RECYCLED HARDWOOD
SPAN TABLES

SUPPLEMENT 2

Wind Classifications N1, N2 and N3

Recycled Species Group B
Recycled Grade, RG1

Prepared by:
Timber Queensland Ltd

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Forest and Wood Products Australia
Level 4, 10–16 Queen Street
Melbourne,Vic 3000
Web: www.fwpa.com.au

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 B - 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

In addition to Species Group B, RG1, the tables in this Supplement apply to Recycled Timber Species Group A - Recycled Grade, RG2.

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	720	540	300	NS
35x90	780	660	360	NS
35x120	860	840	480	340
35x140	900	880	560	380
45x70	940	920	500	340
45x90	1020	1000	620	440
45x120	1120	1100	820	560
45x140	1180	1160	960	660

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	1600	400	1100	300	NS	NS	1600	400	1100	300	NS	NS
90x70	1900	500	1400	400	NS	NS	2000	600	1400	400	NS	NS
90x90	2100	600	1500	400	1100	300	2200	600	1500	400	1100	300
120x45	2100	600	1500	400	1000	300	2100	600	1500	400	1000	300
120x70	2600	700	1900	500	1300	300	2600	700	1900	500	1300	300
120x90	2800	800	2100	600	1400	400	2900	800	2100	600	1400	400
140x45	2500	700	1800	500	1200	300	2500	700	1800	500	1200	300
140x70	3000	900	2200	600	1500	400	3100	900	2200	600	1500	400
140x90	3300	900	2400	700	1700	500	3400	1000	2400	700	1700	500
170x45	3100	900	2200	600	1500	400	3100	900	2200	600	1500	400
170x70	3600	1000	2700	800	1800	500	3800	1100	2700	800	1800	500
170x90	3800	1100	3000	900	2100	600	4200	1200	3000	900	2100	600
190x45	3400	1000	2400	700	1700	500	3400	1000	2400	700	1700_{10}	500_{10}
190x70	3900	1100	3000	900	2100	600	4200	1200	3000	900	2100	600
190x90	4100	1200	3300	900	2300	600	4700	1400	3300	900	2300	600
240x45	4100	1200	3100	900	2100_{10}	600_{10}	4300	1200	3100	900	2100_{45}	600_{45}
240x70	4600	1300	3800	1100	2600	700	5300	1500	3800	1100	2600_{10}	700
240x90	5000	1500	4200	1200	2900	800	5900	1700	4200	1200	2900	800
290x45	4800	1400	3700	1100	2600_{25}	700_{25}	5300	1500	3700_{20}	1100_{20}	2500_{75}	700_{75}
290x70	5400	1600	4500	1300	3200_{10}	900_{10}	6400	1900	4600	1300	3200_{45}	900_{45}
290x90	5700	1700	4800	1400	3500_{5}	1000_{5}	7100	2100	5000	1500	3500_{25}	1000_{25}

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	1600	400	1500	400	1500	400	1900	500	1800	500	1700	500
90x45	1800	500	1700	500	1700	500	2200	600	2100	600	2000	600
120x35	2500	700	2400	700	2300	600	3100	900	2900	800	2700	750
120x45	2900	800	2700	800	2600	700	3400	1000	3300	900	3100	800
140x35	3200	900	3100	900	2900	850	3700	1100	3500	950	3200	850
140x45	3600	1000	3400	1000	3300	950	4000	1200	3800	1050	3600	950
170x35	4000	1200	3800	1100	3500	1050	4500	1300	4300	1150	3900	1050
170x45	4300	1200	4100	1200	3800	1100	4900	1450	4700	1250	4400	1150
190x35	4400	1300	4100	1200	3800	1100	5000	1450	4800	1300	4300	1200
190x45	4900	1400	4400	1300	4100	1200	5500	1600	5200	1400	4900	1300
240x35	5500	1600	5000	1500	4600	1300	6400	1850	6100	1600	5500	1500
240x45	5900	1700	5300	1500	4900	1400	7000	2000	6600	1750	6100	1600
290x45	6800	2000	6100	1800	5700	1700	7200	2100	7200	2150	7100	1950

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	3600	3600	3400	3100	2900	2600
190x45	3900	3900	3600	3400	3200	2900
240x35	4500	4400	4100	3800	3700	3300
240x45	4800	4600	4300	4100	3900	3600
290x45	5500	5300	4900	4700	4500	4100

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	1000
40x290	1100
45x240	1200
45x290	1300
50x240	1400
50x290	1600
60x240	1900
60x290	2000

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	3500	2500	1700	2400	2200	2000	1600	1700	1600	1500	1400
90x90	4800	4800	4000	2800	4000	3600	3300	2600	2800	2700	2500	2300
120x120	4800	4800	4800	4800	4800	4800	4800	4700	4800	4700	4500	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	2400	2000	1700	1200	1700	1500	1300	NS
90x90	4800	4500	3200	2200	4000	3200	2700	2100	2800	2500	2300	1900
120x120	4800	4800	4800	4000	4800	4800	4800	3800	4800	4400	4000	3400
140x140	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4700
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			
70x70	2400	1300	1100	900	NS	1000	NS	NS	NS
70x90	2400	1600	1400	1300	1100	1400	1100	NS	NS
	2700	1200	1100	NS	NS	1000	NS	NS	NS
70x120	2400	2200	1900	1700	1500	1800	1500	1300	1100
	2700	1600	1500	1300	1200	1400	1200	NS	NS
	3000	1200	1100	1000	NS	1100	NS	NS	NS
70x140	2400	2600	2200	2000	1800	2100	1700	1500	1300
	2700	2000	1700	1600	1400	1600	1400	1200	900
	3000	1400	1300	1200	1100	1300	1000	NS	NS
90x70	2400	2400	2100	1900	1700	2100	1700	1500	1400
	2700	1800	1700	1500	1400	1600	1400	1200	1000
	3000	1400	1300	1200	1100	1300	1000	NS	NS
90x90	2400	3000	2700	2400	2200	2600	2200	1900	1700
	2700	2300	2100	1900	1700	2000	1700	1500	1300
	3000	1800	1600	1500	1400	1600	1400	1200	1000
90x120	2400	4000	3600	3200	2900	3500	2900	2500	2200
	2700	3100	2800	2500	2300	2700	2300	2000	1700
	3000	2500	2200	2000	1800	2100	1800	1600	1400
	3600	1300	1300	1200	1200	1200	1200	1000	NS
90x140	2400	4800	4200	3800	3500	4100	3500	3000	2600
	2700	3700	3300	3000	2700	3200	2700	2300	2000
	3000	3000	2600	2400	2200	2500	2100	1800	1600
	3600	1600	1600	1500	1400	1600	1400	1300	1100
120x70	2400	4800	4400	4000	3700	4200	3700	3300	2900
	2700	3700	3400	3100	2900	3300	2900	2500	2300
	3000	3000	2700	2500	2300	2600	2300	2000	1800
	3600	1800	1800	1600	1500	1700	1500	1400	1200
120x90	2400	4800	4800	4800	4600	4800	4600	4100	3700
	2700	4700	4200	3900	3600	4100	3600	3200	2800
	3000	3700	3400	3100	2900	3300	2900	2500	2300
	3600	2500	2200	2100	1900	2200	1900	1700	1600
	4200	1300	1300	1300	1200	1300	1200	1100	1100

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 20 kN.

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

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Table 7 (cont)

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			
120x120	2400	4800	4800	4800	4800	4800	4800	4800	4800
	2700	4800	4800	4800	4800	4800	4800	4200	3800
	3000	4800	4500	4100	3800	4400	3800	3400	3000
	3600	3300	3100	2800	2600	3000	2600	2300	2100
	4200	1700	1700	1700	1700	1700	1700	1600	1400
120x140	2400	4800	4800	4800	4800	4800	4800	4800	4800
	2700	4800	4800	4800	4800	4800	4800	4800	4500
	3000	4800	4800	4800	4500	4800	4500	4000	3600
	3600	3900	3600	3300	3100	3500	3100	2700	2400
	4200	2100	2100	2100	2000	2100	2000	1900	1700
	4800	900	900	900	900	900	900	900	900
140x70	2400	4800	4800	4800	4800	4800	4800	4800	4300
	2700	4800	4800	4600	4200	4800	4200	3800	3400
	3000	4300	4000	3600	3400	3800	3400	3000	2700
	3600	2900	2700	2500	2300	2600	2300	2000	1800
	4200	1600	1600	1600	1500	1600	1500	1400	1300
140x90	2400	4800	4800	4800	4800	4800	4800	4800	4800
	2700	4800	4800	4800	4800	4800	4800	4700	4300
	3000	4800	4800	4500	4200	4800	4200	3800	3400
	3600	3600	3300	3100	2900	3300	2900	2600	2300
	4200	2100	2100	2100	2000	2100	2000	1800	1600
	4800	900	900	900	900	900	900	900	900
140x120	2700	4800	4800	4800	4800	4800	4800	4800	4800
	3000	4800	4800	4800	4800	4800	4800	4800	4600
	3600	4800	4500	4100	3900	4400	3900	3400	3100
	4200	2900	2900	2900	2700	2900	2700	2500	2200
	4800	900	900	900	900	900	900	900	900
140x140	3000	4800	4800	4800	4800	4800	4800	4800	4800
	3600	4800	4800	4800	4500	4800	4500	4100	3700
	4200	3500	3500	3400	3300	3500	3300	2900	2600
	4800	1800	1800	1800	1800	1800	1800	1800	1800

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 20 kN.

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

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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	2500	2600	2000	1900	1700	1700	1500	1400	1400	1300
140x45	2700	2700	2100	2100	1900	1900	1700	1600	1600	1500
140x70	3100	3000	2500	2600	2200	2200	2000	2000	1800	1800
140x90	3200	3200	2700	2700	2400	2400	2200	2200	2000	2000
170x35	3000	3000	2400	2400	2100	2100	1900	1900	1800	1700
170x45	3200	3200	2600	2700	2300	2300	2100	2100	1900	1900
170x70	3500	3500	3000	3000	2700	2700	2400	2500	2200	2200
170x90	3700	3700	3200	3200	2900	2900	2600	2700	2500	2500
190x35	3300	3200	2700	2700	2400	2400	2100	2100	2000	2000
190x45	3500	3400	2900	2900	2600	2600	2300	2300	2200	2100
190x70	3800	3800	3300	3300	3000	3000	2700	2800	2500	2600
190x90	4000	4000	3500	3500	3200	3100	3000	3000	2800	2800
240x35	3900	3900	3300	3300	3000	3000	2700	2800	2500	2500
240x45	4100	4100	3500	3500	3200	3200	3000	3000	2800	2800
240x70	4600	4500	3900	3900	3600	3500	3300	3300	3100	3100
240x90	4800	4800	4100	4100	3800	3700	3500	3500	3400	3300
290x45	4700	4700	4000	4000	3700	3600	3400	3400	3200	3200
290x70	5200	5200	4500	4500	4100	4100	3800	3800	3600	3600
290x90	5500	5500	4800	4700	4300	4300	4100	4100	3900	3800
	Continuous Span									
140x35	3200	3200	2700	2600	2200	2200	1900	1600	1600	1400
140x45	3400	3400	2900	2900	2500	2500	2200	2100	1900	1600
140x70	3800	3800	3300	3200	3000	3000	2700	2700	2400	2500
140x90	4100	4100	3500	3400	3100	3100	2900	2900	2700	2700
170x35	3700	3700	3200	3100	2700	2800	2300	2200	2100	1700
170x45	4000	4000	3400	3300	3100	3000	2700	2700	2400	2400
170x70	4400	4400	3800	3800	3400	3400	3200	3100	2900	2900
170x90	4700	4700	4000	4000	3600	3600	3400	3400	3200	3200
190x35	4100	4100	3400	3400	3000	3000	2600	2700	2300	2100
190x45	4300	4300	3700	3700	3300	3300	3000	3000	2700	2700
190x70	4800	4800	4100	4100	3700	3700	3500	3500	3300	3200
190x90	5100	5100	4400	4300	4000	3900	3700	3700	3500	3500
240x35	4800	4900	4100	4100	3700	3700	3400_{15}	3300_{15}	3000_{25}	3000_{25}
240x45	5100	5200	4400	4400	4000	4000	3700	3700	3400_{15}	3300_{10}
240x70	5700	5700	4900	4900	4400	4400	4200	4200	3900	3900
240x90	6000	6000	5200	5200	4700	4700	4400	4400	4200	4200
290x45	5900	5900	5100	5100	4600	4600	4300_{15}	4300_{15}	4100_{35}	4000_{35}
290x70	6500	6500	5600	5600	5100	5100	4800	4800	4500_{5}	4500
290x90	6700	6800	5900	5900	5400	5400	5100	5100	4800	4800

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	1900	1900	1500	1400	1300	NS	1200	NS	NS	NS
140x45	2100	2100	1600	1600	1400	1300	1300	NS	1200	NS
140x70	2400	2500	1900	1900	1700	1600	1500	1400	1400	1200
140x90	2600	2700	2100	2100	1800	1800	1600	1600	1500	1400
170x35	2300	2300	1800	1800	1600	1500	1400	1300	1400	NS
170x45	2500	2600	2000	2000	1700	1700	1600	1500	1500	1300
170x70	2900	2900	2300	2300	2000	2000	1800	1800	1700	1700
170x90	3100	3100	2600	2600	2200	2200	2000	2000	1900	1900
190x35	2600	2700	2100	2000	1800	1800	1600	1500	1500	1400
190x45	2800	2800	2200	2200	2000	1900	1800	1800	1600	1600
190x70	3200	3200	2600	2700	2300	2300	2100	2000	1900	1900
190x90	3400	3400	2800	2900	2500	2500	2300	2200	2100	2100
240x35	3200	3200	2600	2700	2300	2200	2100	2000	1900	1900
240x45	3400	3400	2900	2900	2500	2500	2300	2200	2100	2100
240x70	3800	3800	3200	3200	2900	2900	2700	2700	2400	2400
240x90	4000	4000	3400	3400	3100	3100	2900	2900	2700	2700
290x45	3900	3900	3300	3300	3000	3000	2800	2800	2600	2500
290x70	4400	4400	3700	3700	3400	3300	3100	3100	3000	3000
290x90	4600	4600	4000	3900	3600	3600	3400	3300	3200	3100
	Continuous Span									
140x35	2600	2600	2000	2000	1800	1600	1600	1200	1400	NS
140x45	2800	2800	2200	2100	1900	1800	1700	1600	1600	1200
140x70	3200	3100	2600	2600	2300	2200	2100	2000	1900	1600
140x90	3400	3300	2800	2800	2500	2500	2200	2200	2100	2000
170x35	3100	3100	2500	2500	2100	2100	1700	1500	1600	1200
170x45	3300	3200	2700	2700	2400	2400	2100	2100	1700	1500
170x70	3700	3700	3100	3100	2800	2700	2500	2500	2300	2200
170x90	3900	3900	3300	3300	3000	3000	2800	2700	2600	2500
190x35	3300	3300	2800	2800	2400	2400_{5}	2200_{10}	1600_{5}	1600_{5}	1300_{15}
190x45	3600	3600	3000	3000	2700	2600	2400	2400_{5}	2200_{10}	1700
190x70	4000	4000	3400	3300	3100	3000	2800	2800	2600	2600
190x90	4200	4200	3600	3600	3300	3200	3000	3000	2900	2800
240x35	4000	4000	3400	3400	3100_{15}	3100_{15}	2700_{30}	2800_{35}	2200_{40}	1900_{20}
240x45	4300	4300	3600	3600	3300	3200	3100_{20}	3000_{20}	2700_{30}	2800_{35}
240x70	4700	4700	4000	4000	3700	3600	3400	3400	3200_{10}	3200_{5}
240x90	5000	5100	4300	4300	3900	3900	3600	3600	3400	3400
290x45	4900	4900	4200	4200	3800_{15}	3700_{15}	3500_{35}	3500_{35}	3300_{60}	3200_{60}
290x70	5500	5500	4700	4600	4200	4200	3900_{5}	3900_{5}	3700_{20}	3700_{20}
290x90	5800	5800	4900	5000	4500	4500	4200	4200	4000_{5}	3900_{10}

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	2600	550	2400	450	2300	400	2100	300
	20	2400	550	2200	450	2000	400	1800	300
	40	2000	550	1800	450	1600	400	1400	300
	60	1800	550	1500	450	1400	400	1200	300
	90	1500	500	1300	450	1200	400	1100	350
90x45	10	3100	600	2800	500	2600	450	2300	350
	20	2600	650	2300	500	2200	450	1900	350
	40	2200	650	1900	500	1700	450	1500	350
	60	1900	650	1700	550	1500	450	1300	350
	90	1700	600	1500	550	1300	500	1200	400
90x70	10	3400	800	3200	650	3000	550	2700	450
	20	3000	800	2700	650	2500	550	2200	450
	40	2500	800	2200	650	2000	550	1800	450
	60	2200	850	1900	650	1800	550	1500	450
	90	1900	850	1700	700	1500	600	1400	500
90x90	10	3600	850	3300	700	3100	600	2900	500
	20	3100	900	2900	700	2600	600	2400	500
	40	2600	900	2400	750	2200	600	1900	500
	60	2400	950	2100	750	1900	650	1700	500
	90	2100	950	1800	800	1700	650	1500	550
120x35	10	3800	700	3500	550	3200	450	2800	400
	20	3200	700	2900	550	2700	500	2300	400
	40	2700	700	2300	600	2100	500	1900	400
	60	2300	750	2100	600	1900	500	1600	400
	90	2100	800	1800	600	1600	550	1400	400
120x45	10	4000	800	3700	650	3500	550	3100	450
	20	3500	800	3100	650	2900	550	2500	450
	40	2900	800	2500	650	2300	550	2000	450
	60	2500	850	2200	700	2000	600	1800	450
	90	2200	900	2000	700	1800	600	1600	500
120x70	10	4400	1000	4100	800	3900	700	3500	550
	20	3900	1000	3500	800	3300	700	2900	550
	40	3300	1050	2900	850	2700	700	2400	550
	60	2900	1050	2600	850	2400	750	2100	600
	90	2600	1100	2300	900	2100	750	1800	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							
120x90	10	4600	1100	4300	900	4100	750	3700	600
	20	4100	1100	3700	900	3500	800	3100	600
	40	3500	1150	3100	950	2900	800	2600	650
	60	3100	1200	2800	950	2600	800	2300	650
	90	2800	1250	2500	1000	2300	850	2000	700
140x35	10	4400	800	4000	650	3700	550	3300	450
	20	3700	800	3400	650	3100	550	2700	450
	40	3100	800	2700	650	2500	550	2200	450
	60	2700	850	2400	700	2200	600	1900	450
	90	2400	900	2100	700	1900	600	1700	500
140x45	10	4600	900	4300	700	4000	600	3600	500
	20	4000	900	3600	750	3300	600	3000	500
	40	3300	950	3000	750	2700	650	2400	500
	60	3000	950	2600	750	2400	650	2100	500
	90	2600	1000	2300	800	2100	700	1800	550
140x70	10	5000	1150	4700	900	4400	800	4100	600
	20	4400	1150	4100	900	3800	800	3400	650
	40	3800	1150	3400	950	3100	800	2800	650
	60	3400	1200	3000	950	2800	850	2400	650
	90	3000	1250	2700	1000	2400	850	2100	700
140x90	10	5200	1250	4900	1000	4700	850	4300	700
	20	4700	1300	4300	1000	4000	900	3600	700
	40	4000	1300	3600	1050	3400	900	3000	700
	60	3600	1350	3300	1100	3000	950	2600	750
	90	3300	1400	2900	1150	2600	950	2300	800
170x35	10	5200	950	4800	750	4500	650	4100	500
	20	4500	950	4100	750	3700	650	3300	500
	40	3700	950	3300	750	3000	650	2700	500
	60	3300	1000	2900	800	2700	650	2400	550
	90	2900	1050	2600	850	2400	700	2100	550
170x45	10	5500	1050	5100	850	4800	700	4300	550
	20	4800	1050	4300	850	4000	750	3600	600
	40	4000	1100	3600	900	3300	750	2900	600
	60	3600	1150	3200	900	2900	750	2600	600
	90	3200	1150	2800	950	2600	800	2200	650

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	5900	1350	5500	1050	5300	900	4800	700
	20	5300	1350	4800	1100	4500	900	4100	750
	40	4500	1400	4100	1100	3800	950	3400	750
	60	4100	1400	3600	1150	3400	950	3000	750
	90	3600	1500	3200	1200	3000	1000	2600	800
170x90	10	6000	1500	5700	1200	5500	1000	5100	800
	20	5500	1500	5100	1200	4800	1050	4400	850
	40	4800	1550	4400	1250	4100	1050	3600	850
	60	4400	1600	3900	1250	3600	1100	3200	850
	90	3900	1650	3500	1350	3200	1150	2800	900
190x35	10	5700	1000	5300	800	5000	700	4500	550
	20	5000	1050	4500	800	4200	700	3700	550
	40	4200	1050	3700	850	3400	700	3000	550
	60	3700	1100	3300	850	3000	750	2600	600
	90	3300	1150	2900	900	2600	750	2300	600
190x45	10	6000	1150	5600	950	5300	800	4800	650
	20	5300	1150	4800	950	4500	800	4000	650
	40	4500	1200	4000	950	3700	800	3300	650
	60	4000	1250	3600	1000	3300	850	2900	650
	90	3600	1300	3100	1050	2900	900	2500	700
190x70	10	6400	1450	6100	1150	5800	1000	5300	800
	20	5800	1500	5300	1200	5000	1000	4500	800
	40	5000	1500	4500	1200	4200	1050	3700	850
	60	4500	1550	4100	1250	3700	1050	3300	850
	90	4100	1650	3600	1300	3300	1100	2900	900
190x90	10	6600	1650	6300	1300	6000	1100	5600	900
	20	6000	1650	5600	1350	5300	1150	4800	900
	40	5300	1700	4800	1350	4500	1150	4000	950
	60	4800	1750	4400	1400	4000	1200	3600	950
	90	4400	1850	3900	1450	3600	1250	3200	1000
240x35	10	7000	1250	6500	1000	6100	850	5600	650
	20	6100	1250	5600	1000	5200	850	4700	650
	40	5200	1300	4700	1000	4300	850	3800	700
	60	4700	1300	4100	1050	3800	900	3300	700
	90	4100	1350	3600	1100	3300	950	2900	750

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	1400	6800	1100	6500	950	6000	750
	20	6500	1450	6000	1150	5600	950	5000	750
	40	5600	1450	5000	1150	4600	1000	4100	800
	60	5000	1500	4500	1200	4100	1000	3600	800
	90	4500	1550	4000	1250	3600	1050	3200	850
240x70	10	7200	1800	7200	1400	7000	1200	6600	950
	20	7000	1800	6600	1450	6200	1200	5600	1000
	40	6200	1850	5600	1500	5200	1250	4700	1000
	60	5600	1900	5100	1500	4700	1300	4200	1000
	90	5100	2000	4500	1600	4200	1350	3700	1050
240x90	10	7200	2000	7200	1600	7200	1350	6900	1100
	20	7200	2050	6900	1600	6500	1400	6000	1100
	40	6500	2100	6000	1650	5600	1400	5000	1100
	60	6000	2150	5400	1700	5000	1450	4500	1150
	90	5400	2250	4900	1800	4500	1500	4000	1200
290x45	10	7200	1650	7200	1300	7200	1100	7100	900
	20	7200	1650	7100	1350	6600	1100	6000	900
	40	6600	1700	6000	1350	5500	1150	4900	900
	60	6000	1750	5400	1400	4900	1200	4400	950
	90	5400	1850	4800	1450	4400	1250	3900	1000
290x70	10	7200	2100	7200	1650	7200	1400	7200	1100
	20	7200	2150	7200	1700	7200	1450	6700	1150
	40	7200	2200	6700	1750	6300	1450	5600	1150
	60	6700	2250	6100	1750	5600	1500	5000	1200
	90	6100	2350	5400	1850	5000	1550	4400	1250
290x90	10	7200	2400	7200	1900	7200	1600	7200	1250
	20	7200	2400	7200	1900	7200	1600	7100	1300
	40	7200	2450	7100	1950	6700	1650	6000	1300
	60	7100	2550	6500	2000	6000	1700	5400	1350
	90	6500	2650	5800	2100	5400	1750	4800	1400

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	3400	550	3100	450	2600	400	2100	300
	20	3300	550	3000	450	2700	400	2100	300
	40	2700	550	2400	450	2200	400	1900	300
	60	2400	550	2100	450	1900	400	1700	300
	90	2100	500	1800	450	1700	400	1500	350
90x45	10	4100	600	3600	500	3000	450	2400	350
	20	3600	650	3200	500	2900	450	2400	350
	40	2900	650	2600	500	2400	450	2100	350
	60	2600	650	2300	550	2100	450	1800	350
	90	2300	600	2000	550	1800	500	1600	400
90x70	10	4700	800	4300	650	3800	550	2900	450
	20	4000	800	3600	650	3400	550	3000	450
	40	3400	800	3000	650	2700	550	2400	450
	60	3000	850	2600	650	2400	550	2100	450
	90	2600	850	2300	700	2100	600	1900	500
90x90	10	4900	850	4500	700	4200	600	3300	500
	20	4300	900	3900	700	3600	600	3200	500
	40	3600	900	3200	750	3000	600	2600	500
	60	3200	950	2900	750	2600	650	2300	500
	90	2900	950	2500	800	2300	650	2000	550
120x35	10	5200	700	4300	550	3600	450	2800	400
	20	4400	700	3900	550	3600	500	2900	400
	40	3600	700	3200	600	2900	500	2600	400
	60	3200	750	2800	600	2600	500	2200	400
	90	2800	800	2500	600	2200	550	2000	400
120x45	10	5500	800	4900	650	4100	550	3200	450
	20	4700	800	4200	650	3900	550	3300	450
	40	3900	800	3500	650	3200	550	2800	450
	60	3500	850	3100	700	2800	600	2500	450
	90	3100	900	2700	700	2500	600	2100	500
120x70	10	6000	1000	5600	800	5200	700	4000	550
	20	5200	1000	4800	800	4400	700	4000	550
	40	4400	1050	4000	850	3700	700	3200	550
	60	4000	1050	3500	850	3200	750	2800	600
	90	3500	1100	3100	900	2800	750	2500	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							
120x90	10	6200	1100	5800	900	5500	750	4500	600
	20	5500	1100	5100	900	4700	800	4300	600
	40	4700	1150	4300	950	3900	800	3500	650
	60	4300	1200	3800	950	3500	800	3100	650
	90	3800	1250	3400	1000	3100	850	2700	700
140x35	10	6000	800	5100	650	4300	550	3300	450
	20	5100	800	4600	650	4200	550	3400	450
	40	4200	800	3700	650	3400	550	3000	450
	60	3700	850	3300	700	3000	600	2600	450
	90	3300	900	2900	700	2600	600	2300	500
140x45	10	6300	900	5800	700	4900	600	3800	500
	20	5400	900	4900	750	4500	600	3900	500
	40	4500	950	4000	750	3700	650	3300	500
	60	4000	950	3600	750	3300	650	2900	500
	90	3600	1000	3100	800	2900	700	2500	550
140x70	10	6800	1150	6400	900	6000	800	4800	600
	20	6000	1150	5500	900	5100	800	4600	650
	40	5100	1150	4600	950	4300	800	3800	650
	60	4600	1200	4100	950	3800	850	3300	650
	90	4100	1250	3600	1000	3300	850	2900	700
140x90	10	7000	1250	6600	1000	6300	850	5400	700
	20	6300	1300	5800	1000	5500	900	4900	700
	40	5500	1300	4900	1050	4600	900	4100	700
	60	4900	1350	4400	1100	4100	950	3600	750
	90	4400	1400	3900	1150	3600	950	3200	800
170x35	10	7100	950	6300	750	5300	650	4100	500
	20	6100	950	5500	750	5100	650	4200	500
	40	5100	950	4500	750	4100	650	3700	500
	60	4500	1000	4000	800	3700	650	3200	550
	90	4000	1050	3500	850	3200	700	2800	550
170x45	10	7200	1050	6900	850	6000	700	4700	550
	20	6500	1050	5900	850	5500	750	4800	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	650

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	1350	7200	1050	7100	900	5900	700
	20	7100	1350	6600	1100	6200	900	5600	750
	40	6200	1400	5600	1100	5100	950	4600	750
	60	5600	1400	5000	1150	4600	950	4000	750
	90	5000	1500	4400	1200	4000	1000	3600	800
170x90	10	7200	1500	7200	1200	7200	1000	6700	800
	20	7200	1500	6900	1200	6500	1050	5900	850
	40	6500	1550	5900	1250	5500	1050	4900	850
	60	5900	1600	5300	1250	4900	1100	4400	850
	90	5300	1650	4800	1350	4400	1150	3900	900
190x35	10	7200	1000	7100	800	6000	700	4700	550
	20	6800	1050	6100	800	5700	700	4800	550
	40	5700	1050	5000	850	4600	700	4100	550
	60	5000	1100	4500	850	4100	750	3600	600
	90	4500	1150	3900	900	3600	750	3100	600
190x45	10	7200	1150	7200	950	6800	800	5300	650
	20	7200	1150	6500	950	6100	800	5400	650
	40	6100	1200	5400	950	5000	800	4400	650
	60	5400	1250	4800	1000	4400	850	3900	650
	90	4800	1300	4300	1050	3900	900	3400	700
190x70	10	7200	1450	7200	1150	7200	1000	6700	800
	20	7200	1500	7200	1200	6800	1000	6200	800
	40	6800	1500	6200	1200	5700	1050	5100	850
	60	6200	1550	5500	1250	5100	1050	4500	850
	90	5500	1650	4900	1300	4500	1100	4000	900
190x90	10	7200	1650	7200	1300	7200	1100	7200	900
	20	7200	1650	7200	1350	7200	1150	6600	900
	40	7200	1700	6600	1350	6100	1150	5500	950
	60	6600	1750	5900	1400	5500	1200	4900	950
	90	5900	1850	5300	1450	4900	1250	4300	1000
240x35	10	7200	1250	7200	1000	7200	850	6000	650
	20	7200	1250	7200	1000	7100	850	6200	650
	40	7100	1300	6300	1000	5800	850	5200	700
	60	6300	1300	5600	1050	5200	900	4500	700
	90	5600	1350	5000	1100	4500	950	4000	750

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	1400	7200	1100	7200	950	6900	750
	20	7200	1450	7200	1150	7200	950	6800	750
	40	7200	1450	6800	1150	6300	1000	5600	800
	60	6800	1500	6100	1200	5600	1000	4900	800
	90	6100	1550	5400	1250	4900	1050	4300	850
240x70	10	7200	1800	7200	1400	7200	1200	7200	950
	20	7200	1800	7200	1450	7200	1200	7200	1000
	40	7200	1850	7200	1500	7100	1250	6400	1000
	60	7200	1900	6900	1500	6400	1300	5700	1000
	90	6900	2000	6200	1600	5700	1350	5000	1050
240x90	10	7200	2000	7200	1600	7200	1350	7200	1100
	20	7200	2050	7200	1600	7200	1400	7200	1100
	40	7200	2100	7200	1650	7200	1400	6800	1100
	60	7200	2150	7200	1700	6800	1450	6100	1150
	90	7200	2250	6600	1800	6100	1500	5400	1200
290x45	10	7200	1650	7200	1300	7200	1100	7200	900
	20	7200	1650	7200	1350	7200	1100	7200	900
	40	7200	1700	7200	1350	7200	1150	6700	900
	60	7200	1750	7200	1400	6700	1200	5900	950
	90	7200	1850	6500	1450	5900	1250	5200_5	1000
290x70	10	7200	2100	7200	1650	7200	1400	7200	1100
	20	7200	2150	7200	1700	7200	1450	7200	1150
	40	7200	2200	7200	1750	7200	1450	7200	1150
	60	7200	2250	7200	1750	7200	1500	6800	1200
	90	7200	2350	7200	1850	6800	1550	6000	1250
290x90	10	7200	2400	7200	1900	7200	1600	7200	1250
	20	7200	2400	7200	1900	7200	1600	7200	1300
	40	7200	2450	7200	1950	7200	1650	7200	1300
	60	7200	2550	7200	2000	7200	1700	7200	1350
	90	7200	2650	7200	2100	7200	1750	6500	1400

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	4200	1400	3300	1150	2800	950	2400	850	2100	750
	20	3600	1400	2800	1200	2400	950	2100	850	1900	750
	40	3000	1400	2400	1200	2000	1000	1800	850	1600	800
	60	2700	1300	2100	1000	1800	900	1600	800	1500	700
	90	2400	1200	1900	900	1600	800	1400	700	1300	600
170x70	10	4700	1600	3800	1450	3200	1200	2800	1000	2500	900
	20	4100	1600	3300	1450	2800	1200	2500	1050	2200	950
	40	3500	1600	2700	1300	2400	1200	2100	1050	1900	950
	60	3100	1500	2400	1200	2100	1000	1900	900	1700	800
	90	2700	1300	2200	1100	1900	900	1700	800	1500	700
170x90	10	5000	1750	4000	1600	3400	1300	3000	1150	2700	1000
	20	4400	1750	3500	1600	3000	1300	2700	1150	2400	1050
	40	3700	1750	3000	1500	2600	1300	2300	1100	2100	1050
	60	3300	1600	2700	1300	2300	1100	2100	1000	1900	900
	90	3000	1500	2400	1200	2000	1000	1800	900	1700	800
190x45	10	4700	1550	3700	1300	3100	1050	2700	950	2400	850
	20	4000	1550	3200	1300	2700	1100	2400	950	2100	850
	40	3400	1550	2600	1300	2300	1100	2000	950	1800	850
	60	3000	1500	2400	1200	2000	1000	1800	900	1700	800
	90	2600	1300	2100	1000	1800	900	1600	800	1500	700
190x70	10	5200	1800	4200	1600	3500	1300	3100	1150	2800	1050
	20	4600	1800	3600	1600	3100	1350	2800	1150	2500	1050
	40	3900	1800	3100	1500	2600	1300	2400	1200	2100	1050
	60	3400	1700	2700	1300	2400	1200	2100	1000	1900	900
	90	3100	1500	2400	1200	2100	1000	1900	900	1700	800
190x90	10	5500	1950	4500	1800	3800	1450	3400	1250	3000	1150
	20	4900	1950	3900	1800	3400	1500	3000	1300	2700	1150
	40	4200	1950	3300	1600	2900	1400	2600	1300	2300	1100
	60	3700	1800	3000	1500	2600	1300	2300	1100	2100	1000
	90	3300	1600	2600	1300	2300	1100	2100	1000	1900	900

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	5800	1950	4600	1650	3900	1350	3400	1200	3000	1050
	20	5100	1950	4000	1650	3400	1350	3000	1200	2700	1050
	40	4200	1950	3400	1700	2900	1400	2600	1200	2300	1100
	60	3800	1900	3000	1500	2600	1300	2300	1100	2100	1000
	90	3300	1600	2600	1300	2300	1100	2100	1000	1900	900
240x70	10	6400	2250	5200	2050	4500	1650	3900	1450	3500	1300
	20	5700	2250	4600	2050	3900	1700	3500	1450	3200	1300
	40	4800	2250	3900	1900	3300	1600	3000	1500	2700	1350
	60	4300	2100	3500	1700	3000	1500	2700	1300	2500	1200
	90	3900	1900	3100	1500	2700	1300	2400	1200	2200	1100
240x90	10	6800	2450	5600	2250	4800	1850	4200	1600	3800	1450
	20	6000	2450	4900	2300	4200	1850	3800	1600	3400	1450
	40	5200	2450	4200	2100	3600	1800	3200	1600	3000	1500
	60	4700	2350	3700	1800	3300	1600	2900	1400	2700	1300
	90	4200	2100	3300	1600	2900	1400	2600	1300	2400	1200
290x45	10	6900	2350	5500	2000	4700	1650	4100	1400	3700_{5}	1300
	20	6000	2350	4800	2000	4100	1650	3600	1450	3300	1300
	40	5100	2350	4000	2000	3500	1700	3100	1450	2800_{5}	1300
	60	4600	2300	3600	1800	3100	1500	2800	1400	2600_{5}	1300
	90	4000	2000	3200	1600	2800	1400	2500	1200	2300_{10}	1100
290x70	10	7200	2750	6200	2450	5400	2000	4700	1750	4200	1550
	20	6800	2750	5500	2500	4700	2050	4200	1750	3800	1600
	40	5800	2750	4700	2300	4000	2000	3600	1800	3300	1650
	60	5200	2550	4200	2100	3600	1800	3300	1600	3000	1500
	90	4700	2300	3700	1800	3200	1600	2900	1400	2700	1300
290x90	10	7200	3000	6600	2750	5700	2250	5100	1950	4600	1750
	20	7100	3000	5900	2700	5100	2250	4600	1950	4100	1750
	40	6200	2900	5000	2450	4400	2200	3900	1900	3600	1800
	60	5600	2700	4500	2200	3900	1900	3500	1700	3200	1600
	90	5000	2500	4000	2000	3500	1700	3200	1600	2900	1400

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	5300	1400	3600	1150	2900	950	2600	850	2300	750
	20	5000	1400	3700	1200	3000	950	2600	850	2400	750
	40	4100	1400	3200	1200	2800	1000	2500	850	2200	800
	60	3600	1400	2900	1250	2500	1000	2200	900	2000	800
	90	3200	1400	2500	1150	2200	1050	2000	900	1800	850
170x70	10	6400	1600	4400	1450	3600	1200	3200	1000	2800	900
	20	5600	1600	4500	1450	3700	1200	3200	1050	2900	950
	40	4700	1600	3700	1500	3200	1200	2900	1050	2600	950
	60	4200	1600	3300	1400	2900	1250	2600	1100	2400	1000
	90	3700	1600	2900	1300	2600	1200	2300	1100	2100	1000
170x90	10	6800	1750	4900	1600	4000	1300	3500	1150	3200	1000
	20	6000	1750	4800	1600	4100	1300	3600	1150	3300	1050
	40	5100	1750	4100	1600	3500	1350	3100	1200	2800	1050
	60	4500	1750	3600	1500	3100	1350	2800	1200	2600	1100
	90	4000	1700	3200	1400	2800	1250	2500	1150	2300	1100
190x45	10	5900	1550	4000	1300	3300	1050	2900	950	2600	850
	20	5500	1550	4100	1300	3400	1100	2900	950	2600	850
	40	4600	1550	3600	1350	3100	1100	2800	950	2500	850
	60	4100	1550	3200	1350	2800	1150	2500	1000	2300_{5}	900
	90	3600	1550	2800	1300	2500	1150	2200	1050	2000_{10}	900
190x70	10	7100	1800	4900	1600	4100	1300	3500	1150	3200	1050
	20	6200	1800	5000	1600	4200	1350	3600	1150	3300	1050
	40	5300	1800	4200	1650	3600	1350	3200	1200	2900	1050
	60	4700	1800	3700	1550	3200	1400	2900	1200	2600	1100
	90	4200	1700	3300	1450	2900	1300	2600	1200	2400	1100
190x90	10	7200	1950	5500	1800	4500	1450	3900	1250	3500	1150
	20	6600	1950	5400	1800	4600	1500	4000	1300	3600	1150
	40	5700	1950	4500	1750	3900	1500	3500	1300	3200	1200
	60	5100	1950	4000	1650	3500	1450	3100	1350	2900	1200
	90	4500	1850	3600	1550	3100	1350	2800	1250	2600	1200

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	7200	1950	5100	1650	4200	1350	3600	1200	3300	1050
	20	6900	1950	5200	1650	4300	1350	3700	1200	3400_{10}	1050
	40	5800	1950	4600	1700	3900	1400	3500_{5}	1200	3200_{20}	1100
	60	5100	1950	4100	1650	3500	1450	3100_{10}	1250	2900_{25}	1100
	90	4600	1850	3600	1550	3100	1350	2800_{20}	1250	2600_{35}	1150
240x70	10	7200	2250	6300	2050	5100	1650	4500	1450	4000	1300
	20	7200	2250	6200	2050	5300	1700	4600	1450	4200	1300
	40	6600	2250	5300	2000	4500	1700	4100	1500	3700	1350
	60	5900	2200	4700	1850	4100	1650	3700	1550	3400	1400
	90	5300	2050	4200	1750	3600	1550	3300	1450	3000_{10}	1350
240x90	10	7200	2450	7100	2250	5700	1850	5000	1600	4500	1450
	20	7200	2450	6700	2300	5800	1850	5100	1600	4600	1450
	40	7000	2450	5700	2100	4900	1900	4400	1650	4000	1500
	60	6400	2350	5100	2000	4400	1750	4000	1650	3700	1550
	90	5700	2200	4500	1850	3900	1650	3600	1500	3300	1450
290x45	10	7200	2350	6200	2000	5100	1650	4400	1400	4000_{15}	1300
	20	7200	2350	6400	2000	5200	1650	4500_{15}	1450	4100_{30}	1300
	40	6900	2350	5500	2050	4700_{5}	1700	4200_{25}	1450	3800_{45}	1300
	60	6200	2300	4900	1900	4300_{10}	1700	3800_{30}	1500	3500_{50}	1350
	90	5500	2150	4400	1800	3800_{20}	1600	3400_{40}	1450	3100_{65}	1400
290x70	10	7200	2750	7200	2450	6200	2000	5400	1750	4900	1550
	20	7200	2750	7200	2500	6400	2050	5600	1750	5000_{10}	1600
	40	7200	2750	6300	2300	5500	2050	4900	1800	4500_{15}	1650
	60	7100	2550	5700	2150	4900	1950	4400_{5}	1800	4100_{20}	1650
	90	6300	2400	5100	2000	4400	1800	4000_{10}	1650	3600_{30}	1550
290x90	10	7200	3000	7200	2750	6900	2250	6000	1950	5400	1750
	20	7200	3000	7200	2700	6900	2250	6200	1950	5600	1750
	40	7200	2900	6800	2450	5900	2200	5300	2000	4900_{5}	1800
	60	7200	2700	6100	2300	5300	2050	4800	1900	4400_{10}	1800
	90	6800	2550	5500	2150	4800	1900	4300	1750	4000_{15}	1650

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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