RECYCLED HARDWOOD
SPAN TABLES

SUPPLEMENT 5

Wind Classifications C1 and C2

Recycled Species Group A
Recycled Grade, RG1

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1.0 INTRODUCTION

This Supplement was prepared under a project supported by Forest and Wood Products Australia and provides span tables for some common applications and uses for recycled structural hardwood timber. The span tables provided include some commercial as well as some domestic construction uses. The span tables are specific to recycled timber which will include recycled timber features.

2.0 APPLICATION

The span tables included in this Supplement are only applicable for use with timber graded in accordance with 'Interim Industry Standard, Recycled Timber – Visually Stress Graded Recycled Timber for Structural Purposes' available from www.timber.org.au for the Wind Classifications designated in this Supplement.

The Tables in this Supplement apply to Recycled Timber Species Group A - Recycled Grade, RG1.

For domestic applications, the requirements of AS 1684 are also applicable for use in conjunction with the Tables in this Supplement.

3.0 ALTERNATIVE GRADE

Not applicable.

4.0 TOLERANCES

The depth (D) and breadth (B) shall not be more than 2mm under the sizes given.

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Table 1

Decking Boards - Commercial Applications Supporting 5.0 kPa Uniform Live Load

	Point Live Load (kN)			
	3	5	9	13
Size DxB (mm)	**Span**			
35x70	760	680	380	NS
35x90	820	800	460	320
35x120	900	880	600	420
35x140	960	940	700	480
45x70	980	960	640	440
45x90	1080	1040	780	540
45x120	1180	1160	940	720
45x140	1200	1200	1000	840

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum DL of 60 (kg/m2), Floor Live Load of 5 (kPa).

iii) End bearing lengths = 20 mm at end supports and 20 mm at internal supports for continous members.

iv) Point loads are assumed to be shared by two deck boards.

v) Live load deflection limit = span/150 or 4 mm.

vi) Decking shall be two or more continuous span.

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Table 2

Deck Bearers - Domestic Applications
May Support Decks Greater than 1000mm above the Ground

	Floor Load Width (mm)											
	1200		2400		4800		1200		2400		4800	
	Bearer Span (mm)											
	Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H
Size DxB (mm)	**Single Span**						**Continuous Span**					
90x45	1700	500	1200	300	NS	NS	1800	500	1200	300	NS	NS
90x70	2000	600	1500	400	1100	300	2200	600	1500	400	1100	300
90x90	2200	600	1700	500	1200	300	2400	700	1700	500	1200	300
120x45	2300	600	1700	500	1200	300	2400	700	1700	500	1200	300
120x70	2700	800	2100	600	1400	400	3000	900	2100	600	1400	400
120x90	3000	900	2300	600	1600	400	3300	900	2300	600	1600	400
140x45	2700	800	2000	600	1400	400	2800	800	2000	600	1400	400
140x70	3200	900	2400	700	1700	500	3500	1000	2400	700	1700	500
140x90	3400	1000	2700	800	1900	500	3800	1100	2700	800	1900	500
170x45	3300	900	2400	700	1700	500	3400	1000	2400	700	1700	500
170x70	3700	1100	3000	900	2100	600	4200	1200	3000	900	2100	600
170x90	3900	1100	3300	900	2300	600	4700	1400	3300	900	2300	600
190x45	3600	1000	2700	800	1900	500	3800	1100	2700	800	1800	500
190x70	4000	1200	3300	900	2300	600	4700	1400	3300	900	2300	600
190x90	4300	1200	3600	1000	2600	700	5200	1500	3700	1100	2600	700
240x45	4300	1200	3400	1000	2400_{5}	700_{5}	4900	1400	3400	1000	2300_{25}	600_{25}
240x70	4800	1400	4000	1200	3000	900	6000	1800	4200	1200	3000	900
240x90	5100	1500	4300	1200	3300	900	6500	1900	4700	1400	3300	900
290x45	5000	1500	4200	1200	2900_{15}	800_{15}	5900	1700	4200_{5}	1200	2800_{55}	800_{55}
290x70	5600	1600	4700	1400	3600_{5}	1000_{5}	7000	2100	5100	1500	3600_{25}	1000_{25}
290x90	5900	1700	5000	1500	4000	1200	7200	2100	5600	1600	4000_{10}	1200

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Cantilever (mm).

ii) The above table was based on a maximum DL of 30 (kg/m2), Floor Point Load of 1.8 (kN), Balcony Live Load of 3 (kPa).

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 30 % of Backspan.

v) End bearing lengths = 50 mm at end supports and 100 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 50 mm at end supports and 100 mm at internal supports.

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Table 3

Deck Joists - Domestic Applications
May Support Decks greater than 1000mm above the Ground

	Joist Spacing (mm)											
	300		450		600		300		450		600	
	Max Joist Span (mm)											
	Span	C'lever	Span	C'lever	Span	C'lever	Span	C'lever	Span	C'lever	Span	C'lever
Size DxB (mm)	**Single Span**						**Continuous Span**					
90x35	1700	500	1600	400	1600	400	2100	600	1900	500	1900	500
90x45	2000	600	1800	500	1800	500	2400	700	2200	600	2100	600
120x35	2700	800	2600	700	2500	700	3300	900	3100	850	3000	800
120x45	3200	900	3000	900	2800	800	3600	1050	3400	950	3300	850
140x35	3400	1000	3300	900	3100	900	3900	1150	3700	1000	3600	900
140x45	3700	1100	3600	1000	3400	1000	4200	1250	4000	1100	3900	1000
170x35	4200	1200	3900	1100	3700	1100	4700	1400	4500	1200	4300	1100
170x45	4600	1300	4200	1200	3900	1100	5200	1500	4900	1300	4800	1200
190x35	4700	1400	4300	1200	4000	1200	5300	1550	5000	1350	4800	1250
190x45	5100	1500	4600	1300	4300	1200	5800	1700	5500	1450	5300	1350
240x35	5700	1700	5100	1500	4800	1400	6700	1950	6400	1700	6000	1550
240x45	6100	1800	5500	1600	5100	1500	7200	2100	6900	1850	6400	1700
290x45	7000	2100	6300	1800	5900	1700	7200	2100	7200	2100	7200	2050

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, C'lever = Cantilever (mm).

ii) The above table was based on a maximum Deck Mass of 30 (kg/m2), Floor Point Load of 1.8 (kN), Balcony Live Load of 3 (kPa).

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 30 % of Backspan.

v) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members.

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Table 4

Stair Stringers

Size DxB (mm)	Stair Width (mm)					
	750	900	1200	1500	1800	2400
	Maximum Stringer Span (mm)					
190x35	3800	3800	3500	3300	3100	2800
190x45	4100	4000	3800	3600	3300	3000
240x35	4700	4500	4200	4000	3800	3500
240x45	5000	4800	4500	4200	4000	3700
290x45	5700	5500	5100	4900	4600	4300

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Floor Mass of 40 (kg/m2), Floor Live Load of 2.0 (kPa), Floor Point Load of 2.7 (kN).

iii) Minimuim bearing length = 50 mm at end supports.

iv) Maximum trench depth to accommodate treads - 10 mm.

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Table 5

Stair Treads (with open flights)

Size DxB (mm)	Max Tread Span (mm)
35x240	800
35x290	900
40x240	1100
40x290	1200
45x240	1300
45x290	1400
50x240	1500
50x290	1700
60x240	2000
60x290	2100

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Deck Mass of 40 (kg/m2), Floor Point Load of 2.7 (kN).

iii) Minimuim bearing length = 35 mm at end supports.

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Table 6

Posts
Supporting Roof and/or Floor Loads

	Floor Load Area (m2)											
	0				10				20			
Roof Load Area (m2)	0	10	20	40	0	10	20	40	0	10	20	40
Size DxB (mm)	**Maximum Post Height (mm)**											
Sheet Roof												
70x70	4800	3100	2200	NS	2700	2400	2000	NS	1900	1800	1700	NS
90x90	4800	4800	3600	2500	4400	3900	3300	2400	3100	2900	2800	2300
120x120	4800	4800	4800	4500	4800	4800	4800	4300	4800	4800	4800	4100
140x140	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
170x170	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
190x190	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
Tile Roof												
70x70	4800	2700	1900	1300	2700	2200	1700	1200	1900	1700	1500	NS
90x90	4800	4300	3100	2200	4400	3500	2900	2100	3100	2700	2500	2000
120x120	4800	4800	4800	3800	4800	4800	4800	3700	4800	4800	4400	3600
140x140	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
170x170	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
190x190	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Sheet Roof Mass of 40 (kg/m2), Tile Roof Mass of 90 (kg/m2), Total Upper Floor Mass of 50 (kg/m2), Floor Live Load of 1.5 (kPa).

iii) Posts are free standing, i.e. not supporting lateral wind loads from walls etc.

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Table 7

Window or Door Mullions
Single or Upper Storey Load Bearing Walls

Size DxB (mm)	Mullion Height (mm)	Roof Load Width (mm)							
		3000	4500	6000	7500	3000	4500	6000	7500
		Mullion Spacing (mm)							
		Sheet Roof				Tile Roof			
70x90	2400	900	NS	NS	NS	NS	NS	NS	NS
70x120	2400	1400	1300	1100	1000	1300	1100	NS	NS
70x140	2400	1600	1500	1400	1300	1500	1300	1100	1000
	2700	1100	1100	1000	NS	1100	900	NS	NS
90x70	2400	1500	1400	1300	1200	1400	1300	1100	1000
	2700	1100	1100	900	NS	1100	NS	NS	NS
90x90	2400	1900	1700	1600	1500	1800	1600	1400	1300
	2700	1500	1400	1300	1200	1400	1200	1100	900
	3000	1000	1000	900	NS	1000	NS	NS	NS
90x120	2400	2600	2300	2200	2000	2400	2100	1900	1700
	2700	2000	1800	1700	1600	1800	1600	1500	1400
	3000	1500	1400	1300	1300	1400	1300	1200	1000
90x140	2400	3100	2800	2600	2300	2800	2500	2200	2000
	2700	2300	2200	2000	1800	2200	1900	1700	1600
	3000	1800	1700	1500	1400	1700	1500	1400	1300
120x70	2400	3000	2800	2600	2400	2900	2600	2300	2200
	2700	2400	2200	2000	1900	2200	2000	1800	1700
	3000	1800	1700	1600	1500	1700	1600	1500	1400
	3600	900	900	900	900	900	900	NS	NS
120x90	2400	3800	3500	3300	3100	3500	3200	2900	2700
	2700	2900	2700	2600	2400	2800	2500	2300	2100
	3000	2300	2200	2000	1900	2200	2000	1800	1700
	3600	1400	1300	1200	1200	1300	1200	1200	1100
120x120	2400	4800	4700	4400	4100	4800	4300	3900	3600
	2700	4000	3700	3400	3200	3700	3400	3100	2800
	3000	3200	2900	2700	2500	2900	2700	2400	2200
	3600	1900	1800	1800	1700	1800	1800	1600	1500
120x140	2400	4800	4800	4800	4800	4800	4800	4600	4300
	2700	4700	4300	4000	3800	4400	4000	3600	3300
	3000	3700	3500	3200	3000	3500	3200	2900	2700
	3600	2200	2200	2100	2000	2200	2100	1900	1800
	4200	1100	1100	1100	1100	1100	1100	1100	1100
140x70	2400	4300	4000	3800	3500	4100	3700	3400	3200
	2700	3400	3200	3000	2800	3200	2900	2700	2500
	3000	2700	2500	2400	2200	2500	2300	2100	2000
	3600	1700	1600	1500	1400	1600	1500	1400	1300
140x90	2400	4800	4800	4700	4400	4800	4600	4300	4000
	2700	4200	4000	3700	3500	4000	3600	3400	3100
	3000	3400	3200	2900	2800	3200	2900	2700	2500
	3600	2200	2100	2000	1900	2100	2000	1800	1600
	4200	1100	1100	1100	1100	1100	1100	1100	1000
140x120	2400	4800	4800	4800	4800	4800	4800	4800	4800
	2700	4800	4800	4800	4700	4800	4800	4500	4100
	3000	4500	4200	4000	3700	4300	3900	3600	3300
	3600	3000	2800	2700	2500	2900	2600	2400	2200
	4200	1600	1600	1600	1600	1600	1600	1600	1500
140x140	2700	4800	4800	4800	4800	4800	4800	4800	4800
	3000	4800	4800	4700	4400	4800	4600	4200	3900
	3600	3600	3400	3200	3000	3400	3100	2900	2700
	4200	1900	1900	1900	1900	1900	1900	1900	1800
	4800	900	900	900	900	900	900	900	900

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Sheet Roof Mass of 40 (kg/m2), Tile Roof Mass of 90 (kg/m2).

iii) Maximum tension load in mullion not to exceed 60 kN.

iv) Mullion Spacing is half the width of opening either side of mullion or for mullions/studs at sides of openings, half the width of opening.

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Table 8

Lintels (Window Heads) - Sheet Roof
Supporting Single or Upper Storey Loadbearing Walls

	Roof Load Width (mm)									
	1500		3000		4500		6000		7500	
Rafter/Truss Spacing (mm)	600	1200	600	1200	600	1200	600	1200	600	1200
	Maximum Lintel Span (mm)									
Size DxB (mm)	**Single Span**									
140x35	2600	2700	1900	1600	1500	NS	1300	NS	NS	NS
140x45	2800	2800	2200	2100	1700	1400	1500	NS	1300	NS
140x70	3200	3200	2600	2600	2200	2100	1800	1600	1600	NS
140x90	3400	3300	2800	2900	2500	2400	2100	2000	1800	1500
170x35	3100	3100	2400	2300	1900	1400	1600	NS	NS	NS
170x45	3300	3300	2700	2600	2200	2100	1800	1200	1600	NS
170x70	3700	3600	3100	3100	2700	2600	2300	2200	2000	1600
170x90	3900	3900	3300	3300	3000	2900	2600	2500	2300	2200
190x35	3400	3300	2700	2600	2100	1600	1700	NS	1600	NS
190x45	3600	3600	3000	2900	2500	2300	2100	1600	1700	NS
190x70	4000	4000	3400	3400	3000	2900	2600	2500	2400	2200
190x90	4200	4200	3600	3600	3300	3200	2900	2800	2600	2500
240x35	4000	4000	3400	3200	2700	2700	2400	1700	1900	1200
240x45	4300	4300	3600	3600	3100	3000	2700	2600	2400	1700
240x70	4700	4700	4100	4000	3700	3700	3300	3200	2900	2800
240x90	5000	5000	4300	4300	3900	3900	3700	3500	3300	3100
290x45	4900	4900	4200	4200	3800	3600	3300	3100	2900	2800
290x70	5400	5400	4700	4600	4200	4200	4000	3900	3600	3400
290x90	5700	5700	4900	4900	4500	4500	4200	4200	4000	3900
	Continuous Span									
140x35	2800	2800	2000	1600	1500	NS	NS	NS	NS	NS
140x45	3200	3100	2200	2100	1600	1400	1500	NS	NS	NS
140x70	3900	3900	2700	2800	2200	2100	1900	1600	1600	1300
140x90	4200	4200	3000	3000	2500	2600	2100	2000	1800	1600
170x35	3400	3300	2400	2400	1700	1400	1500	NS	NS	NS
170x45	3900	3800	2700	2700	2200	1700	1600	1300	1400	NS
170x70	4600	4600	3400	3300	2700	2700	2300	2100	2000	1600
170x90	4800	4900	3700	3600	3000	3000	2600	2700	2300	2100
190x35	3800	3800	2700	2700	1800	1600	1500	NS	NS	NS
190x45	4300	4300	3000	3000	2300	2100	1700	1500	1500	1200
190x70	5000	5000	3800	3700	3000	3000	2600	2700	2200	1700
190x90	5300	5300	4200	4200	3400	3300	2900	2900	2600	2700
240x35	4900	4900	3400	3100	2700	2800	1900	1900	1900_{5}	1700_{5}
240x45	5300	5300	3900	3800	3100	3100	2300	1900	1900	1900
240x70	5900	5900	4800	4700	3900	3800	3400	3100	3000	3000
240x90	6200	6200	5300	5300	4300	4300	3700	3600	3300	3100
290x45	6100	6100	4700	4600	3800	3300	3200_{10}	3000_{5}	2500_{5}	2000
290x70	6700	6700	5800	5700	4700	4600	4100	4000	3500	3200
290x90	7000	7100	6200	6100	5200	5200	4500	4500	4000	4000

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Roof Mass of 40 (kg/m2).

iii) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

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Table 9

Lintels (Window Heads) - Tile Roof
Supporting Single or Upper Storey Loadbearing Walls

	Roof Load Width (mm)									
	1500		3000		4500		6000		7500	
Rafter/Truss Spacing (mm)	600	1200	600	1200	600	1200	600	1200	600	1200
	Maximum Lintel Span (mm)									
Size DxB (mm)	**Single Span**									
140x35	2000	2000	1600	1500	1400	NS	1200	NS	NS	NS
140x45	2200	2200	1700	1700	1500	1400	1400	NS	1300	NS
140x70	2500	2600	2000	2000	1700	1700	1600	1500	1500	1300
140x90	2700	2800	2200	2200	1900	1900	1700	1700	1600	1500
170x35	2400	2500	1900	1900	1700	1600	1500	NS	1400	NS
170x45	2700	2700	2100	2100	1800	1800	1700	1500	1500	NS
170x70	3000	3000	2500	2500	2100	2100	1900	1900	1800	1800
170x90	3200	3200	2700	2700	2300	2300	2100	2100	2000	1900
190x35	2700	2800	2200	2100	1900	1900	1700	1400	1600	NS
190x45	3000	3000	2400	2400	2100	2000	1900	1800	1700	1400
190x70	3300	3300	2800	2800	2400	2400	2200	2200	2000	2000
190x90	3500	3500	3000	3000	2600	2700	2400	2400	2200	2200
240x35	3300	3300	2800	2800	2400	2400	2200	2100	2000	1600
240x45	3500	3500	3000	3000	2600	2700	2400	2400	2200	2200
240x70	3900	3900	3400	3300	3000	3000	2800	2800	2600	2600
240x90	4200	4200	3600	3500	3200	3200	3000	3000	2800	2800
290x45	4100	4100	3500	3400	3100	3100	2900	2900	2700	2700
290x70	4500	4500	3900	3800	3500	3500	3300	3200	3100	3100
290x90	4800	4800	4100	4100	3700	3700	3500	3400	3300	3300
	Continuous Span									
140x35	2700	2700	2100	2000	1600	1300	1400	NS	NS	NS
140x45	2900	2900	2300	2300	1800	1600	1600	1200	1400	NS
140x70	3300	3200	2700	2700	2400	2400	2000	2000	1600	1500
140x90	3500	3500	3000	3000	2600	2600	2300	2200	2000	2000
170x35	3200	3200	2600	2600	1900	1600	1500	1200	NS	NS
170x45	3400	3400	2900	2900	2300	2100	1700	1500	1600	1200
170x70	3800	3800	3200	3200	2900	2900	2500	2600	2200	1700
170x90	4100	4000	3400	3400	3100	3100	2800	2800	2500	2600
190x35	3500	3500	2900	2900	2200	1700	1600	1300	1400_{5}	NS
190x45	3700	3700	3100	3100	2600	2700	2200	1600	1600	1300_{10}
190x70	4200	4200	3500	3500	3200	3100	2800	2800	2500	2600
190x90	4400	4400	3700	3700	3400	3300	3100	3100	2800	2800
240x35	4200	4200	3500	3500	2800_{15}	3000_{25}	2200_{25}	1900_{10}	1900_{30}	1900_{30}
240x45	4400	4400	3700	3700	3400_{10}	3100_{5}	2700_{20}	2900_{25}	2200_{25}	1900_{10}
240x70	4900	5000	4200	4200	3800	3800	3500_{5}	3500_{5}	3100_{15}	3100_{10}
240x90	5200	5200	4500	4400	4000	4000	3800	3700	3500_{5}	3500_{5}
290x45	5100	5100	4300	4300	3900_{25}	3900_{25}	3200_{40}	3200_{40}	3100_{70}	3100_{45}
290x70	5700	5700	4800	4800	4400	4300	4100_{20}	4100_{20}	3900_{40}	3400_{25}
290x90	6000	6000	5100	5200	4700	4700	4400_{5}	4300_{5}	4100_{20}	4100_{20}

NOTES :

i) D = member depth, B = member breadth, NS = not suitable.

ii) The above table was based on a maximum Roof Mass of 90 (kg/m2).

iii) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

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Table 10

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span							
90x35	10	2900	500	2300	400	1900	350	1600	250
	20	2600	500	2300	400	1900	350	1600	250
	40	2100	500	1800	400	1700	350	1500	250
	60	1800	500	1600	400	1500	350	1300	250
	90	1600	500	1400	400	1300	350	1100	300
90x45	10	3300	550	2600	450	2200	400	1800	300
	20	2800	550	2500	450	2200	400	1800	300
	40	2300	550	2000	450	1800	400	1600	300
	60	2000	600	1800	450	1600	400	1400	300
	90	1800	600	1500	450	1400	400	1200	300
90x70	10	3600	700	3300	550	2700	500	2200	400
	20	3100	700	2800	550	2600	500	2200	400
	40	2600	700	2300	550	2100	500	1900	400
	60	2300	700	2000	600	1900	500	1600	400
	90	2000	750	1800	600	1600	500	1400	400
90x90	10	3800	800	3500	600	3100	550	2400	450
	20	3300	800	3000	650	2800	550	2500	450
	40	2800	800	2500	650	2300	550	2000	450
	60	2500	800	2200	650	2000	550	1800	450
	90	2200	850	1900	650	1800	550	1600	450
120x35	10	4000	600	3200	500	2600	400	2100	350
	20	3400	600	3000	500	2700	400	2100	350
	40	2800	650	2500	500	2300	450	2000	350
	60	2500	650	2200	500	2000	450	1700	350
	90	2200	650	1900	550	1700	450	1500	350
120x45	10	4300	700	3600	550	3000	500	2400	400
	20	3600	700	3300	550	3000	500	2400	400
	40	3000	700	2700	600	2400	500	2200	400
	60	2700	750	2400	600	2200	500	1900	400
	90	2400	750	2100	600	1900	500	1600	400
120x70	10	4600	900	4300	700	3800	600	2900	500
	20	4000	900	3700	700	3400	600	3000	500
	40	3400	900	3100	750	2800	600	2500	500
	60	3100	900	2700	750	2500	650	2200	500
	90	2700	950	2400	750	2200	650	1900	500

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span							
120x90	10	4800	1000	4500	800	4200	700	3300	550
	20	4300	1000	3900	800	3700	700	3300	550
	40	3700	1000	3300	800	3000	700	2700	550
	60	3300	1050	2900	850	2700	700	2400	550
	90	2900	1050	2600	850	2400	750	2100	600
140x35	10	4600	700	3800	550	3100	450	2500	400
	20	3900	700	3500	550	3200	500	2500	400
	40	3300	700	2900	600	2600	500	2300	400
	60	2900	750	2500	600	2300	500	2000	400
	90	2500	750	2200	600	2000	500	1800	400
140x45	10	4900	800	4300	650	3600	550	2800	450
	20	4200	800	3800	650	3500	550	2800	450
	40	3500	800	3100	650	2900	550	2500	450
	60	3100	850	2800	650	2500	550	2200	450
	90	2800	850	2400	700	2200	600	1900	450
140x70	10	5200	1000	4900	800	4500	700	3400	550
	20	4700	1000	4300	800	4000	700	3500	550
	40	4000	1050	3600	850	3300	700	2900	550
	60	3600	1050	3200	850	2900	700	2600	550
	90	3200	1050	2800	850	2600	750	2200	600
140x90	10	5400	1150	5100	900	4900	750	3900	600
	20	4900	1150	4500	900	4200	800	3800	600
	40	4200	1150	3800	950	3500	800	3100	650
	60	3800	1150	3400	950	3100	800	2800	650
	90	3400	1200	3000	950	2800	850	2400	650
170x35	10	5500	850	4600	650	3900	550	3000	450
	20	4700	850	4300	650	3900	550	3100	450
	40	3900	850	3500	650	3200	550	2800	450
	60	3500	850	3100	700	2800	600	2500	450
	90	3100	900	2700	700	2500	600	2200	450
170x45	10	5700	950	5200	750	4400	650	3400	500
	20	5000	950	4600	750	4200	650	3400	500
	40	4200	950	3800	750	3500	650	3100	500
	60	3800	1000	3300	800	3100	650	2700	500
	90	3300	1000	2900	800	2700	700	2400	550

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span							
170x70	10	6100	1200	5800	950	5500	800	4300	650
	20	5500	1200	5100	950	4800	800	4300	650
	40	4800	1200	4300	950	4000	850	3500	650
	60	4300	1250	3800	1000	3500	850	3100	650
	90	3800	1250	3400	1000	3100	850	2700	700
170x90	10	6300	1350	6000	1050	5800	900	4800	700
	20	5800	1350	5400	1050	5000	900	4600	750
	40	5000	1350	4600	1100	4300	950	3800	750
	60	4600	1400	4100	1100	3800	950	3400	750
	90	4100	1400	3700	1150	3400	950	3000	750
190x35	10	6000	900	5200	700	4400	600	3400	500
	20	5200	900	4700	700	4400	600	3400	500
	40	4400	950	3900	750	3600	650	3100	500
	60	3900	950	3400	750	3100	650	2800	500
	90	3400	950	3000	750	2800	650	2400	500
190x45	10	6300	1050	5900	800	5000	700	3800	550
	20	5500	1050	5100	850	4700	700	3900	550
	40	4700	1050	4200	850	3900	700	3400	550
	60	4200	1050	3700	850	3400	750	3000	600
	90	3700	1100	3300	900	3000	750	2600	600
190x70	10	6700	1300	6400	1050	6100	900	4900	700
	20	6100	1300	5600	1050	5300	900	4800	700
	40	5300	1350	4800	1050	4400	900	3900	700
	60	4800	1350	4300	1100	3900	900	3500	750
	90	4300	1400	3800	1100	3500	950	3100	750
190x90	10	6900	1450	6600	1150	6300	1000	5500	800
	20	6300	1450	5900	1150	5600	1000	5100	800
	40	5600	1500	5100	1200	4700	1000	4200	800
	60	5100	1500	4600	1200	4200	1050	3800	850
	90	4600	1550	4100	1250	3800	1050	3300	850
240x35	10	7200	1100	6600	850	5600	750	4400	600
	20	6400	1100	5900	900	5500	750	4400	600
	40	5500	1100	4900	900	4500	750	4000	600
	60	4900	1150	4300	900	4000	750	3500	600
	90	4300	1150	3800	950	3500	800	3100	600

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span							
240x45	10	7200	1250	7200	1000	6400	850	5000	650
	20	6800	1250	6300	1000	5800	850	5100	650
	40	5800	1300	5300	1000	4900	850	4300	700
	60	5300	1300	4700	1050	4300	900	3800	700
	90	4700	1350	4200	1050	3800	900	3300	700
240x70	10	7200	1600	7200	1250	7200	1050	6300	850
	20	7200	1600	6900	1250	6500	1050	5900	850
	40	6500	1600	5900	1300	5500	1100	4900	850
	60	5900	1650	5300	1300	4900	1100	4400	900
	90	5300	1700	4800	1350	4400	1150	3900	900
240x90	10	7200	1800	7200	1400	7200	1200	7100	950
	20	7200	1800	7200	1450	6800	1200	6300	950
	40	6800	1800	6300	1450	5900	1250	5300	1000
	60	6300	1850	5700	1500	5300	1250	4700	1000
	90	5700	1900	5100	1500	4700	1300	4200	1000
290x45	10	7200	1450	7200	1150	7200	1000	6200	800
	20	7200	1450	7200	1150	6900	1000	6200	800
	40	6900	1500	6300	1200	5800	1000	5200	800
	60	6300	1500	5600	1200	5200	1000	4600	800
	90	5600	1550	5000	1250	4600	1050	4000	850
290x70	10	7200	1850	7200	1450	7200	1250	7200	1000
	20	7200	1850	7200	1500	7200	1250	7000	1000
	40	7200	1900	7000	1500	6600	1300	5900	1000
	60	7000	1950	6400	1550	5900	1300	5300	1050
	90	6400	2000	5700	1600	5300	1350	4700	1050
290x90	10	7200	2100	7200	1650	7200	1400	7200	1100
	20	7200	2100	7200	1650	7200	1400	7200	1100
	40	7200	2150	7200	1700	7000	1450	6300	1150
	60	7200	2200	6800	1750	6300	1450	5700	1150
	90	6800	2250	6100	1800	5700	1500	5000	1200

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span							
90x35	10	2900	500	2300	400	1900	350	1600	250
	20	3000	500	2300	400	1900	350	1600	250
	40	2900	500	2400	400	2000	350	1600	250
	60	2500	500	2200	400	2000	350	1700	250
	90	2200	500	1900	400	1800	350	1500	300
90x45	10	3300	550	2600	450	2200	400	1800	300
	20	3400	550	2700	450	2200	400	1800	300
	40	3100	550	2700	450	2200	400	1800	300
	60	2700	600	2400	450	2200	400	1900	300
	90	2400	600	2100	450	1900	400	1700	300
90x70	10	4200	700	3300	550	2700	500	2200	400
	20	4200	700	3300	550	2800	500	2200	400
	40	3500	700	3100	550	2800	500	2300	400
	60	3100	700	2800	600	2500	500	2200	400
	90	2800	750	2400	600	2200	500	1900	400
90x90	10	4700	800	3700	600	3100	550	2400	450
	20	4500	800	3700	650	3100	550	2500	450
	40	3800	800	3400	650	3100	550	2500	450
	60	3400	800	3000	650	2800	550	2400	450
	90	3000	850	2700	650	2400	550	2100	450
120x35	10	4000	600	3200	500	2600	400	2100	350
	20	4100	600	3200	500	2700	400	2100	350
	40	3800	650	3300	500	2700	450	2200	350
	60	3400	650	3000	500	2700	450	2200	350
	90	3000	650	2600	550	2400	450	2100	350
120x45	10	4500	700	3600	550	3000	500	2400	400
	20	4600	700	3600	550	3000	500	2400	400
	40	4100	700	3600	600	3100	500	2500	400
	60	3600	750	3200	600	2900	500	2500	400
	90	3200	750	2800	600	2600	500	2300	400
120x70	10	5700	900	4500	700	3800	600	2900	500
	20	5500	900	4600	700	3800	600	3000	500
	40	4700	900	4200	750	3800	600	3000	500
	60	4200	900	3700	750	3400	650	3000	500
	90	3700	950	3300	750	3000	650	2600	500

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span							
120x90	10	6300	1000	5000	800	4200	700	3300	550
	20	5800	1000	5100	800	4300	700	3300	550
	40	5000	1000	4500	800	4100	700	3400	550
	60	4500	1050	4000	850	3700	700	3200	550
	90	4000	1050	3500	850	3200	750	2900	600
140x35	10	4700	700	3800	550	3100	450	2500	400
	20	4800	700	3800	550	3200	500	2500	400
	40	4400	700	3900	600	3300	500	2600	400
	60	3900	750	3500	600	3200	500	2600	400
	90	3500	750	3000	600	2800	500	2400	400
140x45	10	5300	800	4300	650	3600	550	2800	450
	20	5400	800	4300	650	3600	550	2800	450
	40	4800	800	4300	650	3700	550	2900	450
	60	4300	850	3800	650	3400	550	3000	450
	90	3800	850	3300	700	3000	600	2600	450
140x70	10	6600	1000	5300	800	4500	700	3400	550
	20	6300	1000	5400	800	4500	700	3500	550
	40	5400	1050	4800	850	4500	700	3600	550
	60	4800	1050	4300	850	4000	700	3500	550
	90	4300	1050	3800	850	3500	750	3100	600
140x90	10	7200	1150	5900	900	5000	750	3900	600
	20	6600	1150	6000	900	5100	800	3900	600
	40	5700	1150	5200	950	4800	800	4000	650
	60	5200	1150	4700	950	4300	800	3800	650
	90	4700	1200	4100	950	3800	850	3300	650
170x35	10	5800	850	4600	650	3900	550	3000	450
	20	5900	850	4700	650	3900	550	3100	450
	40	5300	850	4800	650	4000	550	3100	450
	60	4800	850	4200	700	3800	600	3200	450
	90	4200	900	3700	700	3400	600	3000	450
170x45	10	6500	950	5200	750	4400	650	3400	500
	20	6600	950	5300	750	4500	650	3400	500
	40	5700	950	5100	750	4600	650	3500	500
	60	5100	1000	4600	800	4200	650	3600	500
	90	4600	1000	4000	800	3700	700	3200	550

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span							
170x70	10	7200	1200	6500	950	5500	800	4300	650
	20	7200	1200	6600	950	5600	800	4300	650
	40	6500	1200	5800	950	5400	850	4500	650
	60	5800	1250	5200	1000	4800	850	4200	650
	90	5200	1250	4600	1000	4200	850	3700	700
170x90	10	7200	1350	7200	1050	6200	900	4800	700
	20	7200	1350	7200	1050	6300	900	4900	750
	40	6800	1350	6200	1100	5800	950	5000	750
	60	6200	1400	5600	1100	5200	950	4600	750
	90	5600	1400	5000	1150	4600	950	4100	750
190x35	10	6500	900	5200	700	4400	600	3400	500
	20	6600	900	5300	700	4400	600	3400	500
	40	5900	950	5300	750	4600	650	3500	500
	60	5300	950	4700	750	4300	650	3600	500
	90	4700	950	4100	750	3800	650	3300	500
190x45	10	7200	1050	5900	800	5000	700	3800	550
	20	7200	1050	6000	850	5000	700	3900	550
	40	6400	1050	5700	850	5200	700	4000	550
	60	5700	1050	5100	850	4700	750	4100	600
	90	5100	1100	4500	900	4100	750	3600	600
190x70	10	7200	1300	7200	1050	6200	900	4900	700
	20	7200	1300	7200	1050	6300	900	4900	700
	40	7100	1350	6500	1050	6000	900	5100	700
	60	6500	1350	5800	1100	5300	900	4700	750
	90	5800	1400	5200	1100	4700	950	4200	750
190x90	10	7200	1450	7200	1150	7000	1000	5500	800
	20	7200	1450	7200	1150	7100	1000	5500	800
	40	7200	1500	6900	1200	6400	1000	5700	800
	60	6900	1500	6200	1200	5800	1050	5100	850
	90	6200	1550	5600	1250	5100	1050	4500	850
240x35	10	7200	1100	6600	850	5600	750	4400	600
	20	7200	1100	6700	900	5700	750	4400	600
	40	7200	1100	6600	900	5900	750	4600	600
	60	6600	1150	5900	900	5400	750	4700_{5}	600
	90	5900	1150	5200	950	4800	800	4200_{10}	600

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 10 (cont)

Rafters or Purlins
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof & Ceiling Mass (kg/m2)	Rafter Spacing (mm)							
		600		900		1200		1800	
		Maximum Rafter Span + Overhang (mm)							
		Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span							
240x45	10	7200	1250	7200	1000	6400	850	5000	650
	20	7200	1250	7200	1000	6500	850	5100	650
	40	7200	1300	7100	1000	6600	850	5200	700
	60	7100	1300	6400	1050	5900	900	5200	700
	90	6400	1350	5700	1050	5200	900	4600	700
240x70	10	7200	1600	7200	1250	7200	1050	6300	850
	20	7200	1600	7200	1250	7200	1050	6400	850
	40	7200	1600	7200	1300	7200	1100	6500	850
	60	7200	1650	7200	1300	6700	1100	6000	900
	90	7200	1700	6500	1350	6000	1150	5300	900
240x90	10	7200	1800	7200	1400	7200	1200	7100	950
	20	7200	1800	7200	1450	7200	1200	7100	950
	40	7200	1800	7200	1450	7200	1250	7200	1000
	60	7200	1850	7200	1500	7200	1250	6400	1000
	90	7200	1900	7000	1500	6400	1300	5700	1000
290x45	10	7200	1450	7200	1150	7200	1000	6200	800
	20	7200	1450	7200	1150	7200	1000	6200	800
	40	7200	1500	7200	1200	7200	1000	6400_{5}	800
	60	7200	1500	7200	1200	7000	1000	6200_{10}	800
	90	7200	1550	6800	1250	6200	1050	5500_{10}	850
290x70	10	7200	1850	7200	1450	7200	1250	7200	1000
	20	7200	1850	7200	1500	7200	1250	7200	1000
	40	7200	1900	7200	1500	7200	1300	7200	1000
	60	7200	1950	7200	1550	7200	1300	7200	1050
	90	7200	2000	7200	1600	7200	1350	6300	1050
290x90	10	7200	2100	7200	1650	7200	1400	7200	1100
	20	7200	2100	7200	1650	7200	1400	7200	1100
	40	7200	2150	7200	1700	7200	1450	7200	1150
	60	7200	2200	7200	1750	7200	1450	7200	1150
	90	7200	2250	7200	1800	7200	1500	6800	1200

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) The above table was based on a Batten Spacing of 900.

iii) Minimum BackSpan = 200 % of Overhang.

iv) Maximum Overhang = 50 % of Backspan.

v) Maximium BirdsMouth Depth = 30.00% of depth.

vi) End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports.

vii) This Table may also be used for pergola or verandah rafters/purlins

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Table 11

Roof Beams
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof Mass (kg/m2)	Roof Load Width (mm)									
		1500		3000		4500		6000		7500	
		Maximum Beam Span & OverHang (mm)									
		Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span									
170x45	10	3800	1450	2600	1050	2200	850	1900	750	1700	700
	20	3800	1450	2700	1050	2200	900	1900	750	1700	700
	40	3200	1450	2500	1100	2100	900	1900	750	1700	700
	60	2800	1400	2200	1100	1900	900	1700	800	1600	700
	90	2500	1200	1900	900	1700	800	1500	700	1400	700
170x70	10	4800	1700	3300	1300	2700	1050	2300	950	2100	850
	20	4300	1700	3300	1300	2700	1100	2300	950	2100	850
	40	3600	1700	2900	1350	2500	1100	2200	950	2000	850
	60	3200	1600	2600	1300	2200	1100	2000	950	1800	850
	90	2900	1400	2300	1100	2000	1000	1800	900	1600	800
170x90	10	5300	1850	3600	1450	3000	1200	2600	1050	2300	900
	20	4600	1850	3700	1450	3000	1200	2600	1050	2300	950
	40	3900	1850	3100	1500	2700	1200	2400	1050	2200	950
	60	3500	1700	2800	1400	2400	1200	2200	1050	2000	950
	90	3100	1500	2500	1200	2100	1000	1900	900	1800	900
190x45	10	4300	1650	3000	1200	2400	950	2100	850	1900	750
	20	4300	1650	3000	1200	2400	1000	2100	850	1900	750
	40	3500	1650	2800	1200	2400	1000	2100	850	1900	750
	60	3100	1500	2500	1250	2100	1000	1900	900	1700	800
	90	2800	1400	2200	1100	1900	900	1700	800	1600	800
190x70	10	5400	1900	3700	1450	3000	1200	2600	1050	2300	950
	20	4800	1900	3700	1450	3000	1200	2600	1050	2300	950
	40	4100	1900	3200	1500	2800	1200	2500	1050	2300	950
	60	3600	1800	2900	1400	2500	1250	2200	1100	2000	950
	90	3200	1600	2500	1200	2200	1100	2000	1000	1800	900
190x90	10	5800	2050	4100	1600	3300	1350	2900	1150	2600	1050
	20	5100	2050	4100	1650	3400	1350	2900	1150	2600	1050
	40	4400	2050	3500	1650	3000	1350	2700	1200	2500	1050
	60	3900	1900	3100	1500	2700	1300	2400	1200	2200	1050
	90	3500	1700	2800	1400	2400	1200	2200	1100	2000	1000

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) Minimum BackSpan = 200 % of Overhang.

iii) Maximum Overhang = 50 % of Backspan.

iv) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

v) Rafter/Purlin Spacing up to 1800mm.

vi) This Table may also be used for pergola or verandah beams.

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Table 11 (cont)

Roof Beams
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof Mass (kg/m2)	Roof Load Width (mm)									
		1500		3000		4500		6000		7500	
		Maximum Beam Span & OverHang (mm)									
		Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Single Span									
240x45	10	5600	2050	3800	1500	3100	1250	2700	1050	2400	950
	20	5300	2050	3800	1500	3100	1250	2700	1050	2400	950
	40	4500	2050	3500	1550	3000	1250	2700	1100	2500_{5}	1000
	60	4000	2000	3100	1550	2700	1300	2400	1100	2200_{5}	1000
	90	3500	1700	2800	1400	2400	1200	2200	1100	2000_{5}	1000
240x70	10	6800	2400	4600	1850	3800	1500	3300	1300	2900	1200
	20	6000	2400	4700	1850	3800	1500	3300	1300	3000	1200
	40	5100	2400	4100	1900	3500	1550	3100	1350	2900	1200
	60	4600	2300	3600	1800	3100	1550	2800	1350	2600	1200
	90	4100	2000	3200	1600	2800	1400	2500	1200	2300	1100
240x90	10	7100	2600	5200	2050	4200	1700	3700	1450	3300	1300
	20	6300	2600	5200	2050	4300	1700	3700	1450	3300	1300
	40	5400	2600	4400	2100	3800	1700	3400	1500	3100	1350
	60	4900	2450	3900	1900	3400	1700	3100	1500	2800	1350
	90	4400	2200	3500	1700	3000	1500	2700	1300	2500	1200
290x45	10	6800	2450	4600	1800	3700	1500	3200	1300	2900_{5}	1150
	20	6300	2450	4600	1850	3800	1500	3300	1300	2900_{5}	1150
	40	5400	2450	4300	1850	3700	1500	3300_{5}	1300	3000_{10}	1200
	60	4800	2400	3800	1900	3300	1550	2900_{5}	1350	2700_{10}	1200
	90	4200	2100	3400	1700	2900	1400	2600_{5}	1300	2400_{15}	1200
290x70	10	7200	2850	5600	2250	4600	1850	4000	1600	3600	1400
	20	7100	2850	5700	2250	4600	1850	4000	1600	3600	1450
	40	6100	2850	4900	2300	4200	1850	3800	1600	3500	1450
	60	5500	2650	4400	2200	3800	1900	3400	1650	3100_{5}	1500
	90	4900	2400	3900	1900	3400	1700	3000	1500	2800_{5}	1400
290x90	10	7200	3150	6300	2500	5100	2050	4400	1750	4000	1600
	20	7200	3150	6200	2500	5200	2050	4500	1800	4000	1600
	40	6500	3000	5300	2550	4600	2100	4100	1800	3800	1600
	60	5900	2850	4700	2300	4100	2000	3700	1850	3400	1650
	90	5300	2650	4200	2100	3700	1800	3300	1600	3100	1500

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) Minimum BackSpan = 200 % of Overhang.

iii) Maximum Overhang = 50 % of Backspan.

iv) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

v) Rafter/Purlin Spacing up to 1800mm.

vi) This Table may also be used for pergola or verandah beams.

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Table 11 (cont)

Roof Beams
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof Mass (kg/m2)	Roof Load Width (mm)									
		1500		3000		4500		6000		7500	
		Maximum Beam Span & OverHang (mm)									
		Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span									
170x45	10	3800	1450	2600	1050	2200	850	1900	750	1600	700
	20	3900	1450	2700	1050	2200	900	1900	750	1700	700
	40	4000	1450	2700	1100	2200	900	1900	750	1700	700
	60	3800	1450	2800	1100	2300	900	2000	800	1800	700
	90	3400	1450	2700	1150	2300	900	2000	800	1800_{5}	700
170x70	10	4800	1700	3300	1300	2700	1050	2300	950	2100	850
	20	4900	1700	3300	1300	2700	1100	2300	950	2100	850
	40	5000	1700	3400	1350	2800	1100	2400	950	2100	850
	60	4400	1700	3500	1350	2800	1100	2500	950	2200	850
	90	3900	1650	3100	1350	2700	1150	2400	1000	2200	900
170x90	10	5400	1850	3600	1450	3000	1200	2600	1050	2300	900
	20	5400	1850	3700	1450	3000	1200	2600	1050	2300	950
	40	5300	1850	3800	1500	3100	1200	2700	1050	2400	950
	60	4800	1850	3800	1500	3200	1250	2700	1050	2500	950
	90	4200	1750	3400	1450	2900	1250	2600	1100	2400	1000
190x45	10	4300	1650	3000	1200	2400	950	2100	850	1800	750
	20	4400	1650	3000	1200	2400	1000	2100	850	1800	750
	40	4500	1650	3100	1200	2500	1000	2200	850	1900	750
	60	4300	1650	3200	1250	2600	1000	2200	900	2000	800
	90	3800	1600	3000	1250	2600	1050	2300_{5}	900	2000_{20}	800
190x70	10	5400	1900	3700	1450	3000	1200	2600	1050	2300	950
	20	5500	1900	3700	1450	3000	1200	2600	1050	2300	950
	40	5500	1900	3800	1500	3100	1200	2700	1050	2400	950
	60	4900	1900	3900	1500	3200	1250	2800	1100	2500	950
	90	4400	1800	3500	1500	3000	1250	2700	1100	2500	1000
190x90	10	6000	2050	4100	1600	3300	1350	2900	1150	2600	1050
	20	6100	2050	4100	1650	3400	1350	2900	1150	2600	1050
	40	5900	2050	4200	1650	3400	1350	3000	1200	2700	1050
	60	5300	2050	4200	1700	3500	1400	3100	1200	2700	1050
	90	4700	1900	3800	1600	3300	1400	2900	1200	2700	1100

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) Minimum BackSpan = 200 % of Overhang.

iii) Maximum Overhang = 50 % of Backspan.

iv) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

v) Rafter/Purlin Spacing up to 1800mm.

vi) This Table may also be used for pergola or verandah beams.

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Table 11 (cont)

Roof Beams
Supporting Roof and Ceiling Loads

Size DxB (mm)	Roof Mass (kg/m2)	Roof Load Width (mm)									
		1500		3000		4500		6000		7500	
		Maximum Beam Span & OverHang (mm)									
		Span	O/H	Span	O/H	Span	O/H	Span	O/H	Span	O/H
		Continuous Span									
240x45	10	5600	2050	3800	1500	3100	1250	2700	1050	2300	950
	20	5600	2050	3800	1500	3100	1250	2700	1050	2300	950
	40	5800	2050	3900	1550	3200	1250	2800	1100	2400_{10}	1000
	60	5400	2050	4000	1550	3300	1300	2800_{15}	1100	2500_{25}	1000
	90	4800	1900	3800	1600	3300_{15}	1300	2900_{30}	1150	2600_{50}	1000
240x70	10	6900	2400	4600	1850	3800	1500	3300	1300	2900	1200
	20	7000	2400	4700	1850	3800	1500	3300	1300	3000	1200
	40	6900	2400	4800	1900	3900	1550	3400	1350	3100	1200
	60	6200	2300	4900	1900	4000	1550	3500	1350	3100_{5}	1200
	90	5500	2150	4400	1800	3800	1600	3400_{5}	1400	3200_{20}	1250
240x90	10	7200	2600	5200	2050	4200	1700	3700	1450	3300	1300
	20	7200	2600	5200	2050	4300	1700	3700	1450	3300	1300
	40	7200	2600	5300	2100	4400	1700	3800	1500	3400	1350
	60	6700	2450	5400	2050	4500	1750	3900	1500	3500	1350
	90	6000	2300	4800	1900	4100	1700	3700	1550	3400_{10}	1400
290x45	10	6800	2450	4600	1800	3700	1500	3200	1300	2800_{10}	1150
	20	6900	2450	4600	1850	3800	1500	3300_{10}	1300	2800_{15}	1150
	40	7000	2450	4700	1850	3900_{5}	1500	3400_{20}	1300	2900_{30}	1200
	60	6500	2400	4800	1900	4000_{20}	1550	3400_{35}	1350	3000_{50}	1200
	90	5800	2200	4600_{5}	1850	4000_{35}	1600	3500_{60}	1350	3100_{80}	1250
290x70	10	7200	2850	5600	2250	4600	1850	4000	1600	3600	1400
	20	7200	2850	5700	2250	4600	1850	4000	1600	3600	1450
	40	7200	2850	5800	2300	4800	1850	4100	1600	3700_{15}	1450
	60	7200	2650	6000	2250	4900	1900	4200_{15}	1650	3800_{25}	1500
	90	6600	2500	5300	2100	4600_{5}	1850	4200_{25}	1700	3800_{45}	1500
290x90	10	7200	3150	6300	2500	5100	2050	4400	1750	4000	1600
	20	7200	3150	6400	2500	5200	2050	4500	1800	4000	1600
	40	7200	3000	6500	2550	5300	2100	4600	1800	4100_{5}	1600
	60	7200	2850	6400	2400	5400	2100	4700_{5}	1850	4200_{15}	1650
	90	7200	2650	5700	2200	5000	2000	4500_{15}	1850	4200_{30}	1700

NOTES :

i) D = member depth, B = member breadth, NS = not suitable, O/H = Overhang (mm).

ii) Minimum BackSpan = 200 % of Overhang.

iii) Maximum Overhang = 50 % of Backspan.

iv) End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continous members. Subscript values indicate the minimium additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.

v) Rafter/Purlin Spacing up to 1800mm.

vi) This Table may also be used for pergola or verandah beams.

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