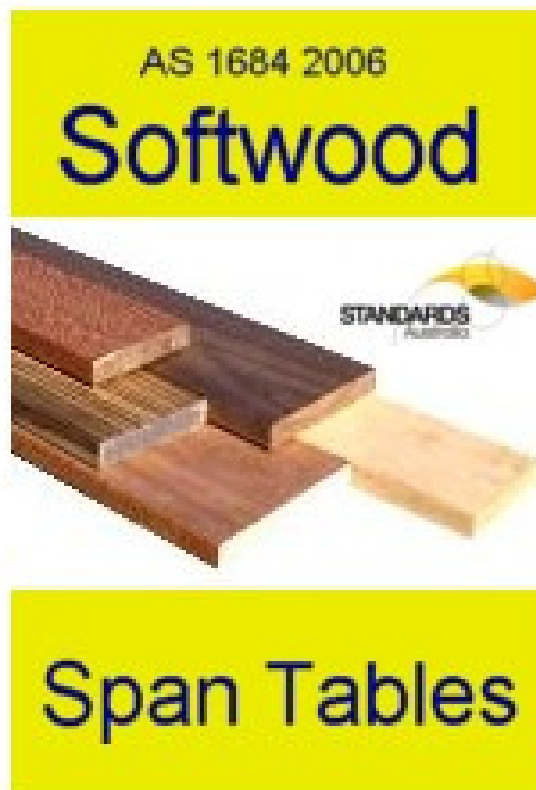




Extracted From Australian Building Code
Australian Standard AS 1684 - 2006



Seasoned Softwood Span Tables

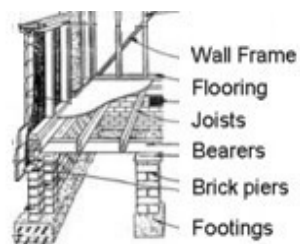
Floor Joists for Balconies, Decks and Internal Floors.

Seasoned Softwood Span Tables

Floor Joists for Balconies, Decks and Internal Floors

Revised Loading – 21/6/07

The 2006 AS 1684 – *Residential Timber Framed Construction Standard*, is based on the loadings contained in the *Loading Code AS1170.2 – 1989*. The current *Loading Code, AS/NZS 1170.1:2002*, has introduced a reduced imposed loading of 2.0 kPa on domestic decks above 1 metre from the ground. This guide has been produced so that builders, tradesmen and designers can take advantage of the reduced loading and compare the most commonly used seasoned softwood grades. As the timber is for external exposed above ground application, it is assumed that it will be preservative treated to H3 level.



Seasoned Softwood Floor Joist Spans For Balconies and Decks

(joist spacing 450mm)

Single Span (supported at either end only)

Size	F5		F7		MGP10	
	Span	Cantilever	Span	Cantilever	Span	Cantilever
90 x 35	NS	NS	1000	300	NS	NS
90 x 45	1100	300	1200	300	1400	400
120x35	1500	400	1700	500	1700	500
120x45	1800	500	2000	600	2200	600
140x35	2100	600	2200	600	2400	700
140 x 45	2300	600	2500	700	2900	800
190 x 35	3300	900	3400	1000	3500	1000
190 x 45	3600	1000	3800	1100	4100	1200
240 x 35	4200	1250	4400	1300	4300	1200
240 x 45	4500	1300	4800	1400	5100	1500
290 x 45	5500	1650	5700	1700	6000	1800

Continuous Span (supported over more than two points)

Size	F5		F7		MGP10	
	Span	Cantilever	Span	Cantilever	Span	Cantilever
90 x 35	1000	300	1300	300	1200	300
90 x 45	1300	300	1500	400	1700	500
120 x 35	1900	500	2100	600	2200	600
120 x 45	2200	600	2400	700	2700	800
140 x 35	2500	750	2700	800	2700	800
140 x 45	2800	800	3000	850	3300	900
190 x 35	3400	1000	3800	1050	3500	1000
190 x 45	3800	1100	4200	1150	4300	1150
240 x 35	4300	1250	4800	1300	4300	1200
240 x 45	4800	1400	5400	1450	5200	1550
290 x 45	5800	1650	6500	1750	6000	1800

Seasoned Softwood Floor Joist Spans For Internal Floors
(joist spacing 450mm - not supporting roof loads)

Single Span

size	Joist span max 450mm centres			Joist span max 600mm centres		
	F5	F7	MGP10	F5	F7	MGP10
70 x 45	NS	NS	NS	NS	NS	NS
90 x 35	NS	1000	NS	300	NS	NS
90 x 45	1000	1400	1500	300	1400	400
120 x 35	1600	1800	1900	500	1700	500
120 x 45	1900	2000	2100	600	2200	600
140 x 35	2000	2100	2300	600	2400	700
140 x 45	2200	2300	2600	700	2900	800
190 x 35	2900	3000	3300	1000	3500	1000
190 x 45	3100	3300	3600	1100	4100	1200
240 x 35	3800	4000	4400	1300	4300	1200
240 x 45	4100	4400	4800	1400	5100	1500
290 x 45	5000	5200	5500	1700	6000	1800

Continuous Span

size	Joist span max 450mm centres			Joist span max 600mm centres		
	F5	F7	MGP10	F5	F7	MGP10
70 x 45	NS	1100	1200	NS	NS	1000
90 x 35	1100	1500	1300	NS	1200	1000
90 x 45	1600	1700	1800	1200	1500	1700
120 x 35	2000	2100	2300	1800	1900	2100
120 x 45	2200	2300	2500	2000	2100	2300
140 x 35	2400	2500	2800	2200	2300	2500
140 x 45	2600	2800	3100	2400	2500	2700
190 x 35	3400	3600	4000	3100	3200	3500
190 x 45	3800	4000	4400	3400	3500	3900
240 x 35	4600	4900	5200	4000	4200	4500
240 x 45	5100	5300	5600	4400	4600	5000
290 x 45	5900	6100	6400	5400	5600	6000

Notes;

1. This table is extracted from AS 1684 - 2006 - Residential Timber Framed Construction Standards and assumes the building practice contained within that standard.
2. Roof load is calculated at zero, ie; no roof or wall loads are taken into account. Assumes a maximum floor mass of 40 kg/m².
3. Joists crippled over supports shall be calculated as single spans.
4. NS = not suitable

This publication is produced by the Timber and Building Materials Association, in conjunction with the Timber Development Association NSW and with assistance from the FWPRDC. The FWPRDC is jointly funded by the forest and wood products industry and the Australian Government.

Important notice;

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