"	5'-9"	5'-0"

NOTE: When using a joist in a multiple span condition (rather than simple), the uniform allowable load over the multiple span may increase up to 30% **OR** the allowable span may increase up to 10%.

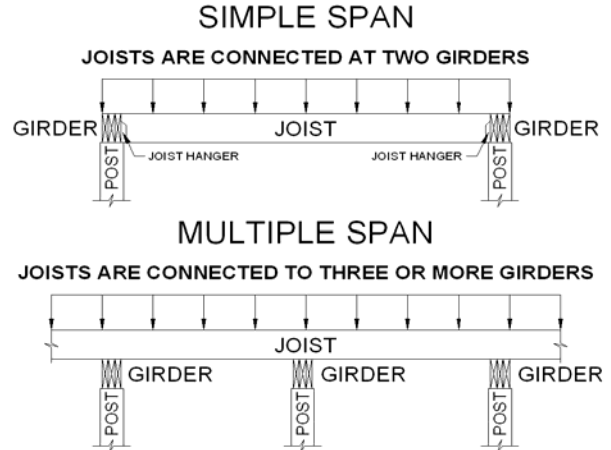
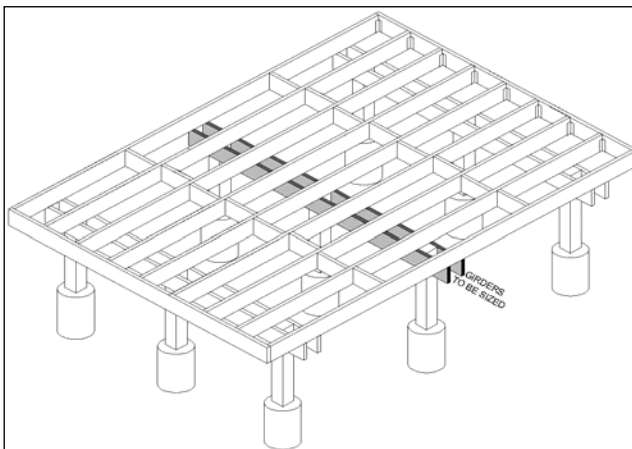
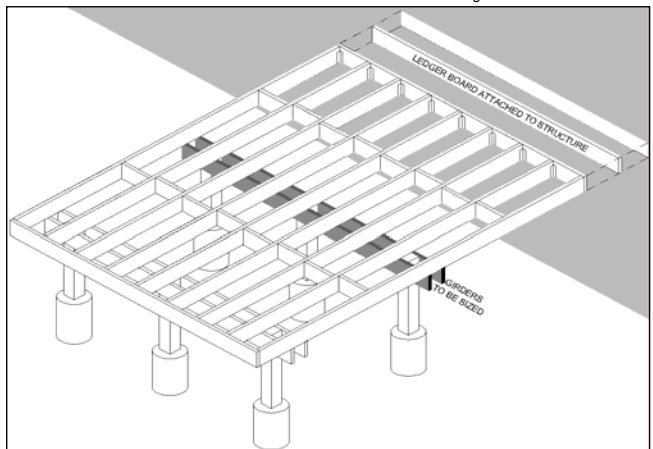


Table to Calculate Girders 100 psf Commercial Live Load							
Length of Span (feet)	Spacing between Posts (feet)						
	3	4	5	6	7	8	9
5	(2) 2x6's or (1) 4x6	(2) 2x8's or (1) 3x10	(2) 2x10's or (1) 3x10	(2) 2x12's or (2) 3x10's	(3) 2x12's	(4) 2x12's	*
6	(3) 2x6's or (2) 2x8's or (1) 4x6	(3) 2x8's or (2) 2x10's or (1) 3x10	(3) 2x10's or (2) 2x12's	(2) 2x12's	(4) 2x12's	*	*
7	(3) 2x6's or (2) 2x8's or (1) 6x6	(3) 2x8's or (2) 2x10's or (1) 3x10	(3) 2x10's or (2) 2x12's	(3) 2x12's or (3) 3x10's	(4) 2x12's	*	*
8	(3) 2x6's or (2) 2x8's or (1) 6x6	(4) 2x8's or (2) 2x10's or (1) 3x10	(3) 2x10's or (2) 2x12's	(3) 2x12's or (3) 3x10's	*	*	*
9	(2) 2x8's or (1) 6x6	(4) 2x8's or (2) 2x10's or (1) 3x10	(2) 2x12's	(3) 2x12's	*	*	*
10	(4) 2x6's or (2) 2x8's or (1) 6x6	(4) 2x8's or (3) 2x10's or (2) 2x12's	(2) 2x12's	(4) 2x12's	*	*	*
11	(4) 2x6's or (2) 2x8's	(3) 2x10's or (2) 2x12's	(3) 2x12's	(4) 2x12's	*	*	*

* Beams Larger than 2x12 recommended



Joists in Multiple Span connected to three girders



Joists in Multiple Span, connected to two girders & attached to Structure using Ledger Board