

# Supplement No 22 (Sept. 1978) to AS 1684

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SAA LIGHT TIMBER FRAMING CODE  
LIGHT TIMBER FRAMING SPAN TABLES  
**Seasoned Softwood - Stress  
Grade F14**



STANDARDS ASSOCIATION OF AUSTRALIA  
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# STANDARDS ASSOCIATION OF AUSTRALIA

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## Supplement to AS 1684, SAA Light Timber Framing Code

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### SUPPLEMENT No 22

### LIGHT TIMBER FRAMING SPAN TABLES SEASONED SOFTWOOD—STRESS GRADE F14

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**1 SCOPE.** This Supplement to AS 1684, SAA Light Timber Framing Code, gives tables of maximum allowable span in their various structural applications for a range of commonly supplied softwood timber sections, provided they have been mechanically stress graded or visually stress graded in their seasoned condition to be in Stress Grade F14 in accordance with the appropriate Australian standard specification.

**2 APPLICATION.** This Supplement shall be read in conjunction with AS 1684, and the tables of span for the various members given herein shall apply only where the structures in which they are used are constructed in accordance with the Rules given in AS 1684.

NOTE: The following abbreviations are used in certain Tables:

NS = Not suitable  
A, B, C, D, E = The type of footing to be used (see Table 2 of AS 1684)  
(when used with span of bearers)  
F (when used with span of bearers) = Footing requires to be designed.

SEASONED SOFTWOOD—STRESS GRADE F14

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to AS 1684

TABLE 1S(A) BEARERS SUPPORTING SINGLE-STOREY LOADBEARING WALLS  
MAXIMUM SPACING OF BEARERS PARALLEL TO WALL 1.8 m

Size* depth X breadth (mm)	Maximum allowable span of bearer (m)							
	Sheet roofing				Tiled roofing			
	Raftered roof	Trussed roof, of span			Raftered roof	Trussed roof, of span		
6 m		7.5 m	9 m	6 m		7.5 m	9 m	
BEARERS SUPPORTED AT TWO POINTS ONLY								
90 X 70	1.5 A	1.4 A	1.4 A	1.3 B	1.2 B	1.2 B	1.1 B	1.1 B
120 X 70	1.9 B	1.9 B	1.8 B	1.8 B	1.6 B	1.6 B	1.5 B	1.4 B
140 X 70	2.3 B	2.2 B	2.1 B	2.0 B	1.9 B	1.8 B	1.7 C	1.7 C
170 X 70	2.8 B	2.7 B	2.6 B	2.5 B	2.3 C	2.2 C	2.1 C	2.0 D
190 X 70	3.1 B	3.0 C	2.9 C	2.8 C	2.6 C	2.5 C	2.4 D	2.3 D
240 X 70	3.9 C	3.8 C	3.6 D	3.5 D	3.3 D	3.1 D	3.0 D	2.9 D
BEARERS CONTINUOUS OVER TWO OR MORE SPANS								
90 X 70	2.0 B	1.9 B	1.8 B	1.8 B	1.7 B	1.6 B	1.5 B	1.4 B
120 X 70	2.6 B	2.5 B	2.4 B	2.3 B	2.2 C	2.1 C	2.0 C	1.9 C
140 X 70	3.0 B	2.9 B	2.8 C	2.7 C	2.6 C	2.5 C	2.3 D	2.2 D
170 X 70	3.7 C	3.6 C	3.4 C	3.3 D	3.1 D	3.0 D	2.8 D	2.7 D
190 X 70	4.0 C	3.9 D	3.8 D	3.7 D	3.5 D	3.3 D	3.2 D	3.0 E
240 X 70	4.8 D	4.7 D	4.6 D	4.5 D	4.2 D	4.1 E	4.0 E	3.8 F

TABLE 1S(B) BEARERS SUPPORTING SINGLE-STOREY LOADBEARING WALLS  
MAXIMUM SPACING OF BEARERS PARALLEL TO WALL 3.6 m

Size* depth X breadth (mm)	Maximum allowable span of bearer (m)							
	Sheet roofing				Tiled roofing			
	Raftered roof	Trussed roof, of span			Raftered roof	Trussed roof, of span		
6 m		7.5 m	9 m	6 m		7.5 m	9 m	
BEARERS SUPPORTED AT TWO POINTS ONLY								
90 X 70	1.4 B	1.4 B	1.3 B	1.3 B	1.2 B	1.2 B	1.1 B	1.1 B
120 X 70	1.9 B	1.8 B	1.8 B	1.7 B	1.6 B	1.5 B	1.5 C	1.4 C
140 X 70	2.2 B	2.1 B	2.1 B	2.0 B	1.9 C	1.8 C	1.7 C	1.7 C
170 X 70	2.7 C	2.6 C	2.5 C	2.4 C	2.3 C	2.2 D	2.1 D	2.0 D
190 X 70	3.0 C	2.9 C	2.8 C	2.7 D	2.5 D	2.4 D	2.3 D	2.2 D
240 X 70	3.8 D	3.6 D	3.5 D	3.4 D	3.2 D	3.1 D	2.9 E	2.8 E
BEARERS CONTINUOUS OVER TWO OR MORE SPANS								
90 X 70	1.9 B	1.8 B	1.8 B	1.7 B	1.6 B	1.6 B	1.5 C	1.4 C
120 X 70	2.5 C	2.4 C	2.4 C	2.3 C	2.2 C	2.1 C	2.0 D	1.9 D
140 X 70	2.9 C	2.9 C	2.8 C	2.7 D	2.5 D	2.4 D	2.3 D	2.2 D
170 X 70	3.6 D	3.5 D	3.3 D	3.2 D	3.1 D	2.9 D	2.8 D	2.7 E
190 X 70	3.9 D	3.9 D	3.7 D	3.6 D	3.4 D	3.3 E	3.1 E	3.0 E
240 X 70	4.7 D	4.6 D	4.5 E	4.4 E	4.2 E	4.1 F	3.9 F	3.8 F

TABLE 2S BEARERS SUPPORTING FLOOR JOISTS ONLY

Size* depth X breadth (mm)	Maximum allowable span of bearer (m)						
	Bearer spacing (m)						
	1.2	1.5	1.8	2.1	2.4	3.0	3.6
BEARERS SUPPORTED AT TWO POINTS ONLY							
90 X 70	1.8 A	1.7 A	1.6 A	1.5 A	1.5 A	1.4 A	1.3 B
120 X 70	2.5 A	2.3 A	2.2 B	2.0 B	2.0 B	1.8 B	1.7 B
140 X 70	2.9 B	2.7 B	2.5 B	2.4 B	2.3 B	2.1 B	2.0 B
170 X 70	3.5 B	3.2 B	3.0 B	2.9 B	2.8 B	2.6 B	2.4 B
190 X 70	3.8 B	3.6 B	3.4 B	3.2 B	3.1 B	2.9 B	2.7 C
240 X 70	4.5 B	4.3 B	4.1 B	3.9 C	3.8 C	3.6 C	3.4 D
BEARERS CONTINUOUS OVER TWO OR MORE SPANS							
90 X 70	2.3 A	2.1 A	2.0 A	1.9 B	1.7 B	1.5 B	1.4 B
120 X 70	3.0 B	2.8 B	2.7 B	2.5 B	2.3 B	2.1 B	1.9 B
140 X 70	3.5 B	3.3 B	3.1 B	2.9 B	2.7 B	2.4 B	2.2 B
170 X 70	4.1 B	3.9 B	3.7 B	3.5 B	3.3 B	2.9 B	2.6 C
190 X 70	4.4 B	4.2 B	4.0 B	3.8 C	3.7 C	3.3 C	2.9 C
240 X 70	5.3 C	5.0 C	4.8 C	4.6 C	4.4 C	4.1 D	3.7 D

TABLE 3S FLOOR JOISTS

Size* depth X breadth (mm)	Maximum allowable span of joist (m)					
	Supported at two points only			Continuous over two or more spans		
	Joist spacing (mm)					
(mm)	300	450	600	300	450	600
70 X 45	1.6	1.4	1.3	1.8	1.6	1.5
90 X 35	1.9	1.7	1.6	2.1	1.9	1.8
90 X 45	2.0	1.9	1.8	2.3	2.2	2.1
120 X 35	2.6	2.4	2.3	3.0	2.8	2.7
120 X 45	2.9	2.7	2.6	3.4	3.2	3.1
140 X 35	3.2	3.0	2.9	4.2	3.8	3.5
140 X 45	3.5	3.4	3.1	4.5	4.0	3.7

\*Size must not be under that stated (no negative tolerance).