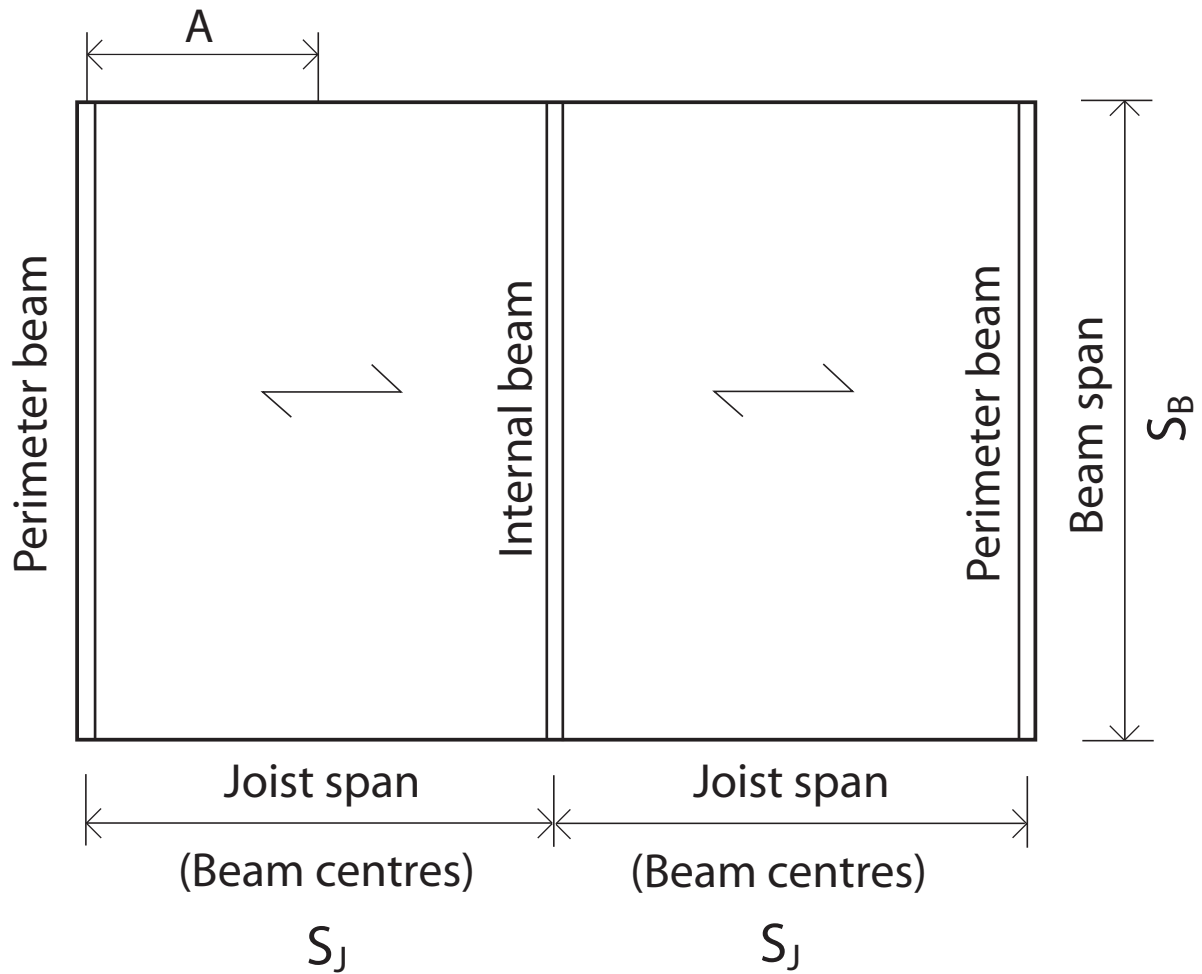


# Joist and beam span tables



For perimeter beams,  $A = \text{beam centres} = 0.5 \text{ joist span}$

## Note

The span tables in this document have been prepared to assist in the preliminary design of timber decks, eg for species selection and initial member sizing. The detailed structural design for an individual deck will need to be confirmed by an appropriately qualified engineer.

# Joist and beam span tables

Table A: Maximum joist spans - Strength Class C16

Joist section (mm)		Imposed load 1.5kN/m <sup>2</sup> Joist centres (mm)			Imposed load 4.0 kN/m <sup>2</sup> Joist centres (mm)		
		400	500	600	400	500	600
width	depth	Maximum clear joist span S <sub>J</sub> (metres)					
44/47	x 97	2.00	1.86	1.75	1.47	1.33	1.22
44/47	x 122	2.51	2.33	2.20	1.85	1.66	1.51
44/47	x 147	3.02	2.81	2.64	2.20	1.97	1.80
44/47	x 170	3.49	3.24	3.05	2.52	2.26	2.07
44/47	x 195	4.00	3.71	3.50	2.87	2.57	2.35
44/47	x 220	4.20	4.18	3.94	3.21	2.88	2.63

Table B: Double member beam spans - Strength Class C16

Beam size (mm)		Imposed load 1.5kN/m <sup>2</sup> Beam centres (metres)				Imposed load 4.0 kN/m <sup>2</sup> Beam centres (metres)			
		1.2	1.8	2.4	3.0	1.2	1.8	2.4	3.0
width	depth	Maximum clear beam span S <sub>B</sub> (metres)							
2 x 44/47	122	1.99	1.72	1.55	1.43	1.45	1.22	1.05	-
2 x 44/47	147	2.39	2.07	1.87	1.73	1.74	1.46	1.25	1.02
2 x 44/47	170	2.76	2.40	2.16	1.99	2.02	1.67	1.44	1.18
2 x 44/47	195	3.16	2.75	2.48	2.29	2.31	1.90	1.64	1.35
2 x 44/47	220	3.56	3.10	2.80	2.58	2.61	2.13	1.83	1.53

#### Imposed loads

1.5kN/m<sup>2</sup> - domestic applications (single occupancy)

4.0kN/m<sup>2</sup> - commercial applications (dining areas, cafes, restaurants, balconies)

#### Note

The span tables in this document have been prepared to assist in the preliminary design of timber decks, eg for species selection and initial member sizing. The detailed structural design for an individual deck will need to be confirmed by an appropriately qualified engineer.