

Application: Floor Joists

A Floor Joist is one of a number of parallel members required to support flooring.

Floor Dead Load - with ceiling - 42kg/m²

Basic Loading Data

Flooring = Particle Board (30kg/m²)
 Underfloor Ceiling = 10mm P'Board (12kg/m²)
 Floor Live Load = Domestic Std (1.5,1.8kPa)
 Wind Area = Very High
 Min End Bearing Length = 30mm
 Min Intermediate Bearing = 45mm
 AS1684.1 Dynamics for 1.0kN static load

Dimensional Data

Top Edge Restraint = continuous restraint
 Bottom Edge Restraint = nil

Design Deflection Limits

Dead Load - Span/300 or 15mm max
 Live Load - Span/360 or 9mm max
 Dynamic Criteria - 1kN Point Load 2mm max

Flooring Material - The above tables allow for a timber flooring material only.

External Use - Where overhanging joists are to be used in an external application such as a balcony, the members must be fully protected from the weather, or treated to an H3 level.

NP Frame LVL 8
NP Frame LVL 11
NP Frame LVL 13

Single Span Floor load width (mm)	Max Span (mm)				
	1700	2800	3900	5200	6000
400	140x45	190x45	240x45	290x45	
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63
	1600	2700	3700	5100	5800
450	140x45	190x45	240x45	290x45	
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63
	1600	2600	3600	4700	5400
600	140x45	190x45	240x45	290x45	
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63

Table values relate to Allowable Maximum Span in mm

Continuous Span Floor load width (mm)	Max Span (mm)				
	1900	3100	4400	5700	6600
400	140x45	190x45	240x45	290x45	
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63
	1800	3000	4200	5600	6400
450	140x45	190x45	240x45	290x45	
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63
	1800	2900	4100	5200	5900
600	140x45	190x45	240x45		
	90x45	140x45	190x45	200x90	240x90
	150x45	150x45	200x45	240x45	300x45
		150x63	200x63	240x63	300x63

Table values relate to Allowable Maximum Span in mm

Note: Span tables shown here for NP Frame LVL 8, 11 and 13 are representative for the basic design function in the NP Design program.

For specific design options, refer to NP Design's professional design feature at www.nelsonpine.co.nz

These span tables apply only to NelsonPine®LVL products