

DECK SPAN TABLES

Southern Yellow Pine No. 2 or better, agency grademarked
Total load: 40 PSF Live + 10 PSF Dead = 50 PSF

FLOOR JOIST MAXIMUM SPANS

SIZE	16" O.C.	24" O.C.
2 X 6	9' 9"	7' 11"
2 X 8	12' 10"	10' 6"
2 X 10	16' 5"	13' 4"

Additional cantilevered spans up to 2' may be added to the joist spans shown.

DECK BOARD MAX. SPANS

SIZE	MAX. SPAN
5/4 X 4	16"
5/4 X 6	16"
2 X 4	24"
2 X 6	24"

BEAM SIZES AND MAXIMUM SPANS (1)						
JOIST SIZE (4)	END BEAMS (2)			CENTER BEAMS (3)		
	NO.	SIZE	MAX. BEAM SPAN	NO.	SIZE	MAX. BEAM SPAN
2 X 6	2 (OR)	2 X 8	8'	2	2 X 10	8'
	1	2 x 10	(5) 8'			
2 X 8	2 (OR)	2 X 10	10'	2	2 X 12	8'
	1	2 X 12	8'			
2 X 10	2 (OR)	2 X 12	10'	2	2 X 12	8'
	2	2 X 10	(6) 8'			

- (1) Double beams bear directly on top of posts. Single beams bear on a notch in the post. Firmly secure beams to posts. Clinch-nail double beams 10" O.C. with 16 penny nails 1 1/2" from top and bottom edge.
- (2) Supporting ends of joists only, including cantilevered span, if any (2' maximum overhang).
- (3) Supporting middle of joists or ends of in-line joists.
- (4) Joists bear on top of beams or on 2 x 2 ledgers nailed to beams. Nail ledgers to beams with 16 penny nails in pre-drilled holes at each joist location, and 6" O.C. or less between joists. Toenail ends of joists to beams with two 16 penny nails.
- (5) When joists are cantilevered, use 2 x 10 #1 grade.
- (6) Notch joists for 2 x 2 ledgers.

RECOMMENDED POST SIZES *				
JOIST SIZE	DECK HEIGHT			
	4'	8'	12'	16'
2 X 6	4 X 4	4 X 6	6 X 6	
2 X 8	4 X 4	4 X 6	6 X 6	
2 X 10	4 X 6		6 X 6	

*Install sway bracing on perimeter posts consisting of x-braces and/or knee braces. Nail braces with three 16 penny nails at each end in pre-drilled holes. Posts should bear on stone base below the frost line, with stone backfill.

NAILING:

Use hot dip galvanized ring shank nails approximately 3 times as long as the thickness of wood being attached. Pre-drill nail holes in ledgers, braces and in ends of deck boards to prevent splitting, as well as when nailing beams and cleats to posts. Whenever possible, nail deck boards with bark side up to reduce cupping.

SPACING BETWEEN BOARDS:

Kiln drying treatment (KDAT) is recommended to reduce shrinkage and warping. KDAT boards should be spaced 1/8 inch. Non-KDAT boards should be nailed with little or no spacing to allow for shrinkage.