

AS 1684.3 C2 Supplement 7—2010

Residential timber-framed construction

Part 3: Cyclonic areas

C2 Supplement 7: Timber framing span tables—Wind classification C2—WA seasoned hardwood—Stress Grade F14 (Supplement to AS 1684.3—2010)



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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												
2/80x30	1200	300	1100	300	1000	300	1700	500	1400	400	1300	300
2/80x40	1400	400	1200	300	1100	300	1800	500	1600	400	1400	400
2/105x30	1600	400	1400	400	1300	300	2200	650	1900	500	1700	500
2/105x40	1800	500	1500	400	1400	400	2400	700	2100	600	1900	500
2/125x30	1900	500	1700	500	1500	400	2600	750	2300	600	2000	600
2/125x40	2100	600	1800	500	1600	400	2900	800	2500	700	2200	600
2/175x30	2700	800	2300	600	2100	600	3600	1000	3100	900	2800	800
2/175x40	2900	800	2500	700	2300	600	3900	1100	3500	1000	3100	900
2/220x30	3400	1000	2900	800	2600	700	4300	1200	3900	1100	3600	1000
2/220x40	3700	1100	3200	900	2900	800	4600	1300	4100	1200	3800	1100
2/260x30	3900	1100	3400	1000	3100	900	4900	1400	4400	1300	4100	1200
2/260x40	4100	1200	3700	1100	3400	1000	5200	1500	4700	1400	4400	1300
Tile Roof												
2/80x30	1100	300	NS	NS	NS	NS	1500	400	1200	300	1000	300
2/80x40	1200	300	1000	300	NS	NS	1700	500	1300	300	1200	300
2/105x30	1500	400	1200	300	1000	300	2000	600	1600	400	1300	300
2/105x40	1600	400	1300	300	1100	300	2200	600	1800	500	1500	400
2/125x30	1700	500	1400	400	1200	300	2400	700	1900	500	1600	400
2/125x40	1900	500	1500	400	1300	300	2600	700	2100	600	1800	500
2/175x30	2400	700	2000	600	1700	500	3300	900	2700	800	2200	600
2/175x40	2700	800	2200	600	1900	500	3600	1000	2900	800	2600	700
2/220x30	3100	900	2500	700	2200	600	4000	1200	3300	900	2800	800
2/220x40	3400	1000	2700	800	2400	700	4300	1200	3600	1000	3200	900
2/260x30	3600	1000	2900	800	2500	700	4500	1300	3900	1100	3300	900
2/260x40	3900	1100	3200	900	2800	800	4900	1400	4100	1200	3800	1100

NOTES:

- Maximum bearer spans supporting roof loads are based on the support of a maximum total sheet roof, framing and ceiling mass of 40 kg/m², a maximum total tile roof, framing and ceiling mass of 90 kg/m² and a maximum flooring mass of 40 kg/m². For guidance on determination of roof mass refer to Appendix B.
- Cantilevers shall not exceed 50% of actual backspan.
- Minimum bearing length = 50 mm at end supports and 100 mm at internal supports for continuous members.
- Multiple members shall be nailed together as per Clause 2.3.
- For design parameters refer to Figure 4.6.
- Where loadbearing walls are supported at right angles to bearer within the bearer span reference should be made to Clause 4.3.1.5.
- 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												
2/80x30	1100	300	1000	300	NS	NS	1400	400	1300	300	1200	300
2/80x40	1200	300	1100	300	1000	300	1600	400	1400	400	1300	300
2/105x30	1400	400	1300	300	1200	300	1800	500	1700	500	1500	400
2/105x40	1500	400	1400	400	1300	300	2100	600	1900	500	1700	500
2/125x30	1600	400	1500	400	1400	400	2200	600	2000	600	1800	500
2/125x40	1800	500	1600	400	1500	400	2500	750	2200	600	2100	600
2/175x30	2300	600	2100	600	1900	500	3000	900	2800	800	2600	700
2/175x40	2500	700	2300	600	2100	600	3400	1000	3100	900	2900	800
2/220x30	2900	800	2600	700	2400	700	3800	1100	3500	1000	3200	900
2/220x40	3200	900	2900	800	2700	800	4100	1200	3800	1100	3600	1000
2/260x30	3400	1000	3100	900	2900	800	4300	1200	4000	1200	3800	1100
2/260x40	3700	1100	3400	1000	3100	900	4700	1400	4300	1200	4100	1200
Tile Roof												
2/80x30	1000	300	NS	NS	NS	NS	1300	300	1100	300	1000	300
2/80x40	1100	300	NS	NS	NS	NS	1500	400	1200	300	1100	300
2/105x30	1300	300	1100	300	1000	300	1700	500	1500	400	1300	300
2/105x40	1400	400	1200	300	1100	300	1900	500	1600	400	1400	400
2/125x30	1500	400	1300	300	1200	300	2000	600	1700	500	1500	400
2/125x40	1700	500	1400	400	1300	300	2300	600	2000	600	1700	500
2/175x30	2200	600	1800	500	1600	400	2900	800	2400	700	2100	600
2/175x40	2400	700	2000	600	1800	500	3200	900	2700	800	2400	700
2/220x30	2700	800	2300	600	2100	600	3600	1000	3100	900	2600	700
2/220x40	3000	900	2500	700	2300	600	3900	1100	3400	1000	3000	900
2/260x30	3200	900	2700	800	2400	700	4100	1200	3600	1000	3100	900
2/260x40	3500	1000	3000	900	2700	800	4400	1300	3900	1100	3600	1000

NOTES:

- Maximum bearer spans supporting roof loads are based on the support of a maximum total sheet roof, framing and ceiling mass of 40 kg/m², a maximum total tile roof, framing and ceiling mass of 90 kg/m² and a maximum flooring mass of 40 kg/m². For guidance on determination of roof mass refer to Appendix B.
- Cantilevers shall not exceed 50% of actual backspan.
- Minimum bearing length = 50 mm at end supports and 100 mm at internal supports for continuous members.
- Multiple members shall be nailed together as per Clause 2.3.
- For design parameters refer to Figure 4.6.
- Where loadbearing walls are supported at right angles to bearer within the bearer span reference should be made to Clause 4.3.1.5.
- Where bearers support roof point loads, reference should be made to Clause 4.3.1.6.