

Bearers & Floor Joists

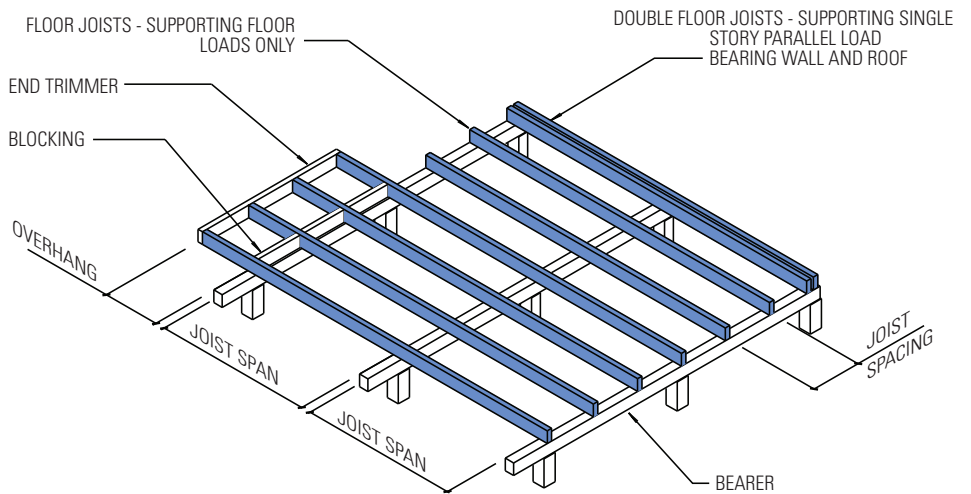
UNIFORMITY

RELIABILITY

DURABILITY

SUSTAINABILITY

Nelson Pine LVL11 Floor Joists (100x45)



Floor Joists - supporting floor loads only - 40kg/m²

| Joint Spacing | 300 | | 450 | | 600 | |
|---------------|-------------------------|-----|------|-----|------|-----|
| | Span | O/H | Span | O/H | Span | O/H |
| DxB 100x45 | Maximum SINGLE span | | | | | |
| | 2300 | 550 | 1850 | 500 | 1750 | 400 |
| 100x45 | Maximum CONTINUOUS Span | | | | | |
| | 3000 | 550 | 2150 | 500 | 2050 | 400 |

Floor Joists - supporting single story parallel load bearing wall and roof

| RLW | | 800 | 1800 | 3000 | 800 | 180 | 3000 |
|----------|--------------------------------|---------------------|------|------|-------------------------|------|------|
| DxB | Roof Mass (kg/m ²) | Maximum SINGLE span | | | Maximum CONTINUOUS span | | |
| 2/100x45 | 40 | 2150 | 1900 | 1750 | 2900 | 2600 | 2350 |
| 2/100x45 | 90 | 1900 | 1650 | 1450 | 2600 | 2200 | 1950 |

All dimensions are in millimeters unless noted

Design Notes for Nelson Pine LVL 11 Bearer and Floor Joists

Design Criteria. These span tables are designed in accordance with the criteria in AS1684.4-1999. The design is based on floor dead loads up to 40kg/m², live loads of 1.5kPa distributed and a 1.8kN concentrated load. For bearers and joists supporting wall loads, a wall mass of 15kg/m² was assumed.

Bearing Area. Floor joists are to have a minimum of 31mm of bearing at end supports or butt joints and a minimum of 63mm of bearing at internal supports for continuous members. Bearers are to have a minimum of 50mm of bearing at end supports or butt joints and minimum of 100mm of bearing at internal supports for continuous members.

Continuous spans. For the case where the spans are not of equal length, the longer span becomes the governing span for obtaining the appropriate member size as if it were a single span.

Overhangs. For overhanging joists, Blocking and End Trimmer are required as per diagram. The maximum permissible overhang is 30% of the backspan.

Certification. Product certification by the Engineered Wood Products Association of Australasia (EWPAA) to conform to AS/NZS 4357.0:2005 Structural Laminated Veneer Lumber.

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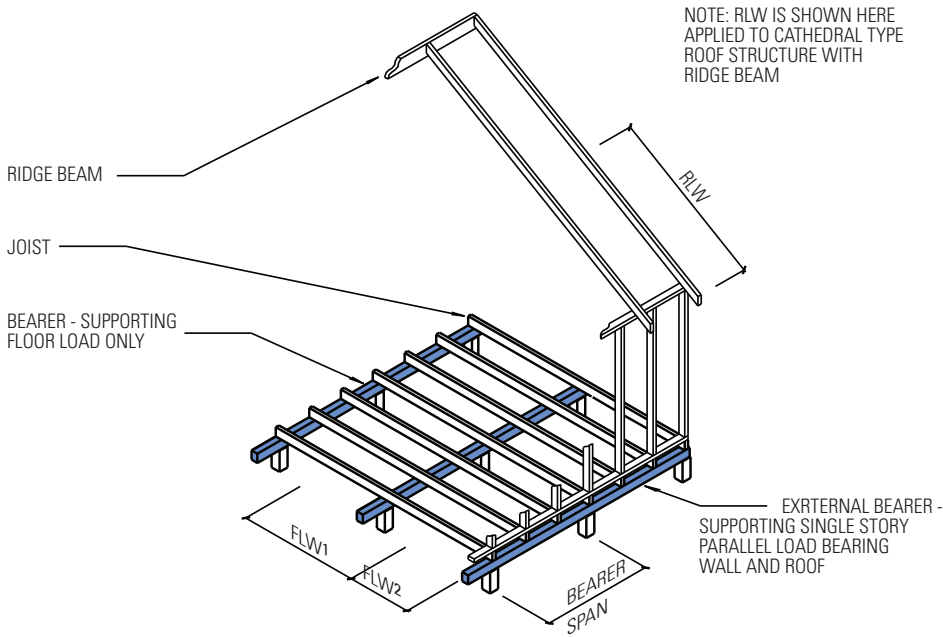
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NelsonPine LVL11 Bearers (100x45 & 100x63)



Bearers - supporting floor loads only - 40kg/m²

| FLW | 1200 | | 1800 | | 2400 | |
|----------|-------------------------|-----|------|-----|------|-----|
| | Span | O/H | Span | O/H | Span | O/H |
| DxB | Maximum SINGLE span | | | | | |
| 100x63 | 1850 | 300 | 1600 | 250 | 1450 | 250 |
| 2/100x45 | 2050 | 350 | 1800 | 300 | 1600 | 250 |
| | Maximum CONTINUOUS Span | | | | | |
| 100x63 | 2300 | 300 | 2000 | 250 | 1800 | 250 |
| 2/100x45 | 2550 | 350 | 2250 | 300 | 2050 | 250 |

Bearers - supporting single story parallel load bearing wall and roof

| FLW | RLW | 900 | | | | 1200 | | | |
|----------|--------------------------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|
| | | 1500 | 3000 | 1500 | 6000 | 1500 | 3000 | 4500 | 6000 |
| | | Span O/H | Span O/H | Span O/H | Span O/H | Span O/H | Span O/H | Span O/H | Span O/H |
| DxB | Roof Mass (kg/m ²) | Maximum SINGLE span | | | | | | | |
| 100x63 | 40 | 1550 400 | 1400 400 | 1300 350 | 1250 350 | 1500 350 | 1350 350 | 1300 350 | 1200 350 |
| 2/100x45 | 40 | 1750 500 | 1600 450 | 1500 150 | 1400 400 | 1650 400 | 1550 400 | 1450 400 | 1350 400 |
| 100x63 | 90 | 1400 400 | 1200 350 | 1100 300 | 1000 300 | 1350 350 | 1200 350 | 1050 300 | 1000 300 |
| 2/100x45 | 90 | 1550 450 | 1350 400 | 1250 350 | 1150 300 | 1500 400 | 1350 400 | 1200 350 | 1100 300 |
| | | Maximum CONTINUOUS span | | | | | | | |
| 100x63 | 40 | 2100 400 | 1900 400 | 1750 350 | 1650 350 | 2000 350 | 1850 350 | 1700 350 | 1650 350 |
| 2/100x45 | 40 | 2350 500 | 2150 450 | 2000 450 | 1900 400 | 2250 400 | 2050 400 | 1950 400 | 1850 400 |
| 100x63 | 90 | 1850 400 | 1600 350 | 1450 300 | 1350 300 | 1800 350 | 1600 350 | 1450 300 | 1350 300 |
| 2/100x45 | 90 | 2100 450 | 1850 400 | 1650 350 | 1550 300 | 2050 400 | 1800 400 | 1650 350 | 1500 300 |

All dimensions are in millimeters unless noted

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