AS 1684.3 C1 Supp 12—2010

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Residential timber-framed construction

Part 3: Cyclonic areas
C1 Supplement 12: Timber framing span tables—Wind classification C1—Unseasoned hardwood—Stress Grade F8
(Supplement to AS 1684.3—2010)

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- Mr Peter Juniper

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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												
100x75	1300	300	1100	300	1000	300	1700	500	1500	400	1300	300
125x75	1600	400	1400	400	1200	300	2200	600	1900	500	1700	500
150x75	1900	500	1600	400	1500	400	2600	700	2200	600	2000	600
175x75	2200	600	1900	500	1700	500	3000	900	2600	700	2400	700
200x75	2600	700	2200	600	2000	600	3500	1000	3000	900	2700	800
225x75	2900	800	2500	700	2200	600	3800	1100	3400	1000	3000	900
250x75	3200	900	2800	800	2500	700	4100	1200	3700	1100	3400	1000
275x75	3500	1000	3000	900	2700	800	4400	1300	4000	1200	3700	1100
300x75	3800	1100	3300	900	3000	900	4700	1400	4300	1200	4000	1200
Tile Roof												
100x75	1100	300	NS	NS	NS	NS	1600	400	1200	300	1000	300
125x75	1400	400	1200	300	1000	300	2000	600	1600	400	1300	300
150x75	1700	500	1400	400	1200	300	2300	600	1900	500	1600	400
175x75	2000	600	1600	400	1400	400	2700	800	2200	600	1800	500
200x75	2300	600	1900	500	1600	400	3100	900	2500	700	2100	600
225x75	2600	700	2100	600	1800	500	3500	1000	2800	800	2400	700
250x75	2900	800	2300	600	2000	600	3800	1100	3200	900	2600	700
275x75	3200	900	2600	700	2300	600	4100	1200	3500	1000	2900	800
300x75	3500	1000	2800	800	2500	700	4400	1300	3800	1100	3200	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 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												
100x75	1100	300	1000	300	NS	NS	1400	400	1300	300	1200	300
125x75	1400	400	1200	300	1100	300	1800	500	1600	400	1500	400
150x75	1600	400	1500	400	1400	400	2100	600	1900	500	1800	500
175x75	1900	500	1700	500	1600	400	2500	700	2300	600	2100	600
200x75	2200	600	2000	600	1800	500	2800	800	2600	700	2400	700
225x75	2500	700	2200	600	2100	600	3200	900	2900	800	2700	800
250x75	2700	800	2500	700	2300	600	3600	1000	3300	900	3000	900
275x75	3000	900	2700	800	2500	700	3900	1100	3600	1000	3300	900
300x75	3300	900	3000	900	2800	800	4200	1200	3900	1100	3600	1000
Tile Roof												
100x75	1000	300	NS	NS	NS	NS	1300	300	1100	300	1000	300
125x75	1300	300	1100	300	1000	300	1700	500	1400	400	1200	300
150x75	1500	400	1300	300	1200	300	2000	600	1700	500	1500	400
175x75	1800	500	1500	400	1400	400	2300	600	2000	600	1700	500
200x75	2100	600	1700	500	1600	400	2700	800	2300	600	2000	600
225x75	2300	600	2000	600	1800	500	3000	900	2600	700	2200	600
250x75	2600	700	2200	600	2000	600	3400	1000	2900	800	2400	700
275x75	2800	800	2400	700	2200	600	3700	1100	3200	900	2700	800
300x75	3100	900	2600	700	2300	600	4000	1200	3400	1000	2900	800

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												
100x75	1000	300	NS	NS	NS	NS	1200	300	1100	300	1000	300
125x75	1200	300	1100	300	1100	300	1500	400	1400	400	1300	300
150x75	1500	400	1400	400	1300	300	1800	500	1700	500	1600	400
175x75	1700	500	1600	400	1500	400	2100	600	1900	500	1800	500
200x75	2000	600	1800	500	1700	500	2400	700	2200	600	2100	600
225x75	2200	600	2000	600	1900	500	2700	800	2500	700	2400	700
250x75	2500	700	2300	600	2100	600	3000	900	2800	800	2600	700
275x75	2700	800	2500	700	2400	700	3300	900	3100	900	2900	800
300x75	2900	800	2700	800	2600	700	3600	1000	3300	900	3200	900
Tile Roof												
100x75	NS	NS	NS	NS	NS	NS	1100	300	1000	300	NS	NS
125x75	1200	300	1000	300	NS	NS	1400	400	1200	300	1100	300
150x75	1400	400	1200	300	1100	300	1700	500	1500	400	1400	400
175x75	1600	400	1400	400	1300	300	2000	600	1800	500	1600	400
200x75	1900	500	1600	400	1500	400	2300	600	2000	600	1800	500
225x75	2100	600	1800	500	1700	500	2600	700	2300	600	2100	600
250x75	2300	600	2100	600	1900	500	2800	800	2500	700	2300	600
275x75	2600	700	2300	600	2100	600	3100	900	2800	800	2500	700
300x75	2800	800	2500	700	2200	600	3400	1000	3000	900	2800	800

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.