AS 1684.3 C1 Supp 3—2010

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Residential timber-framed construction

Part 3: Cyclonic areas
C1 Supplement 3: Timber framing span tables—Wind classification C1—Seasoned softwood—Stress Grade F8 (Supplement to AS 1684.3—2010)

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LIST OF TABLES

SINGLE OR UPPER STOREY

LOWER STOREY OF TWO STOREY

VERANDAHS, POSTS & DECKS

TABLE 1

FLOOR BEARERS - Floor load width 1200 mm
Supporting single or upper storey loadbearing walls

Roof Load Width (mm)	1500		4500		7500		1500		4500		7500	
Size DxB (mm)	Maximum Bearer Span (mm)											
	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever
	Single Span						Continuous Span					
Sheet Roof												
2/90x35	1300	300	1100	300	1000	300	1800	500	1500	400	1300	300
2/90x45	1400	400	1200	300	1100	300	2000	550	1700	500	1500	400
2/120x35	1800	500	1500	400	1400	400	2300	600	2000	600	1800	500
2/120x45	1900	500	1700	500	1500	400	2600	750	2300	600	2000	600
2/140x35	2100	600	1800	500	1600	400	2700	800	2400	700	2100	600
2/140x45	2200	600	1900	500	1700	500	3000	850	2600	700	2300	600
2/170x35	2500	700	2200	600	2000	600	3300	950	2900	800	2500	700
2/170x45	2700	800	2300	600	2100	600	3700	1050	3200	900	2800	800
2/190x35	2800	800	2400	700	2200	600	3700	1050	3200	900	2800	800
2/190x45	3000	900	2600	700	2400	700	4000	1150	3600	1000	3200	900
2/240x35	3500	1000	3000	900	2800	800	4400	1300	4000	1200	3500	1000
2/240x45	3800	1100	3300	900	3000	900	4700	1400	4200	1200	3900	1100
2/290x35	4100	1200	3600	1000	3300	900	5100	1500	4600	1300	4200	1200
2/290x45	4300	1200	3900	1100	3600	1000	5400	1600	4900	1400	4500	1300
Tile Roof												
2/90x35	1200	300	1000	300	NS	NS	1600	400	1200	300	1000	300
2/90x45	1300	300	1100	300	NS	NS	1800	500	1400	400	1100	300
2/120x35	1600	400	1300	300	1100	300	2100	600	1600	400	1300	300
2/120x45	1700	500	1400	400	1200	300	2400	700	1800	500	1500	400
2/140x35	1900	500	1500	400	1300	300	2500	700	1900	500	1500	400
2/140x45	2000	600	1600	400	1400	400	2800	800	2100	600	1700	500
2/170x35	2300	600	1800	500	1600	400	3000	900	2300	600	1900	500
2/170x45	2500	700	2000	600	1700	500	3300	900	2600	700	2100	600
2/190x35	2500	700	2000	600	1800	500	3400	1000	2500	700	2100	600
2/190x45	2700	800	2200	600	1900	500	3700	1100	2900	800	2300	600
2/240x35	3200	900	2600	700	2300	600	4100	1200	3200	900	2600	700
2/240x45	3500	1000	2800	800	2500	700	4400	1300	3600	1000	3000	900
2/290x35	3800	1100	3100	900	2700	800	4800	1400	3800	1100	3200	900
2/290x45	4000	1200	3400	1000	3000	900	5100	1500	4300	1200	3600	1000

NOTES:

i) Maximum bearer spans supporting roof loads are based on the support of a maximum total sheet roof, framing and ceiling mass of 40 kg/m^2, a maximum total tile roof, framing and ceiling mass of 90 kg/m^2 and a maximum flooring mass of 40 kg/m^2. For guidance on determination of roof mass refer to Appendix B.

ii) Cantilevers shall not exceed 50% of actual backspan.

iii) Minimum bearing length = 50 mm at end supports and 100 mm at internal supports for continuous members.

iv) Multiple members shall be nailed together as per Clause 2.3.

v) For design parameters refer to Figure 4.6.

vi) Where loadbearing walls are supported at right angles to bearer within the bearer span reference should be made to Clause 4.3.1.5.

vii) Where bearers support roof point loads, reference should be made to Clause 4.3.1.6.

TABLE 2

FLOOR BEARERS - Floor load width 2400 mm
Supporting single or upper storey loadbearing walls

Roof Load Width (mm)	1500		4500		7500		1500		4500		7500	
Size DxB (mm)	Maximum Bearer Span (mm)											
	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever
	Single Span						Continuous Span					
Sheet Roof												
2/90x35	1100	300	1000	300	1000	300	1300	300	1200	300	1100	300
2/90x45	1200	300	1100	300	1000	300	1500	400	1400	400	1300	300
2/120x35	1500	400	1400	400	1300	300	1800	500	1600	400	1500	400
2/120x45	1600	400	1500	400	1400	400	2000	600	1800	500	1700	500
2/140x35	1800	500	1600	400	1500	400	2100	600	1900	500	1800	500
2/140x45	1900	500	1700	500	1600	400	2300	600	2100	600	2000	600
2/170x35	2100	600	1900	500	1800	500	2500	700	2300	600	2100	600
2/170x45	2300	600	2100	600	2000	600	2800	800	2600	700	2400	700
2/190x35	2400	700	2200	600	2000	600	2800	800	2600	700	2400	700
2/190x45	2600	700	2400	700	2200	600	3200	900	2900	800	2700	800
2/240x35	3000	900	2700	800	2500	700	3500	1000	3200	900	3000	900
2/240x45	3300	900	3000	900	2800	800	4000	1200	3700	1100	3400	1000
2/290x35	3600	1000	3300	900	3100	900	4300	1200	3900	1100	3600	1000
2/290x45	3900	1100	3600	1000	3000	900	4800	1400	4400	1300	4100	1200
Tile Roof												
2/90x35	1100	300	NS	NS	NS	NS	1300	300	1100	300	NS	NS
2/90x45	1200	300	1000	300	NS	NS	1400	400	1200	300	1000	300
2/120x35	1400	400	1200	300	1100	300	1700	500	1400	400	1200	300
2/120x45	1500	400	1300	300	1200	300	1900	500	1600	400	1400	400
2/140x35	1700	500	1400	400	1300	300	2000	600	1700	500	1400	400
2/140x45	1800	500	1500	400	1400	400	2200	600	1900	500	1600	400
2/170x35	2000	600	1700	500	1500	400	2400	700	2000	600	1700	500
2/170x45	2200	600	1900	500	1700	500	2700	800	2300	600	2000	600
2/190x35	2200	600	1900	500	1700	500	2600	700	2300	600	1900	500
2/190x45	2400	700	2100	600	1900	500	3000	900	2600	700	2200	600
2/240x35	2800	800	2400	700	2200	600	3300	900	2800	800	2400	700
2/240x45	3100	900	2600	700	2300	600	3800	1100	3200	900	2800	800
2/290x35	3400	1000	2900	800	2600	700	4000	1200	3400	1000	2900	800
2/290x45	3700	1100	3100	900	2800	800	4600	1300	3900	1100	3300	900

NOTES:

i) Maximum bearer spans supporting roof loads are based on the support of a maximum total sheet roof, framing and ceiling mass of 40 kg/m^2, a maximum total tile roof, framing and ceiling mass of 90 kg/m^2 and a maximum flooring mass of 40 kg/m^2. For guidance on determination of roof mass refer to Appendix B.

ii) Cantilevers shall not exceed 50% of actual backspan.

iii) Minimum bearing length = 50 mm at end supports and 100 mm at internal supports for continuous members.

iv) Multiple members shall be nailed together as per Clause 2.3.

v) For design parameters refer to Figure 4.6.

vi) Where loadbearing walls are supported at right angles to bearer within the bearer span reference should be made to Clause 4.3.1.5.

vii) Where bearers support roof point loads, reference should be made to Clause 4.3.1.6.

TABLE 3

FLOOR BEARERS - Floor load width 3600 mm
Supporting single or upper storey loadbearing walls

Roof Load Width (mm)	1500		4500		7500		1500		4500		7500	
Size DxB (mm)	Maximum Bearer Span (mm)											
	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever	Span	Cantilever
	Single Span						Continuous Span					
Sheet Roof												
2/90x35	1000	300	NS	NS	NS	NS	1100	300	1000	300	1000	300
2/90x45	1100	300	1000	300	1000	300	1300	300	1200	300	1100	300
2/120x35	1400	400	1300	300	1200	300	1500	400	1400	400	1300	300
2/120x45	1500	400	1400	400	1300	300	1700	500	1600	400	1500	400
2/140x35	1600	400	1500	400	1400	400	1700	500	1600	400	1500	400
2/140x45	1700	500	1600	400	1500	400	1900	500	1800	500	1700	500
2/170x35	1900	500	1800	500	1700	500	2100	600	2000	600	1900	500
2/170x45	2100	600	1900	500	1800	500	2400	700	2200	600	2100	600
2/190x35	2100	600	2000	600	1900	500	2300	600	2200	600	2100	600
2/190x45	2300	600	2200	600	2000	600	2600	700	2500	700	2400	700
2/240x35	2700	800	2500	700	2400	700	2900	800	2800	800	2600	700
2/240x45	2900	800	2700	800	2600	700	3300	900	3100	900	3000	900
2/290x35	3300	900	3000	900	2900	800	3500	1000	3300	900	3200	900
2/290x45	3500	1000	3300	900	3100	900	4000	1200	3800	1100	3600	1000
Tile Roof												
2/90x35	1000	300	NS	NS	NS	NS	1100	300	NS	NS	NS	NS
2/90x45	1100	300	NS	NS	NS	NS	1200	300	1100	300	1000	300
2/120x35	1300	300	1100	300	1000	300	1400	400	1300	300	1100	300
2/120x45	1400	400	1200	300	1100	300	1600	400	1400	400	1300	300
2/140x35	1500	400	1300	300	1200	300	1700	500	1500	400	1300	300
2/140x45	1600	400	1400	400	1300	300	1900	500	1700	500	1500	400
2/170x35	1800	500	1600	400	1500	400	2000	600	1800	500	1600	400
2/170x45	2000	600	1700	500	1600	400	2300	600	2000	600	1800	500
2/190x35	2000	600	1800	500	1600	400	2200	600	2000	600	1800	500
2/190x45	2200	600	1900	500	1800	500	2500	700	2300	600	2000	600
2/240x35	2600	700	2300	600	2100	600	2800	800	2500	700	2300	600
2/240x45	2800	800	2500	700	2200	600	3200	900	2800	800	2600	700
2/290x35	3100	900	2700	800	2500	700	3400	1000	3000	900	2700	800
2/290x45	3400	1000	3000	900	2700	800	3900	1100	3400	1000	3100	900

NOTES:

i) Maximum bearer spans supporting roof loads are based on the support of a maximum total sheet roof, framing and ceiling mass of 40 kg/m^2, a maximum total tile roof, framing and ceiling mass of 90 kg/m^2 and a maximum flooring mass of 40 kg/m^2. For guidance on determination of roof mass refer to Appendix B.

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v) For design parameters refer to Figure 4.6.

vi) Where loadbearing walls are supported at right angles to bearer within the bearer span reference should be made to Clause 4.3.1.5.

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