wesbeam
building better wood


# e-beam
engineered LVL beams

# Wesbeam e-beam Span Tables

# engineered to load
# engineered to length
# engineered to last
# end of story

e-beam is the premier laminated veneer lumber (LVL) product available in Australia. LVL has many advantages over traditional building products, including its uniformity of engineering properties, it's high strength to weight ratio and its availability in longer lengths.

Available in a range of thicknesses including 35mm, 45mm, 63mm and 75mm with depths from 90mm to 450mm, e-beam is manufactured from plantation timbers, making it an environmentally sustainable resource.

**About e-beam**

e-beam conforms with the requirements of AS/NZS 4357 Structural Laminated Veneer Lumber. It is manufactuered by laminating Maritime Pine veneer, using phenolic adhesive, in a continuous assembly in which the grain direction of all veneers runs longitudinally. It is pressed as a 1.2 m nominal width continuous billet in various standard thicknesses, cut to standard widths and any specified length for use as structural beams and other framing components.

**Use of e-beam Data**

The Tables and other technical data provided in this publication are only applicable to e-beam LVL manufactured by Wesbeam. This data should not be used for look-alike or substitute products. Use of the e-beam data for look-alike or substitute products can result in unsafe or unsatisfactory performance.

**Basis for Design**

The design criteria used to develop the Span Tables contained in this brochure are based on the assumptions listed in AS1684.1 – 1999 Residential timber framed construction.

**Design Loads**

The design loads used to determine member sizes listed in the Span Tables are as per AS1684.1 – 1999 Residential timber framed construction. The design loads include:-

- Dead loads
- Live loads
- Wind loads
- Snow loads
- Earthquake loads, and
- Load Combinations of the above loads

Design load limitations for each of the above load or load combination cases are also as per AS1684.1 – 1999 Residential timber framed construction.

**Design Capacity Factor (ø)**

The capacity factor (ø) used to calculate the design capacity of a structural framing member listed in the Span Tables is taken from Table 2.5 in AS1720.1 – 1997 where for all LVL structural elements used in residential houses ø = 0.95.

**Terminology, Definitions & Notations Used in these Tables**

The terminology, definitions and notations used in this brochure are similar to and consistent with those used and listed in AS1684 – 1999 Residential timber framed construction.



**Using Multiple Sections**

The use of multiple sections where called for in the Span Tables is permitted using vertically nail laminated LVL. Multiple LVL members are to be fixed in accordance with Cl 2.3 of AS1684.2 – 2010.

**Characteristic Design Values**

The characteristic Design Values for Wesbeam e-beam LVL are available on request from Wesbeam's Technical Department. This service is available for professional design practioners.

The spans listed in this brochure for e-beam LVL manufactured by Wesbeam apply only when the moisture content of the LVL is below 15% in service and are for "on edge" orientation of the LVL section.

# Rafters

## For N3 wind classification

| e-BEAM Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | | Continuous Span | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maximum Rafter Spacing (mm) | | | | | | | | | | | | | | | |
| | | 450 | | 600 | | 900 | | 1200 | | 450 | | 600 | | 900 | | 1200 | |
| | | Maximum Rafter Span and Overhang 'O/H' (m) | | | | | | | | | | | | | | | |
| | | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H |
| 90 x 35 | 10 | 3.3 | 0.7 | 3.2 | 0.5 | 2.9 | 0.6 | 2.7 | 0.4 | 4.3 | 0.6 | 3.9 | 0.5 | 3.5 | 0.6 | 3.2 | 0.4 |
| | 20 | 3.2 | 0.7 | 3.0 | 0.6 | 2.8 | 0.5 | 2.5 | 0.6 | 4.3 | 0.6 | 3.9 | 0.5 | 3.5 | 0.6 | 3.2 | 0.5 |
| | 30 | 3.0 | 0.7 | 2.8 | 0.6 | 2.5 | 0.7 | 2.2 | 0.5 | 4.1 | 0.6 | 3.7 | 0.5 | 3.3 | 0.6 | 3.0 | 0.5 |
| | 40 | 2.8 | 0.8 | 2.5 | 0.6 | 2.2 | 0.7 | 2.1 | 0.5 | 3.7 | 0.7 | 3.4 | 0.5 | 3.0 | 0.6 | 2.8 | 0.5 |
| | 60 | 2.5 | 0.8 | 2.2 | 0.7 | 2.0 | 0.6 | 1.8 | 0.5 | 3.3 | 0.7 | 3.0 | 0.6 | 2.6 | 0.7 | 2.4 | 0.5 |
| | 75 | 2.3 | 0.8 | 2.1 | 0.7 | 1.8 | 0.6 | 1.7 | 0.5 | 3.1 | 0.7 | 2.8 | 0.6 | 2.5 | 0.7 | 2.2 | 0.5 |
| | 90 | 2.2 | 0.8 | 2.0 | 0.7 | 1.7 | 0.8 | 1.6 | 0.6 | 2.9 | 0.7 | 2.6 | 0.6 | 2.3 | 0.7 | 2.1 | 0.6 |
| 90 x 45 | 10 | 3.7 | 0.7 | 3.5 | 0.6 | 3.2 | 0.7 | 3.0 | 0.5 | 4.8 | 0.6 | 4.4 | 0.5 | 3.9 | 0.6 | 3.6 | 0.5 |
| | 20 | 3.5 | 0.8 | 3.3 | 0.6 | 3.0 | 0.7 | 2.7 | 0.5 | 4.8 | 0.6 | 4.4 | 0.5 | 3.9 | 0.6 | 3.6 | 0.5 |
| | 30 | 3.2 | 0.8 | 3.0 | 0.6 | 2.6 | 0.7 | 2.4 | 0.5 | 4.3 | 0.7 | 4.0 | 0.5 | 3.5 | 0.6 | 3.2 | 0.5 |
| | 40 | 3.0 | 0.8 | 2.7 | 0.7 | 2.4 | 0.7 | 2.2 | 0.6 | 4.0 | 0.7 | 3.7 | 0.6 | 3.2 | 0.7 | 3.0 | 0.5 |
| | 60 | 2.6 | 0.9 | 2.4 | 0.7 | 2.1 | 0.8 | 1.9 | 0.6 | 3.5 | 0.8 | 3.2 | 0.6 | 2.8 | 0.7 | 2.6 | 0.6 |
| | 75 | 2.5 | 0.9 | 2.2 | 0.8 | 2.0 | 0.7 | 1.8 | 0.6 | 3.3 | 0.8 | 3.0 | 0.6 | 2.6 | 0.7 | 2.4 | 0.6 |
| | 90 | 2.3 | 0.9 | 2.1 | 0.8 | 1.9 | 0.7 | 1.7 | 0.6 | 3.1 | 0.8 | 2.8 | 0.7 | 2.5 | 0.6 | 2.3 | 0.7 |
| 130 x 35 | 10 | 5.3 | 0.9 | 4.8 | 0.7 | 4.2 | 0.8 | 3.8 | 0.6 | 6.7 | 0.8 | 5.9 | 0.6 | 4.9 | 0.8 | 4.3 | 0.6 |
| | 20 | 4.5 | 1.0 | 4.2 | 0.8 | 3.8 | 0.7 | 3.5 | 0.6 | 6.1 | 0.8 | 5.6 | 0.6 | 5.0 | 0.8 | 4.4 | 0.6 |
| | 30 | 4.1 | 1.0 | 3.8 | 0.8 | 3.3 | 0.7 | 3.1 | 0.6 | 5.4 | 0.9 | 5.0 | 0.7 | 4.5 | 0.6 | 4.1 | 0.8 |
| | 40 | 3.8 | 1.0 | 3.5 | 0.8 | 3.1 | 0.9 | 2.8 | 0.6 | 5.0 | 0.9 | 4.6 | 0.7 | 4.1 | 0.8 | 3.7 | 0.6 |
| | 60 | 3.3 | 1.1 | 3.1 | 0.9 | 2.7 | 0.8 | 2.5 | 0.7 | 4.5 | 1.0 | 4.1 | 0.8 | 3.6 | 0.7 | 3.3 | 0.9 |
| | 75 | 3.1 | 1.1 | 2.9 | 0.9 | 2.5 | 0.8 | 2.3 | 0.7 | 4.2 | 1.0 | 3.8 | 0.8 | 3.4 | 0.9 | 3.1 | 0.7 |
| | 90 | 2.9 | 1.2 | 2.7 | 1.0 | 2.4 | 0.9 | 2.2 | 0.7 | 3.9 | 1.0 | 3.6 | 0.8 | 3.2 | 0.9 | 2.9 | 0.7 |
| 130 x 45 | 10 | 5.5 | 1.0 | 5.2 | 0.8 | 4.5 | 0.7 | 4.1 | 0.9 | 7.4 | 0.8 | 6.9 | 0.6 | 5.7 | 0.8 | 4.9 | 0.7 |
| | 20 | 4.8 | 1.0 | 4.4 | 0.8 | 4.0 | 0.9 | 3.7 | 0.7 | 6.4 | 0.9 | 6.0 | 0.7 | 5.4 | 0.8 | 4.9 | 0.7 |
| | 30 | 4.3 | 1.1 | 4.0 | 0.9 | 3.6 | 0.8 | 3.3 | 0.7 | 5.8 | 0.9 | 5.4 | 0.7 | 4.8 | 0.9 | 4.4 | 0.7 |
| | 40 | 4.0 | 1.1 | 3.7 | 0.9 | 3.3 | 1.0 | 3.0 | 0.7 | 5.4 | 1.0 | 4.9 | 0.8 | 4.4 | 0.9 | 4.0 | 0.7 |
| | 60 | 3.6 | 1.2 | 3.3 | 1.0 | 2.9 | 0.9 | 2.6 | 0.8 | 4.8 | 1.0 | 4.4 | 0.8 | 3.9 | 0.9 | 3.5 | 0.8 |
| | 75 | 3.3 | 1.2 | 3.1 | 1.0 | 2.7 | 1.1 | 2.5 | 0.8 | 4.5 | 1.1 | 4.1 | 0.9 | 3.6 | 0.8 | 3.3 | 1.0 |
| | 90 | 3.2 | 1.2 | 2.9 | 1.0 | 2.5 | 1.1 | 2.3 | 0.8 | 4.2 | 1.1 | 3.9 | 0.9 | 3.4 | 1.0 | 3.1 | 0.8 |
| 150 x 35 | 10 | 6.0 | 0.8 | 5.5 | 1.0 | 4.8 | 0.8 | 4.4 | 0.7 | 7.4 | 0.9 | 6.5 | 0.7 | 5.5 | 0.9 | 4.9 | 0.7 |
| | 20 | 5.1 | 1.1 | 4.8 | 0.9 | 4.3 | 0.8 | 4.0 | 0.7 | 6.9 | 0.9 | 6.4 | 0.7 | 5.7 | 0.9 | 5.0 | 0.7 |
| | 30 | 4.6 | 1.2 | 4.3 | 0.9 | 3.8 | 0.8 | 3.5 | 0.7 | 6.2 | 1.0 | 5.8 | 0.8 | 5.1 | 0.7 | 4.7 | 0.9 |
| | 40 | 4.3 | 1.2 | 4.0 | 1.0 | 3.5 | 0.9 | 3.2 | 0.7 | 5.8 | 1.0 | 5.3 | 0.8 | 4.7 | 1.0 | 4.3 | 0.7 |
| | 60 | 3.8 | 1.3 | 3.5 | 1.0 | 3.1 | 0.9 | 2.8 | 0.8 | 5.1 | 1.1 | 4.7 | 0.9 | 4.2 | 0.8 | 3.8 | 1.0 |
| | 75 | 3.6 | 1.3 | 3.3 | 1.1 | 2.9 | 1.0 | 2.6 | 0.8 | 4.8 | 1.1 | 4.4 | 0.9 | 3.9 | 1.0 | 3.5 | 0.8 |
| | 90 | 3.4 | 1.3 | 3.1 | 1.1 | 2.7 | 1.0 | 2.5 | 0.8 | 4.5 | 1.2 | 4.2 | 0.9 | 3.7 | 1.1 | 3.3 | 0.8 |
| 150 x 45 | 10 | 6.2 | 1.1 | 5.9 | 0.9 | 5.2 | 1.0 | 4.7 | 0.8 | 8.3 | 1.0 | 7.8 | 0.7 | 6.5 | 0.9 | 5.6 | 0.8 |
| | 20 | 5.4 | 1.2 | 5.1 | 1.0 | 4.6 | 0.9 | 4.2 | 0.8 | 7.3 | 1.0 | 6.8 | 0.8 | 6.1 | 0.9 | 5.7 | 0.7 |
| | 30 | 4.9 | 1.3 | 4.6 | 1.0 | 4.1 | 1.1 | 3.8 | 0.8 | 6.6 | 1.1 | 6.1 | 0.9 | 5.5 | 0.8 | 5.0 | 1.0 |
| | 40 | 4.6 | 1.3 | 4.2 | 1.1 | 3.8 | 1.0 | 3.4 | 0.8 | 6.1 | 1.1 | 5.7 | 0.9 | 5.0 | 1.0 | 4.6 | 0.8 |
| | 60 | 4.1 | 1.4 | 3.8 | 1.1 | 3.3 | 1.0 | 3.0 | 0.9 | 5.5 | 1.2 | 5.0 | 1.0 | 4.4 | 0.9 | 4.1 | 1.1 |
| | 75 | 3.8 | 1.4 | 3.5 | 1.2 | 3.1 | 1.1 | 2.8 | 0.9 | 5.1 | 1.2 | 4.7 | 1.0 | 4.2 | 1.1 | 3.8 | 0.9 |
| | 90 | 3.6 | 1.4 | 3.3 | 1.2 | 2.9 | 1.1 | 2.7 | 1.0 | 4.9 | 1.3 | 4.4 | 1.0 | 3.9 | 1.2 | 3.6 | 1.0 |
| 170 x 36 | 10 | 6.6 | 1.2 | 6.3 | 0.9 | 5.5 | 1.1 | 5.0 | 0.8 | 8.1 | 1.0 | 7.2 | 0.8 | 6.0 | 1.0 | 5.3 | 0.8 |
| | 20 | 5.8 | 1.2 | 5.4 | 1.0 | 4.8 | 0.9 | 4.5 | 0.8 | 7.7 | 1.1 | 7.2 | 0.8 | 6.2 | 1.0 | 5.5 | 0.8 |
| | 30 | 5.2 | 1.3 | 4.8 | 1.1 | 4.3 | 0.9 | 4.0 | 0.8 | 7.0 | 0.9 | 6.5 | 1.1 | 5.8 | 0.8 | 5.3 | 1.0 |
| | 40 | 4.8 | 1.4 | 4.5 | 1.1 | 4.0 | 1.0 | 3.6 | 0.8 | 6.5 | 1.2 | 6.0 | 0.9 | 5.3 | 1.1 | 4.9 | 0.8 |
| | 60 | 4.3 | 1.4 | 4.0 | 1.2 | 3.5 | 1.0 | 3.2 | 0.9 | 5.8 | 1.0 | 5.3 | 1.2 | 4.7 | 1.0 | 4.3 | 0.9 |
| | 75 | 4.0 | 1.5 | 3.7 | 1.2 | 3.3 | 1.1 | 3.0 | 0.9 | 5.4 | 1.3 | 5.0 | 1.0 | 4.4 | 1.2 | 4.0 | 0.9 |
| | 90 | 3.8 | 1.5 | 3.5 | 1.3 | 3.1 | 1.1 | 2.8 | 0.9 | 5.1 | 1.3 | 4.7 | 1.1 | 4.1 | 1.0 | 3.8 | 0.9 |
| 170 x 45 | 10 | 6.9 | 1.3 | 6.6 | 1.0 | 5.9 | 1.2 | 5.4 | 0.9 | 9.2 | 1.1 | 8.6 | 0.8 | 7.1 | 1.1 | 6.3 | 0.9 |
| | 20 | 6.1 | 1.4 | 5.7 | 1.1 | 5.1 | 1.0 | 4.7 | 0.9 | 8.1 | 1.2 | 7.6 | 0.9 | 6.9 | 1.1 | 6.4 | 0.8 |
| | 30 | 5.5 | 1.4 | 5.1 | 1.2 | 4.6 | 1.1 | 4.2 | 0.9 | 7.4 | 1.2 | 6.9 | 1.0 | 6.2 | 0.9 | 5.7 | 1.1 |
| | 40 | 5.1 | 1.5 | 4.7 | 1.2 | 4.2 | 1.1 | 3.9 | 0.9 | 6.9 | 1.3 | 6.4 | 1.0 | 5.7 | 1.2 | 5.2 | 0.9 |
| | 60 | 4.6 | 1.5 | 4.2 | 1.3 | 3.7 | 1.2 | 3.4 | 1.0 | 6.2 | 1.3 | 5.7 | 1.1 | 5.0 | 1.2 | 4.6 | 1.0 |
| | 75 | 4.3 | 1.6 | 4.0 | 1.3 | 3.5 | 1.2 | 3.2 | 1.0 | 5.8 | 1.4 | 5.3 | 1.1 | 4.7 | 1.3 | 4.3 | 1.0 |
| | 90 | 4.1 | 1.6 | 3.7 | 1.4 | 3.3 | 1.3 | 3.0 | 1.1 | 5.5 | 1.4 | 5.0 | 1.2 | 4.4 | 1.1 | 4.0 | 1.3 |



# Rafters continued

## For N3 wind classification

| e-BEAM Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | | Continuous Span | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maximum Rafter Spacing (mm) | | | | | | | | | | | | | | | |
| | | 450 | | 600 | | 900 | | 1200 | | 450 | | 600 | | 900 | | 1200 | |
| | | Maximum Rafter Span and Overhang 'O/H' (m) | | | | | | | | | | | | | | | |
| | | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H | SPAN | O/H |
| 200 x 35 | 10 | 7.6 | 1.4 | 7.2 | 1.1 | 6.4 | 1.0 | 5.7 | 0.9 | 9.1 | 1.3 | 7.8 | 1.0 | 6.6 | 1.2 | 6.0 | 0.9 |
| | 20 | 6.7 | 1.5 | 6.2 | 1.2 | 5.6 | 1.1 | 5.2 | 0.9 | 8.9 | 1.3 | 8.1 | 1.0 | 6.8 | 1.2 | 6.1 | 0.9 |
| | 30 | 6.1 | 1.5 | 5.6 | 1.3 | 5.0 | 1.1 | 4.6 | 0.9 | 8.1 | 1.3 | 7.5 | 1.0 | 6.8 | 1.2 | 6.2 | 0.9 |
| | 40 | 5.6 | 1.6 | 5.2 | 1.3 | 4.6 | 1.1 | 4.3 | 0.9 | 7.5 | 1.4 | 7.0 | 1.1 | 6.2 | 1.0 | 5.7 | 0.9 |
| | 60 | 5.0 | 1.7 | 4.6 | 1.4 | 4.1 | 1.2 | 3.8 | 1.0 | 6.8 | 1.5 | 6.2 | 1.2 | 5.5 | 1.1 | 5.0 | 1.0 |
| | 75 | 4.7 | 1.7 | 4.3 | 1.4 | 3.8 | 1.2 | 3.5 | 1.0 | 6.3 | 1.5 | 5.8 | 1.2 | 5.1 | 1.4 | 4.7 | 1.0 |
| | 90 | 4.5 | 1.8 | 4.1 | 1.5 | 3.6 | 1.3 | 3.3 | 1.1 | 6.0 | 1.6 | 5.5 | 1.3 | 4.8 | 1.2 | 4.4 | 1.1 |
| 200 x 45 | 10 | 7.9 | 1.5 | 7.5 | 1.2 | 6.9 | 1.1 | 6.3 | 1.0 | NS | NS | NS | NS | 8.0 | 1.3 | 7.0 | 1.0 |
| | 20 | 7.0 | 1.6 | 6.6 | 1.3 | 6.0 | 1.2 | 5.5 | 1.0 | 9.3 | 1.4 | 8.8 | 1.1 | 8.0 | 1.0 | 7.2 | 1.3 |
| | 30 | 6.4 | 1.7 | 6.0 | 1.4 | 5.4 | 1.2 | 4.9 | 1.0 | 8.6 | 1.5 | 8.0 | 1.2 | 7.2 | 1.1 | 6.6 | 1.0 |
| | 40 | 6.0 | 1.7 | 5.5 | 1.4 | 4.9 | 1.3 | 4.5 | 1.1 | 8.0 | 1.5 | 7.4 | 1.2 | 6.6 | 1.4 | 6.1 | 1.1 |
| | 60 | 5.4 | 1.8 | 4.9 | 1.5 | 4.4 | 1.3 | 4.0 | 1.1 | 7.2 | 1.6 | 6.6 | 1.3 | 5.9 | 1.2 | 5.4 | 1.1 |
| | 75 | 5.0 | 1.9 | 4.6 | 1.6 | 4.1 | 1.4 | 3.8 | 1.2 | 6.8 | 1.6 | 6.2 | 1.3 | 5.5 | 1.5 | 5.0 | 1.2 |
| | 90 | 4.8 | 1.9 | 4.4 | 1.6 | 3.9 | 1.5 | 3.5 | 1.2 | 6.4 | 1.7 | 5.9 | 1.4 | 5.2 | 1.3 | 4.7 | 1.2 |
| 240 x 45 | 10 | 9.1 | 1.9 | 8.7 | 1.5 | 8.1 | 1.4 | 7.5 | 1.2 | NS | NS | NS | NS | 9.3 | 1.5 | 8.0 | 1.2 |
| | 20 | 8.2 | 2.0 | 7.7 | 1.6 | 7.0 | 1.4 | 6.6 | 1.2 | NS | NS | NS | NS | 9.4 | 1.2 | 8.2 | 1.6 |
| | 30 | 7.5 | 2.0 | 7.0 | 1.7 | 6.4 | 1.4 | 5.9 | 1.2 | NS | NS | 9.4 | 1.4 | 8.5 | 1.3 | 7.9 | 1.2 |
| | 40 | 7.0 | 2.1 | 6.6 | 1.7 | 5.9 | 1.5 | 5.4 | 1.2 | 9.4 | 1.8 | 8.8 | 1.5 | 7.9 | 1.4 | 7.3 | 1.2 |
| | 60 | 6.4 | 2.2 | 5.9 | 1.8 | 5.2 | 1.6 | 4.8 | 1.3 | 8.5 | 1.9 | 7.9 | 1.6 | 7.0 | 1.5 | 6.4 | 1.3 |
| | 75 | 6.0 | 2.3 | 5.5 | 1.9 | 4.9 | 1.6 | 4.5 | 1.4 | 8.0 | 2.0 | 7.4 | 1.6 | 6.6 | 1.5 | 6.0 | 1.4 |
| | 90 | 5.7 | 2.3 | 5.2 | 1.9 | 4.6 | 1.7 | 4.2 | 1.4 | 7.6 | 2.0 | 7.0 | 1.7 | 6.2 | 1.6 | 5.7 | 1.4 |
| 240 x 63 | 10 | 9.5 | 2.1 | 9.2 | 1.7 | 8.6 | 1.6 | 8.2 | 1.4 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 20 | 8.6 | 2.3 | 8.2 | 1.9 | 7.6 | 1.7 | 7.1 | 1.4 | NS | NS | NS | NS | NS | NS | 9.5 | 1.4 |
| | 30 | 8.1 | 2.3 | 7.6 | 1.9 | 6.9 | 1.8 | 6.4 | 1.5 | NS | NS | NS | NS | 9.3 | 1.5 | 8.6 | 1.8 |
| | 40 | 7.6 | 2.4 | 7.1 | 2.0 | 6.4 | 1.8 | 6.0 | 1.5 | NS | NS | 9.5 | 1.7 | 8.6 | 1.6 | 8.0 | 1.5 |
| | 60 | 6.9 | 2.5 | 6.4 | 2.1 | 5.8 | 1.9 | 5.3 | 1.6 | 9.3 | 2.2 | 8.6 | 1.8 | 7.7 | 1.7 | 7.1 | 1.6 |
| | 75 | 6.5 | 2.6 | 6.1 | 2.2 | 5.4 | 2.0 | 5.0 | 1.7 | 8.8 | 2.2 | 8.1 | 1.9 | 7.3 | 1.8 | 6.7 | 1.7 |
| | 90 | 6.2 | 2.6 | 5.8 | 2.2 | 5.1 | 2.1 | 4.7 | 1.8 | 8.4 | 2.3 | 7.7 | 1.9 | 6.9 | 1.8 | 6.3 | 2.0 |
| 300 x 45 | 10 | 10.8 | 2.4 | 10.5 | 1.9 | 9.6 | 1.7 | 8.8 | 1.4 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 20 | 9.8 | 2.5 | 9.4 | 2.0 | 8.6 | 1.7 | 8.0 | 1.4 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 30 | 9.1 | 2.6 | 8.6 | 2.1 | 7.8 | 1.7 | 7.2 | 1.5 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 40 | 8.6 | 2.7 | 8.0 | 2.2 | 7.2 | 1.8 | 6.7 | 1.5 | NS | NS | NS | NS | NS | NS | 9.0 | 1.5 |
| | 60 | 7.8 | 2.8 | 7.2 | 2.3 | 6.5 | 1.9 | 6.0 | 1.6 | NS | NS | NS | NS | 8.7 | 1.9 | 8.0 | 1.6 |
| | 75 | 7.4 | 2.8 | 6.8 | 2.4 | 6.1 | 2.0 | 5.6 | 1.7 | NS | NS | 9.1 | 2.0 | 8.1 | 1.9 | 7.5 | 1.7 |
| | 90 | 7.0 | 2.9 | 6.5 | 2.4 | 5.8 | 2.1 | 5.3 | 1.8 | 9.4 | 2.5 | 8.7 | 2.1 | 7.7 | 2.0 | 7.1 | 1.8 |
| 300 x 63 | 10 | 11.2 | 2.8 | 10.9 | 2.2 | 10.4 | 2.0 | 9.7 | 1.7 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 20 | 10.4 | 2.9 | 9.9 | 2.4 | 9.2 | 2.1 | 8.7 | 1.8 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 30 | 9.7 | 3.0 | 9.2 | 2.5 | 8.5 | 2.1 | 7.9 | 1.8 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 40 | 9.2 | 3.0 | 8.7 | 2.5 | 7.9 | 2.2 | 7.3 | 1.8 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 60 | 8.5 | 3.1 | 7.9 | 2.6 | 7.1 | 2.3 | 6.6 | 2.0 | NS | NS | NS | NS | 9.5 | 2.2 | 8.8 | 2.0 |
| | 75 | 8.0 | 3.2 | 7.5 | 2.7 | 6.7 | 2.4 | 6.2 | 2.0 | NS | NS | NS | NS | 9.0 | 2.2 | 8.3 | 2.0 |
| | 90 | 7.7 | 3.3 | 7.1 | 2.8 | 6.4 | 2.5 | 5.8 | 2.1 | NS | NS | 9.5 | 2.4 | 8.5 | 2.3 | 7.8 | 2.1 |
| 360 x 45 | 10 | 12.5 | 2.9 | 12.1 | 2.3 | 10.1 | 2.0 | 8.6 | 1.6 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 20 | 11.5 | 3.0 | 10.9 | 2.4 | 10.1 | 2.0 | 8.9 | 1.7 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 30 | 10.7 | 3.1 | 10.1 | 2.5 | 9.2 | 2.0 | 8.6 | 1.7 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 40 | 10.1 | 3.2 | 9.5 | 2.6 | 8.6 | 2.1 | 8.0 | 1.8 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 60 | 9.2 | 3.3 | 8.6 | 2.8 | 7.7 | 2.2 | 7.1 | 1.9 | NS | NS | NS | NS | 9.5 | 2.2 | 8.8 | 1.9 |
| | 75 | 8.7 | 3.4 | 8.1 | 2.8 | 7.2 | 2.3 | 6.6 | 2.0 | NS | NS | NS | NS | 9.0 | 2.3 | 8.2 | 2.0 |
| | 90 | 8.3 | 3.5 | 7.7 | 2.9 | 6.9 | 2.4 | 6.3 | 2.1 | NS | NS | 9.5 | 2.6 | 8.5 | 2.4 | 7.7 | 2.1 |
| 400 x 63 | 10 | 13.9 | 3.8 | 13.6 | 3.1 | 12.9 | 2.6 | 12.0 | 2.2 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 20 | 13.0 | 3.9 | 12.6 | 3.2 | 11.8 | 2.7 | 11.2 | 2.3 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 30 | 12.4 | 4.0 | 11.8 | 3.3 | 10.9 | 2.7 | 10.3 | 2.3 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 40 | 11.8 | 4.1 | 11.2 | 3.4 | 10.3 | 2.8 | 9.6 | 2.4 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 60 | 10.9 | 4.2 | 10.3 | 3.6 | 9.3 | 3.0 | 8.6 | 2.5 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 75 | 10.4 | 4.3 | 9.7 | 3.7 | 8.8 | 3.1 | 8.1 | 2.6 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 90 | 10.0 | 4.4 | 9.3 | 3.7 | 8.3 | 3.3 | 7.7 | 2.8 | 13.4 | 3.9 | 12.5 | 3.2 | 11.2 | 3.1 | 10.3 | 2.8 |

NS indicates that this span is not available due to manufacturing and transport length limitations

# Roof Beams

## Ridge, Intermediate, Eave and Bressummer Beams
## For N3 wind classification

| e-beam Section D X B (mm) | Sheet Roof and Ceiling | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | |
| | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.8 | 5.4 | 6.0 |
| **Maximum Single Span (m)** | | | | | | | | | | | | |
| 150 x 35 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 1.9 | 1.8 | 1.8 |
| 150 x 45 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 |
| 170 x 35 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 170 x 45 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 | 2.3 | 2.2 | 2.1 |
| 200 x 35 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 2.9 | 2.9 | 2.8 | 2.7 | 2.6 | 2.4 | 2.3 |
| 200 x 45 | 3.9 | 3.7 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 |
| 200 x 63 | 4.3 | 4.1 | 3.9 | 3.8 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 2.9 | 2.8 |
| 240 x 35 | 4.4 | 4.1 | 4.0 | 3.8 | 3.7 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 2.8 | 2.7 |
| 240 x 45 | 4.7 | 4.4 | 4.2 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.3 | 3.1 | 3.0 |
| 240 x 63 | 5.2 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 | 4.1 | 4.0 | 3.9 | 3.7 | 3.5 | 3.4 |
| 300 x 45 | 5.8 | 5.5 | 5.3 | 5.1 | 4.9 | 4.7 | 4.6 | 4.4 | 4.3 | 4.1 | 3.9 | 3.8 |
| 300 x 63 | 6.4 | 6.1 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 | 4.9 | 4.8 | 4.6 | 4.4 | 4.2 |
| 300 x 75 | 6.7 | 6.4 | 6.2 | 5.9 | 5.7 | 5.5 | 5.4 | 5.2 | 5.1 | 4.8 | 4.6 | 4.4 |
| 360 x 63 | 7.6 | 7.3 | 7.0 | 6.7 | 6.5 | 6.3 | 6.1 | 5.9 | 5.7 | 5.5 | 5.2 | 5.0 |
| 400 x 45 | 7.7 | 7.3 | 7.0 | 6.7 | 6.4 | 6.1 | 5.9 | 5.7 | 5.5 | 5.1 | 4.8 | 4.6 |
| 400 x 63 | 8.4 | 8.0 | 7.7 | 7.4 | 7.2 | 6.9 | 6.7 | 6.5 | 6.4 | 6.1 | 5.8 | 5.6 |
| 400 x 75 | 8.8 | 8.4 | 8.1 | 7.8 | 7.5 | 7.3 | 7.1 | 6.9 | 6.7 | 6.4 | 6.1 | 5.9 |
| 450 x 63 | 9.4 | 9.0 | 8.6 | 8.3 | 8.0 | 7.8 | 7.5 | 7.3 | 7.1 | 6.8 | 6.5 | 6.3 |
| **Maximum Continuous Span (m)** | | | | | | | | | | | | |
| 150 x 35 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.3 |
| 150 x 45 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 |
| 170 x 35 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 2.9 | 2.8 | 2.6 |
| 170 x 45 | 4.5 | 4.2 | 4.1 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.1 | 3.0 | 2.9 |
| 200 x 35 | 4.9 | 4.6 | 4.4 | 4.2 | 4.1 | 3.9 | 3.8 | 3.7 | 3.5 | 3.3 | 3.2 | 3.0 |
| 200 x 45 | 5.2 | 5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.1 | 4.0 | 3.9 | 3.7 | 3.5 | 3.4 |
| 200 x 63 | 5.8 | 5.5 | 5.3 | 5.1 | 4.9 | 4.7 | 4.6 | 4.4 | 4.3 | 4.1 | 3.9 | 3.8 |
| 240 x 35 | 5.8 | 5.4 | 5.1 | 4.9 | 4.7 | 4.4 | 4.3 | 4.1 | 4.0 | 3.8 | 3.6 | 3.5 |
| 240 x 45 | 6.3 | 6.0 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 |
| 240 x 63 | 6.9 | 6.6 | 6.3 | 6.1 | 5.8 | 5.7 | 5.5 | 5.3 | 5.2 | 4.9 | 4.7 | 4.5 |
| 300 x 45 | 7.8 | 7.3 | 7.0 | 6.6 | 6.3 | 6.1 | 5.9 | 5.7 | 5.5 | 5.2 | 5.0 | 4.7 |
| 300 x 63 | 8.6 | 8.2 | 7.8 | 7.5 | 7.3 | 7.0 | 6.8 | 6.6 | 6.4 | 6.1 | 5.9 | 5.6 |
| 300 x 75 | 9.0 | 8.6 | 8.2 | 7.9 | 7.7 | 7.4 | 7.2 | 7.0 | 6.8 | 6.5 | 6.2 | 5.9 |
| 360 x 63 | 10.2 | 9.7 | 9.3 | 9.0 | 8.7 | 8.4 | 8.1 | 7.9 | 7.7 | 7.3 | 7.0 | 6.7 |
| 400 x 45 | 8.6 | 8.1 | 7.8 | 7.5 | 7.2 | 7.0 | 6.7 | 6.5 | 6.3 | 6.0 | 5.7 | 5.5 |
| 400 x 63 | 11.3 | 10.8 | 10.3 | 9.9 | 9.6 | 9.3 | 8.9 | 8.7 | 8.3 | 7.9 | 7.5 | 7.2 |
| 400 x 75 | 11.8 | 11.3 | 10.9 | 10.5 | 10.1 | 9.8 | 9.5 | 9.2 | 9.0 | 8.6 | 8.2 | 7.9 |



# Roof Beams

## Ridge, Intermediate, Eave and Bressummer Beams
## For N3 wind classification

| e-beam Section D X B (mm) | Tile Roof and Ceiling | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | |
| | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.8 | 5.4 | 6.0 |
| **Maximum Single Span (m)** | | | | | | | | | | | | |
| 150 x 35 | 2.2 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 |
| 150 x 45 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 |
| 170 x 35 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 |
| 170 x 45 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 1.8 | 1.7 |
| 200 x 35 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 1.8 | 1.8 |
| 200 x 45 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 200 x 63 | 3.4 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.3 | 2.3 |
| 240 x 35 | 3.4 | 3.3 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 | 2.0 | 1.9 |
| 240 x 45 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.8 | 2.6 | 2.5 | 2.4 |
| 240 x 63 | 4.1 | 3.9 | 3.7 | 3.6 | 3.5 | 3.3 | 3.2 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 |
| 300 x 45 | 4.6 | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.1 | 3.0 |
| 300 x 63 | 5.1 | 4.8 | 4.6 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 | 3.8 | 3.7 | 3.5 | 3.4 |
| 300 x 75 | 5.4 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 | 4.3 | 4.2 | 4.1 | 3.9 | 3.7 | 3.6 |
| 360 x 63 | 6.1 | 5.8 | 5.5 | 5.3 | 5.2 | 5.0 | 4.8 | 4.7 | 4.6 | 4.4 | 4.2 | 4.0 |
| 400 x 45 | 6.1 | 5.8 | 5.5 | 5.3 | 5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.7 | 3.5 |
| 400 x 63 | 6.7 | 6.4 | 6.1 | 5.9 | 5.7 | 5.5 | 5.4 | 5.2 | 5.1 | 4.9 | 4.7 | 4.5 |
| 400 x 75 | 7.1 | 6.8 | 6.5 | 6.2 | 6.0 | 5.8 | 5.7 | 5.5 | 5.4 | 5.1 | 4.9 | 4.7 |
| 450 x 63 | 7.6 | 7.2 | 6.9 | 6.6 | 6.4 | 6.2 | 6.0 | 5.9 | 5.7 | 5.5 | 5.2 | 5.0 |
| **Maximum Continuous Span (m)** | | | | | | | | | | | | |
| 150 x 35 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| 150 x 45 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 170 x 35 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.1 | 2.0 |
| 170 x 45 | 3.5 | 3.3 | 3.2 | 3.1 | 2.9 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 |
| 200 x 35 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 | 2.3 |
| 200 x 45 | 4.1 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.2 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 |
| 200 x 63 | 4.6 | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.1 | 3.0 |
| 240 x 35 | 4.6 | 4.4 | 4.1 | 3.9 | 3.8 | 3.5 | 3.4 | 3.3 | 3.2 | 3.0 | 2.8 | 2.6 |
| 240 x 45 | 4.9 | 4.7 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 | 3.8 | 3.7 | 3.5 | 3.4 | 3.1 |
| 240 x 63 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.5 | 4.3 | 4.2 | 4.1 | 3.9 | 3.8 | 3.6 |
| 300 x 45 | 6.1 | 5.8 | 5.6 | 5.3 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 | 3.9 | 3.7 |
| 300 x 63 | 6.8 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 5.4 | 5.3 | 5.1 | 4.9 | 4.7 | 4.5 |
| 300 x 75 | 7.2 | 6.9 | 6.6 | 6.3 | 6.1 | 5.9 | 5.7 | 5.6 | 5.4 | 5.2 | 5.0 | 4.8 |
| 360 x 63 | 8.2 | 7.8 | 7.4 | 7.2 | 6.9 | 6.7 | 6.5 | 6.3 | 6.2 | 5.9 | 5.6 | 5.3 |
| 400 x 45 | 7.0 | 6.7 | 6.3 | 6.0 | 5.8 | 5.7 | 5.5 | 5.3 | 5.1 | 4.8 | 4.6 | 4.4 |
| 400 x 63 | 9.0 | 8.6 | 8.2 | 7.9 | 7.7 | 7.4 | 7.1 | 6.9 | 6.7 | 6.3 | 5.9 | 5.7 |
| 400 x 75 | 9.5 | 9.1 | 8.7 | 8.4 | 8.1 | 7.8 | 7.6 | 7.4 | 7.2 | 6.9 | 6.6 | 6.4 |

# Strutting Beams

## Supporting Underpurlins only
## For N3 wind classification

| e-beam Section D X B (mm) | Sheet Roof | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Roof Area Supported ($m^2$) | | | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 |
| | Maximum Span (m) | | | | | | | | |
| 150 x 45# | 4.0 | 3.7 | 3.2 | 2.9 | 2.7 | 2.5 | 2.3 | 2.1 | NS |
| 150 x 63 | 4.7 | 4.2 | 3.7 | 3.4 | 3.1 | 2.9 | 2.7 | 2.5 | 2.3 |
| 2/150 x 35# | 5.0 | 4.4 | 3.9 | 3.6 | 3.3 | 3.1 | 2.9 | 2.6 | 2.4 |
| 150 x 75 | 5.1 | 4.5 | 4.0 | 3.7 | 3.4 | 3.1 | 3.0 | 2.7 | 2.4 |
| 170 x 45# | 4.8 | 4.3 | 3.8 | 3.5 | 3.2 | 3.0 | 2.8 | 2.5 | 2.2 |
| 170 x 63 | 5.4 | 4.9 | 4.4 | 4.0 | 3.7 | 3.5 | 3.3 | 2.9 | 2.7 |
| 200 x 63# | 6.4 | 6.0 | 5.5 | 5.0 | 4.7 | 4.4 | 4.1 | 3.7 | 3.4 |
| 2/200 x 35# | 6.7 | 6.2 | 5.7 | 5.3 | 4.9 | 4.6 | 4.3 | 3.8 | 3.3 |
| 2/200 x 45# | 7.0 | 6.5 | 6.1 | 5.7 | 5.4 | 5.1 | 4.8 | 4.4 | 4.0 |
| 240 x 63# | 7.5 | 7.0 | 6.6 | 6.2 | 5.9 | 5.6 | 5.3 | 4.8 | 4.4 |
| 2/240 x 45# | 7.9 | 7.5 | 7.1 | 6.8 | 6.5 | 6.3 | 6.1 | 5.6 | 5.2 |
| 300 x 63# | 8.9 | 8.3 | 7.9 | 7.5 | 7.2 | 7.0 | 6.7 | 6.4 | 6.0 |
| 300 x 75# | 9.1 | 8.6 | 8.2 | 7.8 | 7.5 | 7.3 | 7.0 | 6.7 | 6.3 |
| 2/300 x 45# | 9.2 | 8.8 | 8.4 | 8.1 | 7.8 | 7.6 | 7.4 | 6.6 | 6.1 |
| 360 x 63# | 10.0 | 9.5 | 9.1 | 8.7 | 8.4 | 8.2 | 7.9 | 7.5 | 7.1 |
| 400 x 63# | 10.7 | 10.3 | 9.9 | 9.5 | 9.2 | 8.9 | 8.6 | 8.2 | 7.8 |
| 400 x 75# | 10.9 | 10.5 | 10.1 | 9.8 | 9.5 | 9.2 | 9.0 | 8.5 | 8.2 |
| 450 x 63# | 11.6 | 11.1 | 10.7 | 10.4 | 10.1 | 9.8 | 9.5 | 9.1 | 8.4 |

1. All sections with depth to breadth ratio exceeding three must be restrained against rollover at supports.
2. Sections marked with # must be laterally restrained at each strutting point - see AS 1684.
3. Multiple sections nail laminated as per AS 1684.
4. A minimum initial cleareance of 25 mm to ceiling framing members shall be provided at mid-span.
5. Bearing length at end supports to be not less than 70 mm.
6. Beam ends may be chamfer cut to a minimum depth of 90 mm or D/3, whichever is greater.
7. NS signifies section size unlikely to be suitable.



# Strutting Beams

## Supporting Underpurlins only
## For N3 wind classification

| e-beam Section D X B (mm) | Tile Roof | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Roof Area Supported ($m^2$) | | | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 |
| | Maximum Span (m) | | | | | | | | |
| 150 x 45# | 3.0 | 2.5 | 2.2 | NS | NS | NS | NS | NS | NS |
| 150 x 63 | 3.5 | 2.9 | 2.5 | 2.3 | 2.1 | NS | NS | NS | NS |
| 2/150 x 35# | 3.7 | 3.1 | 2.7 | 2.4 | 2.2 | 2.1 | NS | NS | NS |
| 150 x 75 | 3.8 | 3.1 | 2.8 | 2.5 | 2.3 | 2.1 | 2.0 | NS | NS |
| 170 x 45# | 3.6 | 3.0 | 2.6 | 2.3 | 2.1 | 2.0 | 1.9 | NS | NS |
| 170 x 63 | 4.1 | 3.5 | 3.0 | 2.7 | 2.5 | 2.3 | 2.2 | 2.0 | NS |
| 200 x 63# | 5.2 | 4.4 | 3.8 | 3.5 | 3.2 | 3.0 | 2.8 | 2.5 | 2.3 |
| 2/200 x 35# | 5.4 | 4.6 | 4.1 | 3.7 | 3.4 | 3.2 | 3.0 | 2.7 | 2.4 |
| 2/200 x 45# | 5.9 | 5.1 | 4.5 | 4.1 | 3.8 | 3.5 | 3.3 | 3.0 | 2.7 |
| 240 x 63# | 6.3 | 5.6 | 5.0 | 4.5 | 4.1 | 3.9 | 3.6 | 3.3 | 3.0 |
| 2/240 x 45# | 6.9 | 6.3 | 5.7 | 5.3 | 4.9 | 4.5 | 4.3 | 3.9 | 3.5 |
| 300 x 63# | 7.7 | 7.0 | 6.5 | 6.1 | 5.7 | 5.3 | 5.0 | 4.5 | 4.1 |
| 300 x 75# | 7.9 | 7.3 | 6.8 | 6.4 | 6.1 | 5.7 | 5.4 | 4.9 | 4.5 |
| 2/300 x 45# | 8.2 | 7.6 | 7.1 | 6.7 | 6.4 | 6.1 | 5.8 | 5.3 | 4.9 |
| 360 x 63# | 8.9 | 8.2 | 7.6 | 7.2 | 6.8 | 6.6 | 6.3 | 5.9 | 5.4 |
| 400 x 63# | 9.6 | 8.9 | 8.3 | 7.9 | 7.5 | 7.2 | 7.0 | 6.5 | 6.2 |
| 400 x 75# | 9.9 | 9.2 | 8.7 | 8.2 | 7.9 | 7.6 | 7.3 | 6.9 | 6.5 |
| 450 x 63# | 10.5 | 9.8 | 9.2 | 8.8 | 8.4 | 8.0 | 7.8 | 7.3 | 6.9 |

1. All sections with depth to breadth ratio exceeding three must be restrained against rollover at supports.
2. Sections marked with # must be laterally restrained at each strutting point - see AS 1684.
3. Multiple sections nail laminated as per AS 1684.
4. A minimum initial cleareance of 25 mm to ceiling framing members shall be provided at mid-span.
5. Bearing length at end supports to be not less than 70 mm.
6. Beam ends may be chamfer cut to a minimum depth of 90 mm or D/3, whichever is greater.
7. NS signifies section size unlikely to be suitable.

# Strutting-counter Beams

## Supporting Underpurlins and Hanging Beams
## For N3 wind classification

| e-beam Section D X B (mm) | Average Hanging Beam Span (m) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4 | | | | | | 4.2 | | | | | |
| | Roof Area Supported ($m^2$) | | | | | | | | | | | |
| | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| **Maximum Span (m) for Sheet Roof & Ceiling** | | | | | | | | | | | | |
| 170 x 63 | 4.0 | 3.6 | 3.3 | 3.0 | 2.7 | 2.6 | 3.7 | 3.3 | 3.1 | 2.8 | 2.6 | 2.5 |
| 2/170 x 35 | 4.1 | 3.8 | 3.5 | 3.2 | 2.9 | 2.7 | 3.8 | 3.5 | 3.2 | 3.0 | 2.8 | 2.6 |
| 2/170 x 45 | 4.3 | 4.0 | 3.7 | 3.5 | 3.2 | 3.0 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 2.9 |
| 200 x 63 | 4.5 | 4.2 | 3.9 | 3.7 | 3.4 | 3.2 | 4.2 | 3.9 | 3.7 | 3.5 | 3.2 | 3.1 |
| 2/200 x 35 | 4.7 | 4.3 | 4.0 | 3.8 | 3.6 | 3.4 | 4.3 | 4.0 | 3.8 | 3.6 | 3.4 | 3.2 |
| 2/200 x 45 | 4.9 | 4.5 | 4.3 | 4.0 | 3.8 | 3.7 | 4.5 | 4.3 | 4.0 | 3.9 | 3.7 | 3.6 |
| 240 x 63 | 5.2 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.8 |
| 2/240 x 45 | 5.6 | 5.2 | 5.0 | 4.7 | 4.5 | 4.3 | 5.1 | 4.9 | 4.7 | 4.5 | 4.3 | 4.2 |
| 300 x 63 | 6.1 | 5.7 | 5.4 | 5.2 | 5.0 | 4.8 | 5.6 | 5.3 | 5.1 | 4.9 | 4.7 | 4.6 |
| 300 x 75 | 6.3 | 6.0 | 5.7 | 5.4 | 5.2 | 5.0 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 |
| 2/300 x 45 | 6.5 | 6.2 | 5.9 | 5.7 | 5.5 | 5.3 | 6.0 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 |
| 360 x 63 | 6.9 | 6.6 | 6.3 | 6.0 | 5.8 | 5.6 | 6.3 | 6.1 | 5.9 | 5.7 | 5.5 | 5.4 |
| 400 x 63 | 7.4 | 7.1 | 6.8 | 6.6 | 6.3 | 6.1 | 6.8 | 6.6 | 6.4 | 6.2 | 6.0 | 5.8 |
| 400 x 75 | 7.7 | 7.4 | 7.1 | 6.8 | 6.6 | 6.4 | 7.1 | 6.8 | 6.6 | 6.4 | 6.3 | 6.1 |
| 2/400 x 45 | 7.9 | 7.6 | 7.3 | 7.1 | 6.9 | 6.7 | 7.3 | 7.1 | 6.9 | 6.7 | 6.5 | 6.4 |
| 450 x 63 | 8.1 | 7.7 | 7.4 | 7.2 | 7.0 | 6.8 | 7.4 | 7.2 | 7.0 | 6.8 | 6.6 | 6.4 |
| 2/450 x 63 | 9.0 | 8.8 | 8.5 | 8.3 | 8.1 | 7.9 | 8.4 | 8.2 | 8.0 | 7.9 | 7.7 | 7.5 |
| **Maximum Span (m) for Tile Roof and Ceiling** | | | | | | | | | | | | |
| 170 x 63 | 3.5 | 2.8 | 2.4 | 2.1 | 1.9 | NS | 3.2 | 2.7 | 2.3 | 2.1 | 1.9 | NS |
| 2/170 x 35 | 3.7 | 3.0 | 2.6 | 2.3 | 2.0 | 1.9 | 3.4 | 2.8 | 2.5 | 2.2 | 2.0 | 1.9 |
| 2/170 x 45 | 3.9 | 3.3 | 2.8 | 2.5 | 2.3 | 2.1 | 3.7 | 3.1 | 2.7 | 2.4 | 2.2 | 2.1 |
| 200 x 63 | 4.1 | 3.5 | 3.0 | 2.7 | 2.4 | 2.2 | 3.8 | 3.3 | 2.9 | 2.6 | 2.4 | 2.2 |
| 2/200 x 35 | 4.2 | 3.7 | 3.2 | 2.8 | 2.6 | 2.4 | 4.0 | 3.5 | 3.1 | 2.8 | 2.5 | 2.3 |
| 2/200 x 45 | 4.4 | 3.9 | 3.5 | 3.1 | 2.9 | 2.6 | 4.2 | 3.8 | 3.4 | 3.1 | 2.8 | 2.6 |
| 240 x 63 | 4.7 | 4.1 | 3.8 | 3.4 | 3.1 | 2.9 | 4.4 | 4.0 | 3.7 | 3.3 | 3.1 | 2.8 |
| 2/240 x 45 | 5.1 | 4.6 | 4.2 | 3.9 | 3.7 | 3.4 | 4.8 | 4.4 | 4.1 | 3.8 | 3.6 | 3.3 |
| 300 x 63 | 5.6 | 5.0 | 4.6 | 4.3 | 4.1 | 3.9 | 5.3 | 4.8 | 4.5 | 4.2 | 4.0 | 3.8 |
| 300 x 75 | 5.9 | 5.3 | 4.8 | 4.5 | 4.3 | 4.1 | 5.5 | 5.0 | 4.7 | 4.4 | 4.2 | 4.0 |
| 2/300 x 45 | 6.1 | 5.5 | 5.1 | 4.8 | 4.5 | 4.3 | 5.7 | 5.3 | 4.9 | 4.6 | 4.4 | 4.2 |
| 360 x 63 | 6.5 | 5.9 | 5.4 | 5.1 | 4.8 | 4.6 | 6.0 | 5.6 | 5.2 | 4.9 | 4.7 | 4.5 |
| 400 x 63 | 7.0 | 6.4 | 5.9 | 5.6 | 5.3 | 5.0 | 6.5 | 6.1 | 5.7 | 5.4 | 5.1 | 4.9 |
| 400 x 75 | 7.3 | 6.7 | 6.2 | 5.9 | 5.6 | 5.3 | 6.8 | 6.3 | 6.0 | 5.7 | 5.4 | 5.2 |
| 2/400 x 45 | 7.5 | 7.0 | 6.5 | 6.1 | 5.8 | 4.8 | 7.0 | 6.6 | 6.2 | 5.9 | 5.0 | 4.7 |
| 450 x 63 | 7.6 | 7.0 | 6.6 | 6.2 | 5.9 | 5.6 | 7.1 | 6.7 | 6.3 | 6.0 | 5.7 | 5.5 |
| 2/450 x 63 | 8.7 | 8.2 | 7.7 | 7.4 | 7.1 | 6.8 | 8.1 | 7.7 | 7.4 | 7.1 | 6.9 | 6.6 |

1. Average hanging beam span = (H1 + H2) / 2, where H1 and H2 are the spans of the hanging beams on each side of the Strutting-Counter beam.
2. All sections with depth to breadth ratio exceeding three must be restrained against rollover at supports.
3. Multiple sections nail laminated as per AS 1684.
4. Bearing length at end supports to be not less than 70 mm.
5. Beam ends may be chamfer cut to a minimum depth of 90 mm or D/3, whichever is greater.
6. NS signifies section size unlikely to be suitable.



# Strutting - Hanging Beams

## Supporting Underpurlins and Ceiling Joists
## For N3 wind classification

| e-beam Section D X B (mm) | Ceiling Load Width ‹CLW› (m) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4 | | | | 3.0 | | | | 3.6 | | | | |
| | Roof Load Width ‹RLW› for Underpurlin (m) | | | | | | | | | | | | |
| | 1.8 | 2.4 | 3.0 | 3.6 | 1.8 | 2.4 | 3.0 | 3.6 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 |
| | Maximum Span for Sheet Roof & Ceiling (m) | | | | | | | | | | | | |
| 170 x 63 | 3.6 | 3.5 | 3.3 | 3.2 | 3.5 | 3.3 | 3.2 | 3.1 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 |
| 2/170 x 35 | 3.7 | 3.6 | 3.5 | 3.3 | 3.6 | 3.5 | 3.3 | 3.2 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 |
| 2/170 x 45 | 3.9 | 3.8 | 3.7 | 3.6 | 3.8 | 3.7 | 3.6 | 3.5 | 3.7 | 3.6 | 3.5 | 3.3 | 3.3 |
| 200 x 63 | 4.1 | 3.9 | 3.8 | 3.7 | 3.9 | 3.8 | 3.7 | 3.6 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 |
| 2/200 x 35 | 4.2 | 4.1 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.7 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 |
| 2/200 x 45 | 4.4 | 4.3 | 4.1 | 4.0 | 4.3 | 4.1 | 4.0 | 3.9 | 4.1 | 4.0 | 3.9 | 3.8 | 3.8 |
| 240 x 63 | 4.7 | 4.5 | 4.4 | 4.2 | 4.5 | 4.4 | 4.2 | 4.1 | 4.4 | 4.2 | 4.1 | 4.0 | 4.0 |
| 2/240 x 45 | 5.0 | 4.9 | 4.7 | 4.6 | 4.9 | 4.7 | 4.6 | 4.5 | 4.7 | 4.6 | 4.5 | 4.4 | 4.3 |
| 300 x 63 | 5.5 | 5.3 | 5.1 | 5.0 | 5.3 | 5.1 | 5.0 | 4.9 | 5.1 | 5.0 | 4.9 | 4.8 | 4.7 |
| 300 x 75 | 5.7 | 5.5 | 5.3 | 5.2 | 5.5 | 5.3 | 5.2 | 5.1 | 5.3 | 5.2 | 5.1 | 5.0 | 4.9 |
| 2/300 x 45 | 5.9 | 5.7 | 5.5 | 5.4 | 5.7 | 5.6 | 5.4 | 5.3 | 5.5 | 5.4 | 5.3 | 5.2 | 5.1 |
| 360 x 63 | 6.2 | 6.0 | 5.8 | 5.7 | 6.0 | 5.9 | 5.7 | 5.6 | 5.8 | 5.7 | 5.6 | 5.4 | 5.3 |
| 400 x 63 | 6.7 | 6.5 | 6.3 | 6.1 | 6.5 | 6.3 | 6.2 | 6.0 | 6.3 | 6.1 | 6.0 | 5.9 | 5.8 |
| 400 x 75 | 7.0 | 6.7 | 6.6 | 6.4 | 6.8 | 6.6 | 6.4 | 6.2 | 6.6 | 6.4 | 6.2 | 6.1 | 6.0 |
| 2/400 x 45 | 7.2 | 7.0 | 6.8 | 6.6 | 7.0 | 6.8 | 6.6 | 6.5 | 6.8 | 6.6 | 6.5 | 6.4 | 6.2 |
| 450 x 63 | 7.3 | 7.1 | 6.9 | 6.7 | 7.1 | 6.9 | 6.7 | 6.5 | 6.9 | 6.7 | 6.5 | 6.4 | 6.3 |
| 2/450 x 63 | 8.3 | 8.1 | 7.9 | 7.7 | 8.1 | 7.9 | 7.7 | 7.6 | 7.9 | 7.7 | 7.6 | 7.4 | 7.3 |
| **Maximum Span for Tile Roof & Ceiling (m)** | | | | | | | | | | | | | |
| 170 x 63 | 3.1 | 2.9 | 2.7 | 2.6 | 3.0 | 2.8 | 2.7 | 2.6 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 |
| 2/170 x 35 | 3.2 | 3.0 | 2.8 | 2.7 | 3.1 | 2.9 | 2.8 | 2.7 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 |
| 2/170 x 45 | 3.5 | 3.2 | 3.1 | 2.9 | 3.4 | 3.2 | 3.0 | 2.9 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 |
| 200 x 63 | 3.6 | 3.4 | 3.2 | 3.0 | 3.5 | 3.3 | 3.1 | 3.0 | 3.4 | 3.2 | 3.1 | 2.9 | 2.8 |
| 2/200 x 35 | 3.7 | 3.5 | 3.3 | 3.2 | 3.7 | 3.4 | 3.3 | 3.1 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 |
| 2/200 x 45 | 3.9 | 3.7 | 3.6 | 3.4 | 3.8 | 3.7 | 3.5 | 3.4 | 3.8 | 3.6 | 3.4 | 3.3 | 3.2 |
| 240 x 63 | 4.1 | 3.9 | 3.8 | 3.6 | 4.0 | 3.9 | 3.7 | 3.6 | 4.0 | 3.8 | 3.7 | 3.5 | 3.4 |
| 2/240 x 45 | 4.5 | 4.3 | 4.1 | 4.0 | 4.4 | 4.2 | 4.0 | 3.9 | 4.3 | 4.1 | 4.0 | 3.9 | 3.8 |
| 300 x 63 | 4.9 | 4.6 | 4.4 | 4.3 | 4.8 | 4.6 | 4.4 | 4.2 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 |
| 300 x 75 | 5.1 | 4.8 | 4.6 | 4.5 | 5.0 | 4.7 | 4.6 | 4.4 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 |
| 2/300 x 45 | 5.3 | 5.0 | 4.8 | 4.7 | 5.2 | 4.9 | 4.8 | 4.6 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 |
| 360 x 63 | 5.6 | 5.3 | 5.1 | 4.9 | 5.4 | 5.2 | 5.0 | 4.8 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 |
| 400 x 63 | 6.0 | 5.7 | 5.5 | 5.3 | 5.9 | 5.6 | 5.4 | 5.2 | 5.8 | 5.5 | 5.3 | 5.2 | 5.0 |
| 400 x 75 | 6.2 | 5.9 | 5.7 | 5.5 | 6.1 | 5.8 | 5.6 | 5.5 | 6.0 | 5.7 | 5.5 | 5.4 | 5.2 |
| 2/400 x 45 | 6.5 | 6.2 | 6.0 | 5.8 | 6.4 | 6.1 | 5.9 | 5.7 | 6.2 | 6.0 | 5.8 | 5.6 | 5.5 |
| 450 x 63 | 6.5 | 6.2 | 6.0 | 5.8 | 6.4 | 6.1 | 5.9 | 5.7 | 6.3 | 6.0 | 5.8 | 5.6 | 5.5 |
| 2/450 x 63 | 7.6 | 7.2 | 7.0 | 6.8 | 7.4 | 7.1 | 6.9 | 6.7 | 7.3 | 7.0 | 6.8 | 6.6 | 6.4 |

1. All sections with depth to breadth ratio exceeding three must be restrained against rollover at supports.
2. RLW for underpurlin is the average of the rafter spans on each side of the underpurlin supported by the Strutting-Hanging beam.
3. Underpurlin span assumed to be one-half the Strutting-Hanging beam span.
4. CLW is the average of the ceiling joist spans on each side of the Strutting-Hanging beam.
5. Multiple sections nail laminated as per AS 1684.
6. Bearing length at end supports to be not less than 70 mm.
7. Beam ends may be chamfer cut to a minimum depth of 90 mm or D/3, whichever is greater.

# Counter Beams

## Supporting Hanging Beams

| e-beam Section D X B (mm) | Ceiling Load Width 'CLW' (m) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 |
| | Maximum Span (m) | | | | | | | |
| 150 x 35 | 3.4 | 3.2 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 |
| 150 x 45 | 3.7 | 3.4 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 |
| 170 x 35 | 3.9 | 3.6 | 3.4 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 |
| 170 x 45 | 4.2 | 3.9 | 3.7 | 3.5 | 3.4 | 3.2 | 3.1 | 3.0 |
| 200 x 35 | 4.4 | 4.1 | 3.8 | 3.6 | 3.5 | 3.2 | 3.1 | 3.0 |
| 200 x 45 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 |
| 200 x 63 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 | 4.1 | 4.0 |
| 240 x 35 | 4.8 | 4.4 | 4.1 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 |
| 240 x 45 | 5.4 | 5.2 | 5.0 | 4.8 | 4.6 | 4.3 | 4.2 | 4.1 |
| 240 x 63 | 5.8 | 5.6 | 5.3 | 5.2 | 5.0 | 4.9 | 4.8 | 4.7 |
| 300 x 45 | 6.4 | 6.0 | 5.6 | 5.3 | 5.1 | 4.8 | 4.7 | 4.6 |
| 300 x 63 | 6.8 | 6.5 | 6.3 | 6.1 | 5.9 | 5.7 | 5.6 | 5.5 |
| 300 x 75 | 7.0 | 6.7 | 6.5 | 6.3 | 6.1 | 6.0 | 5.8 | 5.7 |
| 360 x 63 | 7.7 | 7.4 | 7.1 | 6.9 | 6.7 | 6.5 | 6.4 | 6.3 |
| 400 x 45 | 6.9 | 6.4 | 6.1 | 5.7 | 5.5 | 5.3 | 5.1 | 5.0 |
| 400 x 63 | 8.3 | 7.9 | 7.7 | 7.4 | 7.2 | 7.1 | 6.9 | 6.8 |
| 400 x 75 | 8.5 | 8.2 | 7.9 | 7.7 | 7.5 | 7.3 | 7.2 | 7.0 |
| 450 x 63 | 8.9 | 8.6 | 8.3 | 8.1 | 7.9 | 7.7 | 7.4 | 7.2 |



# Verandah Beams

## For N3 wind classification

| e-beam Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | Continuous Span | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | |
| | | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 |
| | | Maximum Span (m) | | | | | | | | | | | | | |
| 130 x 35 | 10 | 3.6 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 4.0 | 3.9 | 3.7 | 3.4 | 3.2 | 3.0 | 2.8 |
| | 20 | 3.3 | 3.0 | 2.8 | 2.7 | 2.5 | 2.5 | 2.4 | 4.0 | 3.9 | 3.7 | 3.4 | 3.2 | 3.0 | 2.9 |
| | 40 | 2.7 | 2.5 | 2.4 | 2.3 | 2.1 | 1.9 | 1.9 | 3.6 | 3.3 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 |
| | 75 | 2.3 | 2.0 | 1.9 | 1.7 | 1.6 | 1.6 | 1.5 | 3.0 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.1 |
| | 90 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 |
| 130 x 45 | 10 | 3.9 | 3.5 | 3.3 | 3.1 | 2.9 | 2.9 | 2.8 | 4.2 | 4.2 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 |
| | 20 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 4.2 | 4.2 | 4.0 | 3.7 | 3.5 | 3.4 | 3.2 |
| | 40 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 3.9 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 |
| | 75 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 3.2 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 |
| | 90 | 2.3 | 2.1 | 1.9 | 1.7 | 1.7 | 1.6 | 1.6 | 3.1 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 |
| 130 x 63 | 10 | 4.2 | 4.0 | 3.7 | 3.4 | 3.3 | 3.2 | 3.0 | 5.1 | 5.0 | 4.8 | 4.4 | 4.2 | 4.0 | 3.7 |
| | 20 | 3.8 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 4.9 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 |
| | 40 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.4 | 4.2 | 3.9 | 3.7 | 3.4 | 3.2 | 3.1 | 3.0 |
| | 75 | 2.7 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 3.6 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 |
| | 90 | 2.5 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 3.4 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.4 |
| 150 x 35 | 10 | 4.1 | 3.8 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 5.0 | 4.8 | 4.2 | 3.9 | 3.6 | 3.4 | 3.2 |
| | 20 | 3.8 | 3.4 | 3.2 | 3.0 | 2.8 | 2.7 | 2.7 | 4.8 | 4.4 | 4.2 | 4.0 | 3.7 | 3.4 | 3.3 |
| | 40 | 3.1 | 2.9 | 2.7 | 2.6 | 2.4 | 2.4 | 2.3 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 |
| | 75 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 3.4 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 |
| | 90 | 2.5 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 3.2 | 3.0 | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 |
| 150 x 45 | 10 | 4.4 | 4.1 | 3.8 | 3.5 | 3.4 | 3.3 | 3.1 | 5.2 | 5.1 | 4.9 | 4.5 | 4.1 | 3.8 | 3.5 |
| | 20 | 4.0 | 3.6 | 3.4 | 3.2 | 3.0 | 2.9 | 2.8 | 5.0 | 4.7 | 4.4 | 4.2 | 4.1 | 3.9 | 3.7 |
| | 40 | 3.3 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 4.3 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 |
| | 75 | 2.8 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 3.7 | 3.4 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 |
| | 90 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.8 | 3.6 | 3.2 | 3.0 | 2.8 | 2.6 | 2.5 | 2.4 |
| 150 x 63 | 10 | 4.8 | 4.6 | 4.3 | 4.0 | 3.8 | 3.6 | 3.5 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 | 4.7 | 4.3 |
| | 20 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 3.0 | 5.3 | 5.0 | 4.8 | 4.5 | 4.4 | 4.2 | 4.1 |
| | 40 | 3.7 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 4.7 | 4.4 | 4.2 | 3.9 | 3.7 | 3.6 | 3.4 |
| | 75 | 3.1 | 2.8 | 2.6 | 2.5 | 2.3 | 2.2 | 2.2 | 4.1 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 |
| | 90 | 2.9 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 3.9 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 |
| 170 x 35 | 10 | 4.5 | 4.4 | 4.0 | 3.8 | 3.5 | 3.4 | 3.2 | 5.4 | 5.1 | 4.8 | 4.3 | 4.0 | 3.7 | 3.5 |
| | 20 | 4.2 | 3.8 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 5.2 | 4.9 | 4.6 | 4.4 | 4.1 | 3.9 | 3.6 |
| | 40 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 3.2 |
| | 75 | 2.9 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 3.9 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 |
| | 90 | 2.8 | 2.5 | 2.4 | 2.2 | 2.1 | 1.9 | 1.9 | 3.7 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 |
| 170 x 45 | 10 | 4.9 | 4.6 | 4.4 | 4.1 | 3.9 | 3.7 | 3.5 | 5.7 | 5.6 | 5.4 | 5.1 | 4.8 | 4.4 | 4.1 |
| | 20 | 4.4 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 5.5 | 5.1 | 4.9 | 4.6 | 4.4 | 4.3 | 4.1 |
| | 40 | 3.7 | 3.4 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 4.8 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 |
| | 75 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 4.1 | 3.8 | 3.6 | 3.3 | 3.2 | 3.0 | 2.9 |
| | 90 | 3.0 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 4.0 | 3.6 | 3.3 | 3.2 | 3.0 | 2.9 | 2.7 |

# Verandah Beams continued

## For N3 wind classification

| e-beam Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | Continuous Span | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | |
| | | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 |
| | | Maximum Span (m) | | | | | | | | | | | | | |
| 170 x 63 | 10 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 6.2 | 6.1 | 5.8 | 5.6 | 5.4 | 5.2 | 5.0 |
| | 20 | 4.7 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.4 | 5.8 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.5 |
| | 40 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 | 5.1 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 |
| | 75 | 3.5 | 3.2 | 2.9 | 2.7 | 2.7 | 2.5 | 2.4 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 3.2 |
| | 90 | 3.3 | 3.0 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 4.3 | 4.0 | 3.7 | 3.6 | 3.3 | 3.2 | 3.1 |
| 200 x 35 | 10 | 5.3 | 5.0 | 4.7 | 4.4 | 3.9 | 3.6 | 3.4 | 6.1 | 5.7 | 5.2 | 4.9 | 4.6 | 4.3 | 4.1 |
| | 20 | 4.8 | 4.4 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 5.9 | 5.5 | 5.2 | 5.0 | 4.8 | 4.4 | 4.2 |
| | 40 | 4.1 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 2.8 | 5.1 | 4.8 | 4.5 | 4.3 | 4.1 | 4.0 | 3.8 |
| | 75 | 3.4 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 4.4 | 4.1 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 |
| | 90 | 3.2 | 2.9 | 2.7 | 2.6 | 2.5 | 2.3 | 2.3 | 4.2 | 4.0 | 3.7 | 3.4 | 3.3 | 3.1 | 3.0 |
| 200 x 45 | 10 | 5.4 | 5.2 | 4.9 | 4.8 | 4.5 | 4.3 | 4.2 | 6.5 | 6.3 | 6.0 | 5.7 | 5.3 | 5.1 | 4.9 |
| | 20 | 4.9 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 6.1 | 5.7 | 5.5 | 5.2 | 5.0 | 4.9 | 4.7 |
| | 40 | 4.3 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 5.3 | 5.0 | 4.8 | 4.5 | 4.3 | 4.2 | 4.1 |
| | 75 | 3.7 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 4.7 | 4.4 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 |
| | 90 | 3.5 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.3 | 3.2 |
| 200 x 63 | 10 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.7 | 4.6 | 7.2 | 6.8 | 6.5 | 6.3 | 6.0 | 5.8 | 5.6 |
| | 20 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 6.5 | 6.2 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| | 40 | 4.6 | 4.4 | 4.1 | 3.9 | 3.7 | 3.5 | 3.4 | 5.7 | 5.4 | 5.1 | 4.9 | 4.8 | 4.5 | 4.4 |
| | 75 | 4.0 | 3.7 | 3.5 | 3.2 | 3.1 | 2.9 | 2.8 | 5.0 | 4.7 | 4.4 | 4.3 | 4.1 | 4.0 | 3.8 |
| | 90 | 3.9 | 3.5 | 3.3 | 3.0 | 2.9 | 2.8 | 2.7 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 |
| 240 x 45 | 10 | 6.2 | 5.8 | 5.6 | 5.3 | 5.1 | 5.0 | 4.8 | 7.7 | 7.3 | 6.9 | 6.5 | 6.0 | 5.7 | 5.5 |
| | 20 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.5 | 4.3 | 6.9 | 6.5 | 6.2 | 6.0 | 5.7 | 5.5 | 5.3 |
| | 40 | 4.9 | 4.6 | 4.3 | 4.2 | 4.0 | 3.8 | 3.6 | 6.1 | 5.7 | 5.4 | 5.2 | 5.0 | 4.8 | 4.7 |
| | 75 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 3.1 | 5.3 | 5.0 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 |
| | 90 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 | 5.1 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 |
| 240 x 63 | 10 | 6.5 | 6.1 | 5.9 | 5.7 | 5.5 | 5.3 | 5.2 | 8.1 | 7.7 | 7.4 | 7.2 | 6.8 | 6.6 | 6.4 |
| | 20 | 5.9 | 5.6 | 5.4 | 5.1 | 5.0 | 4.8 | 4.6 | 7.4 | 7.0 | 6.6 | 6.4 | 6.2 | 6.0 | 5.8 |
| | 40 | 5.3 | 5.0 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 | 6.5 | 6.2 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 |
| | 75 | 4.6 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 | 5.7 | 5.4 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 |
| | 90 | 4.4 | 4.2 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 5.5 | 5.2 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 |
| 300 x 45 | 10 | 7.2 | 6.8 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 8.9 | 8.5 | 8.0 | 7.5 | 7.1 | 6.7 | 6.3 |
| | 20 | 6.5 | 6.1 | 5.8 | 5.6 | 5.4 | 5.2 | 5.0 | 8.1 | 7.6 | 7.3 | 7.0 | 6.7 | 6.5 | 6.3 |
| | 40 | 5.7 | 5.4 | 5.1 | 4.9 | 4.7 | 4.6 | 4.4 | 7.2 | 6.7 | 6.4 | 6.1 | 5.9 | 5.7 | 5.5 |
| | 75 | 5.0 | 4.7 | 4.5 | 4.2 | 4.1 | 4.0 | 3.8 | 6.3 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| | 90 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 | 6.0 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 |
| 300 x 63 | 10 | 7.5 | 7.2 | 6.9 | 6.6 | 6.4 | 6.2 | 6.0 | 9.3 | 8.9 | 8.5 | 8.3 | 8.0 | 7.7 | 7.5 |
| | 20 | 6.9 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 5.4 | 8.5 | 8.1 | 7.7 | 7.4 | 7.2 | 7.0 | 6.7 |
| | 40 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 | 7.6 | 7.2 | 6.8 | 6.6 | 6.4 | 6.2 | 6.0 |
| | 75 | 5.4 | 5.1 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 | 6.7 | 6.3 | 6.0 | 5.7 | 5.5 | 5.3 | 5.2 |
| | 90 | 5.2 | 4.9 | 4.6 | 4.5 | 4.2 | 4.1 | 4.0 | 6.5 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 |

1. Bearing length at end supports to be not less than 30 mm and at intermediate supports for continuous span at least 65 mm.



# Verandah Beams

## For N3 wind classification

| e-beam Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | Continuous Span | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | |
| | | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 |
| | | Maximum Span (m) | | | | | | | | | | | | | |
| 130 x 35 | 10 | 3.7 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 4.0 | 3.9 | 3.9 | 3.8 | 3.8 | 3.6 | 3.5 |
| | 20 | 3.3 | 3.0 | 2.8 | 2.7 | 2.5 | 2.5 | 2.4 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 |
| | 40 | 2.7 | 2.5 | 2.4 | 2.3 | 2.1 | 1.9 | 1.9 | 3.6 | 3.3 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 |
| | 75 | 2.3 | 2.0 | 1.9 | 1.7 | 1.6 | 1.6 | 1.5 | 3.0 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.1 |
| | 90 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 |
| 130 x 45 | 10 | 3.9 | 3.8 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 4.2 | 4.2 | 4.1 | 4.0 | 4.0 | 3.9 | 3.7 |
| | 20 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 4.2 | 4.2 | 4.0 | 3.7 | 3.5 | 3.4 | 3.2 |
| | 40 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 3.9 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 |
| | 75 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 3.2 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 |
| | 90 | 2.3 | 2.1 | 1.9 | 1.7 | 1.7 | 1.6 | 1.6 | 3.1 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 |
| 130 x 63 | 10 | 4.2 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 5.1 | 5.0 | 4.8 | 4.4 | 4.4 | 4.2 | 4.1 |
| | 20 | 3.8 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 4.9 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 |
| | 40 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.4 | 4.2 | 3.9 | 3.7 | 3.4 | 3.2 | 3.1 | 3.0 |
| | 75 | 2.7 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 3.6 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 |
| | 90 | 2.5 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 3.4 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.4 |
| 150 x 35 | 10 | 4.1 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 5.0 | 4.9 | 4.3 | 4.3 | 4.2 | 4.1 | 3.9 |
| | 20 | 3.8 | 3.4 | 3.2 | 3.0 | 2.8 | 2.7 | 2.7 | 4.8 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.4 |
| | 40 | 3.1 | 2.9 | 2.7 | 2.6 | 2.4 | 2.4 | 2.3 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 |
| | 75 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 3.4 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 |
| | 90 | 2.5 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 3.2 | 3.0 | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 |
| 150 x 45 | 10 | 4.4 | 4.2 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 5.2 | 5.1 | 4.9 | 4.6 | 4.5 | 4.3 | 4.2 |
| | 20 | 4.0 | 3.6 | 3.4 | 3.2 | 3.0 | 2.9 | 2.8 | 5.0 | 4.7 | 4.4 | 4.2 | 4.1 | 3.9 | 3.7 |
| | 40 | 3.3 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 4.3 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 |
| | 75 | 2.8 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 3.7 | 3.4 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 |
| | 90 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.8 | 3.6 | 3.2 | 3.0 | 2.8 | 2.6 | 2.5 | 2.4 |
| 150 x 63 | 10 | 4.8 | 4.6 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 |
| | 20 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 3.0 | 5.3 | 5.0 | 4.8 | 4.5 | 4.4 | 4.2 | 4.1 |
| | 40 | 3.7 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 4.7 | 4.4 | 4.2 | 3.9 | 3.7 | 3.6 | 3.4 |
| | 75 | 3.1 | 2.8 | 2.6 | 2.5 | 2.3 | 2.2 | 2.2 | 4.1 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 |
| | 90 | 2.9 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 3.9 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 |
| 170 x 35 | 10 | 4.5 | 4.4 | 4.2 | 4.0 | 3.8 | 3.5 | 3.4 | 5.4 | 5.3 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 |
| | 20 | 4.2 | 3.8 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 5.2 | 4.9 | 4.6 | 4.4 | 4.2 | 4.1 | 3.9 |
| | 40 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 3.2 |
| | 75 | 2.9 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 3.9 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 |
| | 90 | 2.8 | 2.5 | 2.4 | 2.2 | 2.1 | 1.9 | 1.9 | 3.7 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 |

# Verandah Beams continued

## For N3 wind classification

| e-beam Section D X B (mm) | Roof Mass kg/m² | Single Span | | | | | | | Continuous Span | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | |
| | | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 |
| | | Maximum Span (m) | | | | | | | | | | | | | |
| 170 x 45 | 10 | 4.9 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 5.7 | 5.6 | 5.4 | 5.1 | 4.9 | 4.8 | 4.7 |
| | 20 | 4.4 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 5.5 | 5.1 | 4.9 | 4.6 | 4.4 | 4.3 | 4.1 |
| | 40 | 3.7 | 3.4 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 4.8 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 |
| | 75 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 4.1 | 3.8 | 3.6 | 3.3 | 3.2 | 3.0 | 2.9 |
| | 90 | 3.0 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 4.0 | 3.6 | 3.3 | 3.2 | 3.0 | 2.9 | 2.7 |
| 170 x 63 | 10 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 6.2 | 6.1 | 5.8 | 5.6 | 5.4 | 5.2 | 5.0 |
| | 20 | 4.7 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.4 | 5.8 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.5 |
| | 40 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 | 5.1 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 |
| | 75 | 3.5 | 3.2 | 2.9 | 2.7 | 2.7 | 2.5 | 2.4 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 3.2 |
| | 90 | 3.3 | 3.0 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 4.3 | 4.0 | 3.7 | 3.6 | 3.3 | 3.2 | 3.1 |
| 200 x 35 | 10 | 5.3 | 5.0 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 6.1 | 6.0 | 5.7 | 5.5 | 5.3 | 5.1 | 5.0 |
| | 20 | 4.8 | 4.4 | 4.2 | 4.0 | 3.7 | 3.6 | 3.4 | 5.9 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.4 |
| | 40 | 4.1 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 2.8 | 5.1 | 4.8 | 4.5 | 4.3 | 4.1 | 4.0 | 3.8 |
| | 75 | 3.4 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 4.4 | 4.1 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 |
| | 90 | 3.2 | 2.9 | 2.7 | 2.6 | 2.5 | 2.3 | 2.3 | 4.2 | 4.0 | 3.7 | 3.4 | 3.3 | 3.1 | 3.0 |
| 200 x 45 | 10 | 5.4 | 5.2 | 4.9 | 4.8 | 4.5 | 4.3 | 4.2 | 6.5 | 6.3 | 6.0 | 5.8 | 5.5 | 5.4 | 5.2 |
| | 20 | 4.9 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 6.1 | 5.7 | 5.5 | 5.2 | 5.0 | 4.9 | 4.7 |
| | 40 | 4.3 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 5.3 | 5.0 | 4.8 | 4.5 | 4.3 | 4.2 | 4.1 |
| | 75 | 3.7 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 4.7 | 4.4 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 |
| | 90 | 3.5 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 4.5 | 4.2 | 4.0 | 3.7 | 3.6 | 3.3 | 3.2 |
| 200 x 63 | 10 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.7 | 4.6 | 7.2 | 6.8 | 6.5 | 6.3 | 6.0 | 5.8 | 5.6 |
| | 20 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 6.5 | 6.2 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| | 40 | 4.6 | 4.4 | 4.1 | 3.9 | 3.7 | 3.5 | 3.4 | 5.7 | 5.4 | 5.1 | 4.9 | 4.8 | 4.5 | 4.4 |
| | 75 | 4.0 | 3.7 | 3.5 | 3.2 | 3.1 | 2.9 | 2.8 | 5.0 | 4.7 | 4.4 | 4.3 | 4.1 | 4.0 | 3.8 |
| | 90 | 3.9 | 3.5 | 3.3 | 3.0 | 2.9 | 2.8 | 2.7 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 |
| 240 x 45 | 10 | 6.2 | 5.8 | 5.6 | 5.3 | 5.1 | 5.0 | 4.8 | 7.7 | 7.3 | 6.9 | 6.6 | 6.4 | 6.2 | 6.0 |
| | 20 | 5.5 | 5.2 | 5.0 | 4.8 | 4.6 | 4.5 | 4.3 | 6.9 | 6.5 | 6.2 | 6.0 | 5.7 | 5.5 | 5.3 |
| | 40 | 4.9 | 4.6 | 4.3 | 4.2 | 4.0 | 3.8 | 3.6 | 6.1 | 5.7 | 5.4 | 5.2 | 5.0 | 4.8 | 4.7 |
| | 75 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 3.1 | 5.3 | 5.0 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 |
| | 90 | 4.1 | 3.8 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 | 5.1 | 4.8 | 4.5 | 4.3 | 4.2 | 4.0 | 3.9 |
| 240 x 63 | 10 | 6.5 | 6.1 | 5.9 | 5.7 | 5.5 | 5.3 | 5.2 | 8.1 | 7.7 | 7.4 | 7.2 | 6.8 | 6.6 | 6.4 |
| | 20 | 5.9 | 5.6 | 5.4 | 5.1 | 5.0 | 4.8 | 4.6 | 7.4 | 7.0 | 6.6 | 6.4 | 6.2 | 6.0 | 5.8 |
| | 40 | 5.3 | 5.0 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 | 6.5 | 6.2 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 |
| | 75 | 4.6 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 | 5.7 | 5.4 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 |
| | 90 | 4.4 | 4.2 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 5.5 | 5.2 | 4.9 | 4.7 | 4.5 | 4.4 | 4.2 |
| 300 x 45 | 10 | 7.2 | 6.8 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 8.9 | 8.5 | 8.1 | 7.8 | 7.5 | 7.3 | 7.0 |
| | 20 | 6.5 | 6.1 | 5.8 | 5.6 | 5.4 | 5.2 | 5.0 | 8.1 | 7.6 | 7.3 | 7.0 | 6.7 | 6.5 | 6.3 |
| | 40 | 5.7 | 5.4 | 5.1 | 4.9 | 4.7 | 4.6 | 4.4 | 7.2 | 6.7 | 6.4 | 6.1 | 5.9 | 5.7 | 5.5 |
| | 75 | 5.0 | 4.7 | 4.5 | 4.2 | 4.1 | 4.0 | 3.8 | 6.3 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| | 90 | 4.8 | 4.5 | 4.3 | 4.1 | 3.9 | 3.7 | 3.6 | 6.0 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 |
| 300 x 63 | 10 | 7.5 | 7.2 | 6.9 | 6.6 | 6.4 | 6.2 | 6.0 | 9.3 | 8.9 | 8.5 | 8.3 | 8.0 | 7.7 | 7.5 |
| | 20 | 6.9 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 5.4 | 8.5 | 8.1 | 7.7 | 7.4 | 7.2 | 7.0 | 6.7 |
| | 40 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 | 7.6 | 7.2 | 6.8 | 6.6 | 6.4 | 6.2 | 6.0 |
| | 75 | 5.4 | 5.1 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 | 6.7 | 6.3 | 6.0 | 5.7 | 5.5 | 5.3 | 5.2 |
| | 90 | 5.2 | 4.9 | 4.6 | 4.5 | 4.2 | 4.1 | 4.0 | 6.5 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 |

1. Bearing length at end supports to be not less than 30 mm and at intermediate supports for continuous span at least 65 mm.



# Lintels

## In Single or Upper Storey Load Bearing External Walls
## For N3 wind classification

| e-beam Section D X B (mm) | Sheet Roof and Ceiling | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Roof Load Width 'RLW' (m) | | | | | | | | | |
| | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 7.2 |
| | Maximum Span (m) | | | | | | | | | |
| 150 x 35 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 |
| 150 x 45 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.2 | 2.1 | 2.1 |
| 170 x 35 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 |
| 170 x 45 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 |
| 200 x 35 | 3.6 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.5 |
| 200 x 45 | 3.7 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.9 | 2.8 | 2.7 | 2.7 |
| 200 x 63 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 3.0 | 2.9 |
| 240 x 35 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.9 |
| 240 x 45 | 4.3 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 |
| 240 x 63 | 4.6 | 4.3 | 4.1 | 3.9 | 3.8 | 3.6 | 3.5 | 3.5 | 3.4 | 3.3 |
| 300 x 45 | 5.0 | 4.8 | 4.5 | 4.2 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 |
| 300 x 63 | 5.4 | 5.1 | 4.8 | 4.6 | 4.5 | 4.3 | 4.2 | 4.1 | 4.0 | 3.9 |
| 300 x 75 | 5.6 | 5.3 | 5.0 | 4.8 | 4.7 | 4.5 | 4.4 | 4.2 | 4.1 | 4.1 |
| 2/300 x 45 | 5.8 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 | 4.6 | 4.5 | 4.4 | 4.3 |
| 360 x 63 | 6.1 | 5.7 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 | 4.8 | 4.6 | 4.5 |
| 400 x 45 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 | 4.7 | 4.6 | 4.3 |
| 400 x 63 | 6.6 | 6.2 | 5.9 | 5.7 | 5.5 | 5.3 | 5.2 | 5.1 | 5.0 | 4.9 |
| 400 x 75 | 6.9 | 6.4 | 6.1 | 5.9 | 5.7 | 5.5 | 5.4 | 5.3 | 5.2 | 5.1 |
| 2/400 x 45 | 7.1 | 6.7 | 6.4 | 6.1 | 5.9 | 5.8 | 5.6 | 5.5 | 5.4 | 5.3 |
| 450 x 63 | 7.2 | 6.8 | 6.4 | 6.2 | 6.0 | 5.8 | 5.6 | 5.5 | 5.4 | 5.3 |

| e-beam Section D X B (mm) | Tile Roof and Ceiling | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Roof Load Width 'RLW' (m) | | | | | | | | | |
| | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 7.2 |
| | Maximum Span (m) | | | | | | | | | |
| 150 x 35 | 2.3 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 1.4 |
| 150 x 45 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.5 |
| 170 x 35 | 2.6 | 2.3 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 |
| 170 x 45 | 2.7 | 2.5 | 2.3 | 2.2 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.7 |
| 200 x 35 | 2.9 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 |
| 200 x 45 | 3.1 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 |
| 200 x 63 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |
| 240 x 35 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |
| 240 x 45 | 3.6 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 |
| 240 x 63 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 |
| 300 x 45 | 4.1 | 3.9 | 3.7 | 3.5 | 3.4 | 3.2 | 3.2 | 3.1 | 3.0 | 2.9 |
| 300 x 63 | 4.5 | 4.2 | 4.0 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 |
| 300 x 75 | 4.7 | 4.3 | 4.1 | 3.9 | 3.9 | 3.7 | 3.6 | 3.5 | 3.5 | 3.4 |
| 2/300 x 45 | 4.9 | 4.6 | 4.3 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 |
| 360 x 63 | 5.1 | 4.8 | 4.6 | 4.3 | 4.2 | 4.0 | 3.9 | 3.8 | 3.8 | 3.7 |
| 400 x 45 | 5.1 | 4.8 | 4.6 | 4.3 | 4.2 | 4.0 | 3.9 | 3.8 | 3.8 | 3.7 |
| 400 x 63 | 5.5 | 5.2 | 4.9 | 4.7 | 4.6 | 4.4 | 4.2 | 4.1 | 4.0 | 4.0 |
| 400 x 75 | 5.8 | 5.4 | 5.1 | 4.9 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 | 4.1 |
| 2/400 x 45 | 6.0 | 5.6 | 5.3 | 5.1 | 5.0 | 4.8 | 4.7 | 4.6 | 4.4 | 4.3 |
| 450 x 63 | 6.1 | 5.6 | 5.3 | 5.1 | 5.0 | 4.8 | 4.7 | 4.6 | 4.4 | 4.3 |

1. Bearing length to be not less than 35 mm unless indicated otherwise by inclusion of a subscript.
2. Subscript values indicate the required minimum bearing length in millimetres.
3. Multiple sections to be nail laminated in accordance with AS 1684.
4. Lintels to be used in conjunction with top plates, ledgers and head trimmers.
5. It is recommended that a clearance of at least 15 mm is allowed over non-loadbearing window or door framing.

# Lintels

## In Lower Storey Load Bearing External Walls
## For N3 wind classification

| Sheet Roof and Ceiling | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Floor Load Width 'FLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | | | | | 2.4 | | | | | 3.0 | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 |
| **Maximum Span (m)** | | | | | | | | | | | | | | | |
| 150 x 35 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 |
| 150 x 45 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 1.9 | 1.8 | 1.8 | 1.7 | 1.6 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 |
| 150 x 75 | 2.4 | 2.2 | 2.2 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 |
| 170 x 35 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 |
| 170 x 45 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 2.1 | 2.0 | 2.0 | 1.9 | 1.8 | 2.0 | 1.9 | 1.9 | 1.8 | 1.8 |
| 200 x 35 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 |
| 200 x 45 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 |
| 200 x 63 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.8 | 2.6 | 2.5 | 2.5 | 2.4 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 |
| 2/200 x 35 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 3.0 | 2.8 | 2.7 | 2.6 | 2.6 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 |
| 240 x 35 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.8 | 2.6 | 2.5 | 2.5 | 2.4 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 |
| 240 x 45 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 3.0 | 2.8 | 2.7 | 2.6 | 2.6 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 |
| 240 x 63 | 3.4 | 3.2 | 3.1 | 3.0 | 3.0 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 |
| 2/240 x 35 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 3.2 | 3.1 | 3.1 | 3.0 | 2.9 |
| 2/240 x 45 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.5 | 3.4 | 3.3 | 3.2 | 3.2 | 3.4 | 3.3 | 3.2 | 3.2 | 3.1 |
| 300 x 45 | 3.7 | 3.5 | 3.4 | 3.3 | 3.2 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 |
| 300 x 63 | 4.0 | 3.8 | 3.7 | 3.6 | 3.5 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.5 | 3.4 | 3.4 | 3.3 |
| 300 x 75 | 4.1 | 4.0 | 3.9 | 3.7 | 3.6 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 |
| 2/300 x 45 | 4.3 | 4.2 | 4.0 | 3.9 | 3.8 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 |
| 360 x 63 | 4.5 | 4.4 | 4.2 | 4.1 | 4.0 | 4.3 | 4.2 | 4.1 | 4.0 | 3.9 | 4.2 | 4.0 | 3.9 | 3.9 | 3.8 |
| 400 x 45 | 4.5 | 4.4 | 4.2 | 4.1 | 4.0 | 4.3 | 4.2 | 4.1 | 4.0 | 3.9 | 4.1 | 4.0 | 3.9 | 3.8 | 3.8 |
| 400 x 63 | 4.9 | 4.7 | 4.6 | 4.4 | 4.3 | 4.7 | 4.5 | 4.4 | 4.3 | 4.2 | 4.5 | 4.4 | 4.3 | 4.2 | 4.1 |
| 400 x 75 | 5.1 | 4.9 | 4.8 | 4.6 | 4.5 | 4.9 | 4.7 | 4.6 | 4.5 | 4.4 | 4.7 | 4.6 | 4.4 | 4.4 | 4.3 |
| 450 x 63 | 5.3 | 5.1 | 5.0 | 4.8 | 4.7 | 5.1 | 4.9 | 4.8 | 4.7 | 4.6 | 4.9 | 4.8 | 4.7 | 4.6 | 4.5 |

1. Bearing length to be not less than 35 mm unless indicated otherwise by inclusion of a subscript.
2. Subscript values indicate the required minimum bearing length in millimetres.
3. Multiple sections to be nail laminated in accordance with AS 1684.
4. Lintels to be used in conjunction with top plates, ledgers and head trimmers.
5. It is recommended that a clearance of at least 15 mm is allowed over non-loadbearing window or door framing.



# Lintels

## In Lower Storey Load Bearing External Walls
## For N3 wind classification

| Tile Roof and Ceiling | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Floor Load Width 'FLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | | | | | 2.4 | | | | | 3.0 | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 |
| **Maximum Span (m)** | | | | | | | | | | | | | | | |
| 150 x 35 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.6 | 1.5 | 1.4 | 1.3 | 1.3 |
| 150 x 45 | 1.9 | 1.7 | 1.6 | 1.5 | 1.4 | 1.8 | 1.6 | 1.5 | 1.5 | 1.4 | 1.7 | 1.6 | 1.5 | 1.4 | 1.4 |
| 150 x 75 | 2.2 | 2 | 1.9 | 1.8 | 1.7 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 2.0 | 1.8 | 1.7 | 1.7 | 1.6 |
| 170 x 35 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 |
| 170 x 45 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 2.0 | 1.8 | 1.7 | 1.6 | 1.6 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 |
| 200 x 35 | 2.3 | 2.1 | 1.9 | 1.8 | 1.7 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 |
| 200 x 45 | 2.4 | 2.2 | 2.1 | 2 | 1.9 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| 200 x 63 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 2/200 x 35 | 2.9 | 2.7 | 2.5 | 2.4 | 2.2 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 |
| 240 x 35 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| 240 x 45 | 2.9 | 2.6 | 2.5 | 2.3 | 2.2 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 |
| 240 x 63 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 3.0 | 2.8 | 2.7 | 2.5 | 2.4 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 |
| 2/240 x 35 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 |
| 2/240 x 45 | 3.5 | 3.3 | 3.1 | 3 | 2.8 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 3.2 | 3.1 | 3.0 | 2.8 | 2.7 |
| 300 x 45 | 3.4 | 3.2 | 3.1 | 2.9 | 2.8 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 3.2 | 3.0 | 2.9 | 2.8 | 2.6 |
| 300 x 63 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 |
| 300 x 75 | 3.9 | 3.6 | 3.5 | 3.3 | 3.2 | 3.7 | 3.5 | 3.4 | 3.3 | 3.1 | 3.6 | 3.4 | 3.3 | 3.2 | 3.1 |
| 2/300 x 45 | 4.1 | 3.8 | 3.6 | 3.5 | 3.4 | 3.9 | 3.7 | 3.6 | 3.4 | 3.3 | 3.8 | 3.6 | 3.5 | 3.4 | 3.3 |
| 360 x 63 | 4.2 | 4 | 3.8 | 3.6 | 3.5 | 4.1 | 3.9 | 3.7 | 3.6 | 3.5 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 |
| 400 x 45 | 4.2 | 4 | 3.8 | 3.6 | 3.5 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 | 3.9 | 3.8 | 3.6 | 3.5 | 3.4 |
| 400 x 63 | 4.6 | 4.3 | 4.1 | 3.9 | 3.8 | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 4.3 | 4.1 | 3.9 | 3.8 | 3.7 |
| 400 x 75 | 4.8 | 4.5 | 4.3 | 4.1 | 4 | 4.6 | 4.4 | 4.2 | 4.0 | 3.9 | 4.5 | 4.3 | 4.1 | 3.9 | 3.8 |
| 450 x 63 | 5 | 4.7 | 4.5 | 4.3 | 4.1 | 4.8 | 4.6 | 4.4 | 4.2 | 4.1 | 4.7 | 4.4 | 4.3 | 4.1 | 4.0 |

1. Bearing length to be not less than 35 mm unless indicated otherwise by inclusion of a subscript.
2. Subscript values indicate the required minimum bearing length in millimetres.
3. Multiple sections to be nail laminated in accordance with AS 1684.
4. Lintels to be used in conjunction with top plates, ledgers and head trimmers.
5. It is recommended that a clearance of at least 15 mm is allowed over non-loadbearing window or door framing.

# Lintels

## Supporting Truncated Girder Truss
## For N3 wind classification

| e-beam Section D X B (mm) | 2400 Setback | | | | | |
|---|---|---|---|---|---|---|
| | Sheet Roof and Ceiling | | | Tile Roof and Ceiling | | |
| | Truss Span (m) | | | Truss Span (m) | | |
| | 6.0 | 7.5 | 9.0 | 6.0 | 7.5 | 9.0 |
| | Maximum Span (m) | | | | | |
| 130 x 35 | 1.8 | 1.7 | 1.6 | 1.3 | 1.3 | 1.2 |
| 130 x 45 | 2.0 | 1.8 | 1.7 | 1.5 | 1.3 | 1.3 |
| 150 x 35 | 2.2 | 2.0 | 1.8 | 1.6 | 1.4 | 1.3 |
| 150 x 45 | 2.4 | 2.2 | 2.0 | 1.6 | 1.5 | 1.4 |
| 170 x 35 | 2.5 | 2.3 | 2.2 | 1.7 | 1.6 | 1.5 |
| 170 x 45 | 2.6 | 2.5 | 2.4 | 1.9 | 1.8 | 1.6 |
| 200 x 45 | 3.0 | 2.9 | 2.8 | 2.3 | 2.1 | 2.0 |
| 200 x 63 | 3.3 | 3.2 | 3.0 | 2.6 | 2.4 | 2.3 |
| 2/200 x 45 | 3.7 | 3.5 | 3.4 | 3.0 | 2.8 | 2.7 |
| 240 x 45 | 3.5 | 3.4 | 3.2 | 2.8 | 2.6 | 2.5 |
| 240 x 63 | 3.8 | 3.7 | 3.5 | 3.1 | 2.9 | 2.8 |
| 2/240 x 45 | 4.3 | 4.0 | 3.9 | 3.4 | 3.3 | 3.2 |
| 300 x 45 | 4.2 | 4.0 | 3.8 | 3.4 | 3.2 | 3.1 |
| 300 x 63 | 4.6 | 4.4 | 4.2 | 3.7 | 3.6 | 3.4 |
| 300 x 75 | 4.8 | 4.6 | 4.4 | 3.9 | 3.7 | 3.6 |
| 2/300 x 45 | 5.0 | 4.8 | 4.7 | 4.1 | 3.9 | 3.8 |
| 360 x 63 | 5.3 | 5.1 | 4.9 | 4.3 | 4.1 | 3.9 |
| 400 x 63 | 5.7 | 5.5 | 5.3 | 4.7 | 4.5 | 4.3 |
| 400 x 75 | 5.9 | 5.7 | 5.5 | 4.9 | 4.7 | 4.5 |
| 450 x 63 | 6.2 | 6.0 | 5.8 | 5.1 | 4.9 | 4.7 |

| e-beam Section D X B (mm) | 3600 Setback | | | | | |
|---|---|---|---|---|---|---|
| | Sheet Roof and Ceiling | | | Tile Roof and Ceiling | | |
| | Truss Span (m) | | | Truss Span (m) | | |
| | 9.0 | 10.5 | 12.0 | 9.0 | 10.5 | 12.0 |
| | Maximum Span (m) | | | | | |
| 130 x 35 | 1.4 | 1.2 | 1.0 | 1.1 | 0.9 | 0.8 |
| 130 x 45 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 |
| 150 x 35 | 1.7 | 1.5 | 1.3 | 1.2 | 1.2 | 1.0 |
| 150 x 45 | 1.9 | 1.7 | 1.6 | 1.3 | 1.2 | 1.2 |
| 170 x 35 | 2.0 | 1.8 | 1.6 | 1.4 | 1.3 | 1.1 |
| 170 x 45 | 2.2 | 2.0 | 1.9 | 1.5 | 1.4 | 1.3 |
| 200 x 45 | 2.6 | 2.5 | 2.4 | 1.8 | 1.7 | 1.6 |
| 200 x 63 | 2.9 | 2.7 | 2.6 | 2.1 | 2.0 | 1.8 |
| 2/200 x 45 | 3.3 | 3.1 | 3.0 | 2.5 | 2.4 | 2.2 |
| 240 x 45 | 3.1 | 3.0 | 2.8 | 2.3 | 2.1 | 2.0 |
| 240 x 63 | 3.4 | 3.2 | 3.1 | 2.6 | 2.5 | 2.4 |
| 2/240 x 45 | 3.8 | 3.6 | 3.5 | 3.0 | 2.9 | 2.7 |
| 300 x 45 | 3.7 | 3.6 | 3.4 | 3.0 | 2.8 | 2.7 |
| 300 x 63 | 4.1 | 3.9 | 3.8 | 3.3 | 3.1 | 3.0 |
| 300 x 75 | 4.2 | 4.1 | 4.0 | 3.4 | 3.3 | 3.2 |
| 2/300 x 45 | 4.5 | 4.3 | 4.2 | 3.6 | 3.5 | 3.3 |
| 360 x 63 | 4.7 | 4.5 | 4.4 | 3.8 | 3.7 | 3.5 |
| 400 x 63 | 5.1 | 4.9 | 4.8 | 4.1 | 4.0 | 3.9 |
| 400 x 75 | 5.3 | 5.2 | 5.0 | 4.3 | 4.2 | 4.0 |
| 450 x 63 | 5.6 | 5.4 | 5.3 | 4.6 | 4.4 | 4.3 |

1. Bearing length to be not less than 35 mm unless indicated otherwise by inclusion of a subscript.
2. Subscript values indicate the required minimum bearing length in millimetres.
3. Multiple sections to be nail laminated in accordance with AS 1684.
4. Lintels to be used in conjunction with top plates, ledgers and head trimmers.
5. It is recommended that a clearance of at least 15 mm is allowed over non-loadbearing window or door framing.
6. Maximum rafter or truss spacing - 600 mm for tile roofs, 1200 mm for sheet roofs.



# Lintels Supporting Strutting Beams

## Strutting Beam Supporting Underpurlins and Hanging Beams
## For N3 wind classification

| e-beam Section D X B (mm) | Maximum Hanging Beam and/or Underpurlin Spans (m) | Sheet Roof and Ceiling | | | | | Tile Roof and Ceiling | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strutting Beam Span (m) | | | | | | | | | |
| | | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 |
| | | Maximum Span (m) | | | | | | | | | |
| 130 x 35 | 2.4 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.3 |
| | 4.2 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 |
| 130 x 45 | 2.4 | 2.3 | 2.2 | 2.1 | 1.9 | 1.9 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 |
| | 4.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 |
| 150 x 45 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 |
| | 4.2 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 |
| 150 x 63 | 2.4 | 2.8 | 2.8 | 2.6 | 2.6 | 2.5 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 |
| | 4.2 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 1.9 | 1.7 | 1.6 | 1.6 | 1.5 |
| 150 x 75 | 2.4 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| | 4.2 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.0 | 1.8 | 1.8 | 1.7 | 1.6 |
| 170 x 45 | 2.4 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 |
| | 4.2 | 2.7 | 2.5 | 2.5 | 2.4 | 2.2 | 1.9 | 1.7 | 1.7 | 1.6 | 1.5 |
| 170 x 63 | 2.4 | 3.1 | 3.0 | 3.0 | 2.9 | 2.8 | 2.4 | 2.3 | 2.2 | 2.0 | 2.0 |
| | 4.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 |
| 200 x 35 | 2.4 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 |
| | 4.2 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 |
| 200 x 45 | 2.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 |
| | 4.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 |
| 200 x 63 | 2.4 | 3.5 | 3.5 | 3.4 | 3.3 | 3.2 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 |
| | 4.2 | 3.3 | 3.3 | 3.2 | 3.1 | 3.0 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 |
| 240 x 45 | 2.4 | 3.8 | 3.7 | 3.6 | 3.4 | 3.4 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 |
| | 4.2 | 3.6 | 3.5 | 3.4 | 3.2 | 3.2 | 2.8 | 2.6 | 2.5 | 2.4 | 2.4 |
| 240 x 63 | 2.4 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 |
| | 4.2 | 3.9 | 3.8 | 3.7 | 3.5 | 3.5 | 3.1 | 3.0 | 2.9 | 2.7 | 2.7 |
| 2/240 x 45 | 2.4 | 4.6 | 4.4 | 4.3 | 4.2 | 4.1 | 3.7 | 3.5 | 3.5 | 3.4 | 3.2 |
| | 4.2 | 4.4 | 4.2 | 4.1 | 4.0 | 3.9 | 3.5 | 3.3 | 3.3 | 3.2 | 3.0 |
| 300 x 63 | 2.4 | 4.9 | 4.8 | 4.7 | 4.6 | 4.4 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 |
| | 4.2 | 4.7 | 4.6 | 4.4 | 4.3 | 4.2 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 |
| 300 x 75 | 2.4 | 5.1 | 5.0 | 4.9 | 4.8 | 4.7 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 |
| | 4.2 | 4.9 | 4.8 | 4.7 | 4.5 | 4.4 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 |
| 2/300 x 45 | 2.4 | 5.4 | 5.2 | 5.1 | 5.0 | 4.9 | 4.3 | 4.2 | 4.1 | 4.0 | 3.9 |
| | 4.2 | 5.2 | 5.0 | 4.9 | 4.8 | 4.7 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 |
| 360 x 63 | 2.4 | 5.6 | 5.4 | 5.3 | 5.2 | 5.1 | 4.5 | 4.4 | 4.3 | 4.1 | 4.1 |
| | 4.2 | 5.4 | 5.2 | 5.1 | 5.0 | 4.9 | 4.3 | 4.2 | 4.1 | 3.9 | 3.9 |
| 400 x 63 | 2.4 | 6.1 | 5.9 | 5.8 | 5.6 | 5.5 | 4.9 | 4.8 | 4.7 | 4.5 | 4.4 |
| | 4.2 | 5.9 | 5.7 | 5.6 | 5.4 | 5.3 | 4.7 | 4.6 | 4.4 | 4.3 | 4.2 |
| 400 x 75 | 2.4 | 6.3 | 6.2 | 6.0 | 5.9 | 5.8 | 5.2 | 5.0 | 4.9 | 4.8 | 4.6 |
| | 4.2 | 6.1 | 5.9 | 5.8 | 5.6 | 5.5 | 5.0 | 4.8 | 4.6 | 4.5 | 4.4 |
| 450 x 63 | 2.4 | 6.7 | 6.5 | 6.3 | 6.2 | 6.1 | 5.4 | 5.3 | 5.1 | 5.0 | 4.9 |
| | 4.2 | 6.5 | 6.2 | 6.1 | 5.9 | 5.8 | 5.2 | 5.1 | 4.9 | 4.8 | 4.7 |

1. Bearing length to be not less than 35 mm unless indicated otherwise by inclusion of a subscript.
2. Subscript values indicate the required minimum bearing length in millimetres.
3. Multiple sections to be nail laminated in accordance with AS 1684.
4. Lintels to be used in conjunction with top plates, ledgers and head trimmers.
5. It is recommended that a clearance of at least 15 mm is allowed over non-loadbearing window or door framing.
6. Maximum rafter spacing - 600 mm for tile roofs, 1200 mm for sheet roofs.

# Floor Joists

## Supporting Floor Loads only

| e-beam Section D X B (mm) | Floor Joist Spacing (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 300 | | 400 | | 450 | | 480 | | 600 | |
| | Maximum single span and cantilever (m) | | | | | | | | | |
| | Span | Cant. | Span | Cant. | Span | Cant. | Span | Cant. | Span | Cant. |
| 90 x 35 | 2.1 | 0.5 | 1.8 | 0.5 | 1.7 | 0.4 | 1.8 | 0.4 | 1.7 | 0.4 |
| 90 x 45 | 2.3 | 0.6 | 2.0 | 0.5 | 1.9 | 0.5 | 1.9 | 0.5 | 1.8 | 0.4 |
| 130 x 35 | 3.3 | 0.8 | 2.6 | 0.8 | 2.4 | 0.7 | 2.5 | 0.7 | 2.3 | 0.6 |
| 130 x 45 | 3.6 | 0.9 | 2.8 | 0.8 | 2.7 | 0.8 | 2.7 | 0.8 | 2.5 | 0.7 |
| 150 x 35 | 3.8 | 0.9 | 3.0 | 0.9 | 2.9 | 0.8 | 3.0 | 0.8 | 2.7 | 0.8 |
| 150 x 45 | 4.0 | 1.0 | 3.3 | 0.9 | 3.1 | 0.9 | 3.2 | 0.9 | 3.0 | 0.8 |
| 170 x 35 | 4.2 | 1.1 | 3.5 | 1.0 | 3.3 | 1.0 | 3.4 | 0.9 | 3.1 | 0.9 |
| 170 x 45 | 4.4 | 1.2 | 3.8 | 1.1 | 3.6 | 1.0 | 3.8 | 1.0 | 3.4 | 0.9 |
| 200 x 35 | 4.7 | 1.3 | 4.3 | 1.1 | 4.0 | 1.1 | 4.2 | 1.1 | 3.8 | 1.0 |
| 200 x 45 | 5.0 | 1.4 | 4.6 | 1.2 | 4.4 | 1.2 | 4.4 | 1.2 | 4.1 | 1.1 |
| 240 x 35 | 5.4 | 1.5 | 5.0 | 1.4 | 4.9 | 1.3 | 4.8 | 1.3 | 4.5 | 1.2 |
| 240 x 45 | 5.7 | 1.6 | 5.3 | 1.5 | 5.1 | 1.4 | 5.1 | 1.4 | 4.8 | 1.3 |
| 300 x 45 | 6.7 | 1.9 | 6.3 | 1.8 | 6.1 | 1.7 | 6.0 | 1.7 | 5.7 | 1.6 |
| 360 x 45 | 7.7 | 2.2 | 7.2 | 2.0 | 7.0 | 2.0 | 6.9 | 1.9 | 6.5 | 1.8 |
| 400 x 45 | 8.3 | 2.4 | 7.8 | 2.2 | 7.5 | 2.1 | 7.4 | 2.1 | 7.0 | 2.0 |
| **Maximum continuous span and cantilever (m)** | | | | | | | | | | |
| 90 x 35 | 2.8 | 0.5 | 2.1 | 0.5 | 2.0 | 0.4 | 2.1 | 0.4 | 1.9 | 0.4 |
| 90 x 45 | 3.0 | 0.5 | 2.3 | 0.5 | 2.2 | 0.5 | 2.3 | 0.5 | 2.1 | 0.4 |
| 130 x 35 | 3.9 | 0.8 | 3.1 | 0.7 | 2.9 | 0.7 | 3.0 | 0.7 | 2.7 | 0.6 |
| 130 x 45 | 4.2 | 0.9 | 3.4 | 0.8 | 3.2 | 0.8 | 3.3 | 0.7 | 3.0 | 0.7 |
| 150 x 35 | 4.4 | 0.9 | 3.8 | 0.9 | 3.4 | 0.8 | 3.6 | 0.8 | 3.2 | 0.7 |
| 150 x 45 | 4.6 | 1.0 | 4.2 | 0.9 | 3.8 | 0.9 | 4.0 | 0.9 | 3.5 | 0.8 |
| 170 x 35 | 4.8 | 1.1 | 4.5 | 1.0 | 4.0 | 0.9 | 4.3 | 0.9 | 3.7 | 0.8 |
| 170 x 45 | 5.1 | 1.1 | 4.8 | 1.0 | 4.4 | 1.0 | 4.5 | 1.0 | 4.0 | 0.9 |
| 200 x 35 | 5.5 | 1.3 | 5.1 | 1.1 | 4.9 | 1.1 | 4.8 | 1.1 | 4.5 | 1.0 |
| 200 x 45 | 5.8 | 1.4 | 5.4 | 1.2 | 5.2 | 1.2 | 5.1 | 1.2 | 4.8 | 1.1 |
| 240 x 35 | 6.3 | 1.5 | 5.8 | 1.4 | 5.7 | 1.3 | 5.6 | 1.3 | 5.3 | 1.2 |
| 240 x 45 | 6.6 | 1.6 | 6.2 | 1.5 | 6.0 | 1.4 | 5.9 | 1.4 | 5.6 | 1.3 |
| 300 x 45 | 7.8 | 1.9 | 7.3 | 1.8 | 7.1 | 1.7 | 6.9 | 1.7 | 6.6 | 1.6 |

1. Joists with D/B > 4 should be blocked at supports as per AS 1684.
2. Cantilever spans should not exceed one half of the installed backspan.



# Floor Joists

## For Tiled Floors or Floors Supporting Heavy Furniture

| e-beam Section D X B (mm) | Floor joist spacing (mm) | | | | | Floor joist spacing (mm) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 300 | 400 | 450 | 480 | 600 | 300 | 400 | 450 | 480 | 600 |
| | Maximum single span (m) | | | | | Maximum continuous span (m) | | | | |
| 90 x 35 | 2.1 | 1.8 | 1.7 | 1.8 | 1.7 | 2.6 | 2.1 | 2.0 | 2.1 | 1.9 |
| 90 x 45 | 2.2 | 2.0 | 1.9 | 1.9 | 1.8 | 2.8 | 2.3 | 2.2 | 2.3 | 2.1 |
| 130 x 35 | 2.9 | 2.6 | 2.4 | 2.5 | 2.3 | 3.6 | 3.1 | 2.9 | 3.0 | 2.7 |
| 130 x 45 | 3.1 | 2.8 | 2.7 | 2.6 | 2.5 | 3.8 | 3.4 | 3.2 | 3.3 | 3.0 |
| 150 x 35 | 3.3 | 3.0 | 2.9 | 2.8 | 2.6 | 4.1 | 3.7 | 3.4 | 3.5 | 3.2 |
| 150 x 45 | 3.5 | 3.2 | 3.1 | 3.0 | 2.8 | 4.4 | 4.0 | 3.8 | 3.8 | 3.5 |
| 170 x 35 | 3.7 | 3.4 | 3.3 | 3.2 | 3.0 | 4.6 | 4.2 | 4.0 | 4.0 | 3.7 |
| 170 x 45 | 4.0 | 3.6 | 3.5 | 3.4 | 3.2 | 4.8 | 4.5 | 4.4 | 4.3 | 4.0 |
| 200 x 35 | 4.3 | 4.0 | 3.8 | 3.8 | 3.5 | 5.2 | 4.8 | 4.7 | 4.6 | 4.4 |
| 200 x 45 | 4.6 | 4.3 | 4.1 | 4.0 | 3.8 | 5.5 | 5.1 | 5.0 | 4.9 | 4.6 |
| 240 x 35 | 5.0 | 4.7 | 4.6 | 4.5 | 4.2 | 5.9 | 5.5 | 5.4 | 5.3 | 5.0 |
| 240 x 45 | 5.2 | 4.9 | 4.8 | 4.7 | 4.5 | 6.2 | 5.8 | 5.7 | 5.6 | 5.3 |
| 300 x 45 | 6.1 | 5.8 | 5.6 | 5.6 | 5.3 | 7.3 | 6.9 | 6.7 | 6.6 | 6.3 |
| 360 x 45 | 7.0 | 6.6 | 6.4 | 6.3 | 6.0 | 8.3 | 7.8 | 7.6 | 7.5 | 7.1 |
| 400 x 45 | 7.5 | 7.1 | 6.9 | 6.8 | 6.5 | 9.0 | 8.4 | 8.2 | 8.1 | 7.7 |

1. Joists with D/B > 4 should be blocked at supports as per AS 1684.
2. Tables apply where the imposed load from floor coverings (tiles & mortar) or heavy furniture is between 50 and 100 kilogram per square metre.

# Floor Joists

## Supporting Parallel Load Bearing Walls Over Openings

| Tile Roof And Ceiling | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Single Span | | | | | | | | | Continuous Span | | | | | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | | | | |
| | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 |
| | Maximum Span (m) | | | | | | | | | | | | | | | | | |
| 2/90 x 35 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 |
| 2/90 x 45 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 |
| 2/130 x 35 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 |
| 2/130 x 45 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 |
| 2/150 x 35 | 2.4 | 2.3 | 2.2 | 2.0 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 3.3 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 | 2.3 |
| 2/150 x 45 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 3.5 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.6 | 2.5 |
| 2/170 x 35 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 |
| 2/170 x 45 | 3.0 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 4.0 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 |
| 2/200 x 35 | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 4.3 | 4.1 | 3.8 | 3.7 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 |
| 2/200 x 45 | 3.5 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 | 4.6 | 4.4 | 4.1 | 3.9 | 3.8 | 3.6 | 3.5 | 3.4 | 3.3 |
| 2/240 x 45 | 4.2 | 3.9 | 3.7 | 3.5 | 3.4 | 3.2 | 3.1 | 3.0 | 3.0 | 5.3 | 5.0 | 4.8 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 | 4.0 |
| 2/300 x 45 | 5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.9 | 3.8 | 3.7 | 6.2 | 5.9 | 5.7 | 5.5 | 5.3 | 5.2 | 5.0 | 4.9 | 4.8 |
| 2/360 x 45 | 5.7 | 5.4 | 5.2 | 5.0 | 4.9 | 4.8 | 4.6 | 4.5 | 4.4 | 7.1 | 6.8 | 6.5 | 6.3 | 6.1 | 5.9 | 5.7 | 5.5 | 5.3 |
| 2/400 x 45 | 6.2 | 5.9 | 5.6 | 5.4 | 5.3 | 5.1 | 5.0 | 4.9 | 4.8 | 7.7 | 7.3 | 6.9 | 6.7 | 6.4 | 6.1 | 5.9 | 5.7 | 5.6 |

| Sheet Roof And Ceiling | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Single Span | | | | | | | | | Continuous Span | | | | | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | | | | |
| | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 |
| | Maximum Span (m) | | | | | | | | | | | | | | | | | |
| 2/90 x 35 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 |
| 2/90 x 45 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 |
| 2/130 x 35 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.6 | 2.5 |
| 2/130 x 45 | 2.7 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 3.6 | 3.4 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.8 | 2.7 |
| 2/150 x 35 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 3.8 | 3.6 | 3.5 | 3.4 | 3.2 | 3.1 | 3.1 | 3.0 | 2.9 |
| 2/150 x 45 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 4.1 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 |
| 2/170 x 35 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.5 | 2.4 | 4.3 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 |
| 2/170 x 45 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 4.6 | 4.4 | 4.2 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 |
| 2/200 x 35 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.9 | 4.9 | 4.8 | 4.6 | 4.5 | 4.3 | 4.2 | 4.1 | 4.0 | 3.9 |
| 2/200 x 45 | 4.1 | 3.9 | 3.7 | 3.6 | 3.4 | 3.3 | 3.3 | 3.2 | 3.1 | 5.2 | 5.0 | 4.8 | 4.7 | 4.6 | 4.5 | 4.4 | 4.2 | 4.1 |
| 2/240 x 45 | 4.8 | 4.6 | 4.4 | 4.3 | 4.1 | 4.0 | 3.9 | 3.8 | 3.7 | 5.9 | 5.7 | 5.5 | 5.4 | 5.3 | 5.1 | 5.0 | 4.9 | 4.8 |
| 2/300 x 45 | 5.6 | 5.4 | 5.2 | 5.1 | 5.0 | 4.9 | 4.8 | 4.7 | 4.6 | 7.0 | 6.7 | 6.5 | 6.3 | 6.2 | 6.1 | 5.9 | 5.8 | 5.7 |
| 2/360 x 45 | 6.4 | 6.2 | 6.0 | 5.8 | 5.7 | 5.6 | 5.4 | 5.3 | 5.2 | 8.0 | 7.7 | 7.4 | 7.2 | 7.1 | 6.9 | 6.8 | 6.6 | 6.5 |
| 2/400 x 45 | 6.9 | 6.6 | 6.5 | 6.3 | 6.1 | 6.0 | 5.9 | 5.8 | 5.7 | 8.6 | 8.3 | 8.0 | 7.8 | 7.6 | 7.5 | 7.3 | 7.2 | 7.1 |

1. Bearing length to be not less than 30 mm at end supports and not less than 65 mm at intermediate supports for continuous span joists unless noted otherwise by a subscript.
2. For single span joists subscript value indicates the required bearing length (in millimetre) for end supports.
3. For continuous span joists, subscript value indicates the required length (in millimetre) at intermediate spports; the bearing length at end supports should be at least one third the bearing length required at the intermediate support but in any case, is not to be less than 30 mm.



# Bearers

## Supporting Floor Loads only

| e-beam Section D X B (mm) | Floor Load Width 'FLW' (m) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 |
| | Maximum single span (m) | | | | | | | | | | | |
| 90 x 63 | 1.9 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 |
| 130 x 63 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 |
| 150 x 63 | 2.9 | 2.7 | 2.6 | 2.4 | 2.3 | 2.2 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 |
| 150 x 75 | 3.1 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.8 |
| 170 x 63 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 |
| 200 x 63 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 |
| 240 x 63 | 4.4 | 4.1 | 4.0 | 3.8 | 3.7 | 3.6 | 3.4 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 |
| 300 x 63 | 5.1 | 4.9 | 4.7 | 4.5 | 4.3 | 4.2 | 4.1 | 3.9 | 3.8 | 3.6 | 3.5 | 3.3 |
| 300 x 75 | 5.3 | 5.1 | 4.9 | 4.7 | 4.5 | 4.4 | 4.3 | 4.1 | 3.9 | 3.8 | 3.7 | 3.5 |
| 360 x 63 | 5.9 | 5.6 | 5.3 | 5.1 | 5.0 | 4.8 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 3.9 |
| 400 x 63 | 6.3 | 6.0 | 5.8 | 5.5 | 5.4 | 5.2 | 5.1 | 4.8 | 4.6 | 4.5 | 4.3 | 4.2 |
| 400 x 75 | 6.6 | 6.2 | 6.0 | 5.8 | 5.6 | 5.4 | 5.3 | 5.0 | 4.8 | 4.7 | 4.5 | 4.4 |
| 450 x 63 | 6.9 | 6.5 | 6.3 | 6.0 | 5.8 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 | 4.7 | 4.6 |
| **Maximum continuous span** | | | | | | | | | | | | |
| 90 x 63 | 2.3 | 2.2 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.6 | 1.4 | 1.4 | 1.3 | 1.2 |
| 130 x 63 | 3.2 | 3.0 | 2.8 | 2.7 | 2.5 | 2.4 | 2.4 | 2.2 | 2.0 | 1.9 | 1.7 | 1.7 |
| 150 x 63 | 3.6 | 3.4 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.3 | 2.1 | 2.0 | 2.0 |
| 150 x 75 | 3.7 | 3.5 | 3.4 | 3.2 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.4 | 2.2 | 2.1 |
| 170 x 63 | 3.9 | 3.7 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 2.9 | 2.7 | 2.4 | 2.3 | 2.1 |
| 200 x 63 | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 3.6 | 3.5 | 3.4 | 3.1 | 2.9 | 2.7 | 2.6 |
| 240 x 63 | 5.1 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.1 |
| 300 x 63 | 6.0 | 5.7 | 5.4 | 5.2 | 5.1 | 4.9 | 4.8 | 4.6 | 4.4 | 4.3 | 4.1 | 3.9 |
| 300 x 75 | 6.3 | 5.9 | 5.7 | 5.5 | 5.3 | 5.1 | 5.0 | 4.8 | 4.6 | 4.4 | 4.3 | 4.2 |
| 360 x 63 | 6.9 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 5.5 | 5.2 | 5.0 | 4.9 | 4.7 | 4.6 |
| 400 x 63 | 7.5 | 7.1 | 6.7 | 6.5 | 6.3 | 6.1 | 5.9 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 |
| 400 x 75 | 7.8 | 7.4 | 7.0 | 6.8 | 6.6 | 6.4 | 6.2 | 5.9 | 5.7 | 5.5 | 5.3 | 5.2 |
| 450 x 63 | 8.1 | 7.7 | 7.4 | 7.1 | 6.9 | 6.7 | 6.5 | 6.2 | 6.0 | 5.8 | 5.6 | 5.3 |

1. Sections with depth 200 mm or greater must be restrained against rollover at supports.
2. Bearing length to be not less than 45 mm at end supports or 90 mm at intermediate supports for continuous span except where otherwise indicated by a subscript to the maximum span.
3. For single span bearers the subscript value indicates the required bearing length at end supports.
4. For continuous span, the subscript value indicates the minimum bearing length required at intermediate supports; the bearing length at end supports must be at least one third of the bearing length indicated for the intermediate support but not less than 45 mm.

# Bearers

## Supporting Single or Upper Storey Load Bearing Walls
## For N3 wind classification

| e-beam Section D X B (mm) | Sheet Roof And Ceiling | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Floor Load Width 'FLW' (m) | | | | | | | | | | | | | | |
| | 1.2 | | | | | 2.1 | | | | | 3.0 | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 |
| **Maximum single span (m)** | | | | | | | | | | | | | | | |
| 90 x 63 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 | 1.2 | 1.2 | 1.1 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 |
| 130 x 63 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 |
| 150 x 63 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.9 | 1.9 | 1.8 | 1.8 | 1.7 |
| 150 x 75 | 2.5 | 2.3 | 2.2 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 |
| 170 x 63 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 |
| 200 x 63 | 3.1 | 2.9 | 2.8 | 2.7 | 2.6 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 |
| 240 x 63 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 3.4 | 3.2 | 3.1 | 3.0 | 2.9 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 |
| 300 x 63 | 4.4 | 4.2 | 4.0 | 3.9 | 3.8 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 |
| 300 x 75 | 4.6 | 4.4 | 4.2 | 4.0 | 3.9 | 4.2 | 4.1 | 3.9 | 3.8 | 3.8 | 4.0 | 3.8 | 3.8 | 3.7 | 3.6 |
| 360 x 63 | 5.0 | 4.8 | 4.6 | 4.4 | 4.3 | 4.6 | 4.5 | 4.3 | 4.2 | 4.1 | 4.3 | 4.2 | 4.1 | 4.0 | 4.0 |
| 400 x 63 | 5.4 | 5.2 | 5.0 | 4.8 | 4.7 | 5.0 | 4.8 | 4.7 | 4.6 | 4.5 | 4.7 | 4.6 | 4.5 | 4.4 | 4.3 |
| 400 x 75 | 5.6 | 5.4 | 5.2 | 5.0 | 4.9 | 5.2 | 5.0 | 4.9 | 4.8 | 4.6 | 4.9 | 4.8 | 4.7 | 4.5 | 4.5 |
| 450 x 63 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 | 5.4 | 5.3 | 5.1 | 5.0 | 4.9 | 5.1 | 5.0 | 4.9 | 4.8 | 4.7 |
| **Maximum continuous span (m)** | | | | | | | | | | | | | | | |
| 90 x 63 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 |
| 130 x 63 | 2.7 | 2.6 | 2.4 | 2.3 | 2.2 | 2.5 | 2.3 | 2.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 |
| 150 x 63 | 3.2 | 3.0 | 2.8 | 2.7 | 2.6 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 |
| 150 x 75 | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 3.0 | 2.9 | 2.7 | 2.6 | 2.6 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 |
| 170 x 63 | 3.6 | 3.4 | 3.2 | 3.0 | 2.9 | 3.2 | 3.1 | 2.9 | 2.8 | 2.7 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 |
| 200 x 63 | 4.0 | 3.9 | 3.7 | 3.6 | 3.4 | 3.7 | 3.6 | 3.4 | 3.3 | 3.2 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 |
| 240 x 63 | 4.6 | 4.4 | 4.2 | 4.1 | 4.0 | 4.3 | 4.1 | 4.0 | 3.9 | 3.8 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 |
| 300 x 63 | 5.4 | 5.2 | 5.0 | 4.8 | 4.7 | 5.0 | 4.9 | 4.7 | 4.6 | 4.5 | 4.7 | 4.6 | 4.5 | 4.4 | 4.3 |
| 300 x 75 | 5.7 | 5.4 | 5.2 | 5.0 | 4.9 | 5.2 | 5.1 | 4.9 | 4.8 | 4.7 | 4.9 | 4.8 | 4.7 | 4.6 | 4.5 |
| 360 x 63 | 6.2 | 5.9 | 5.7 | 5.5 | 5.4 | 5.8 | 5.6 | 5.4 | 5.3 | 5.1 | 5.4 | 5.3 | 5.1 | 5.0 | 4.9 |
| 400 x 63 | 6.7 | 6.4 | 6.2 | 6.0 | 5.8 | 6.2 | 6.0 | 5.8 | 5.7 | 5.5 | 5.8 | 5.7 | 5.6 | 5.4 | 5.3 |
| 400 x 75 | 7.0 | 6.7 | 6.4 | 6.2 | 6.1 | 6.5 | 6.3 | 6.1 | 5.9 | 5.8 | 6.1 | 5.9 | 5.8 | 5.7 | 5.6 |
| 450 x 63 | 7.3 | 7.0 | 6.7 | 6.5 | 6.3 | 6.8 | 6.6 | 6.4 | 6.2 | 6.1 | 6.4 | 6.2 | 6.1 | 5.9 | 5.8 |

1. Sections with depth 200 mm or greater must be restrained against rollover at supports.
2. Bearing length to be not less than 45 mm at end supports or 90 mm at intermediate supports for continuous span except where otherwise indicated by a subscript to the maximum span.
3. For single span bearers the subscript value indicates the required bearing length at end supports.
4. For continuous span, the subscript value indicates the minimum bearing length required at intermediate supports; the bearing length at end supports must be at least one third of the bearing length indicated for the intermediate support but not less than 45 mm.



# Bearers

## Supporting Single or Upper Storey Load Bearing Walls
## For N3 wind classification

| e-beam Section D X B (mm) | Tile Roof And Ceiling | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Floor Load Width 'FLW' (m) | | | | | | | | | | | | | | |
| | 1.2 | | | | | 2.1 | | | | | 3.0 | | | | |
| | Roof Load Width 'RLW' (m) | | | | | | | | | | | | | | |
| | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 | 1.8 | 3.0 | 4.2 | 5.4 | 6.6 |
| **Maximum single span (m)** | | | | | | | | | | | | | | | |
| 90 x 63 | 1.3 | 1.2 | 1.1 | 1.1 | 1.0 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.2 | 1.1 | 1.0 | 1.0 | 0.9 |
| 130 x 63 | 1.8 | 1.7 | 1.5 | 1.4 | 1.4 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.6 | 1.5 | 1.4 | 1.3 | 1.3 |
| 150 x 63 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 |
| 150 x 75 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 |
| 170 x 63 | 2.4 | 2.2 | 2.0 | 1.9 | 1.8 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 |
| 200 x 63 | 2.8 | 2.5 | 2.4 | 2.2 | 2.1 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 2.4 | 2.3 | 2.1 | 2.0 | 2.0 |
| 240 x 63 | 3.4 | 3.1 | 2.8 | 2.7 | 2.5 | 3.1 | 2.9 | 2.7 | 2.6 | 2.4 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 |
| 300 x 63 | 4.0 | 3.8 | 3.5 | 3.3 | 3.2 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 3.6 | 3.4 | 3.2 | 3.1 | 2.9 |
| 300 x 75 | 4.2 | 3.9 | 3.7 | 3.5 | 3.3 | 4.0 | 3.7 | 3.6 | 3.4 | 3.2 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 |
| 360 x 63 | 4.6 | 4.3 | 4.1 | 3.9 | 3.7 | 4.3 | 4.1 | 3.9 | 3.8 | 3.6 | 4.1 | 3.9 | 3.8 | 3.7 | 3.5 |
| 400 x 63 | 5.0 | 4.6 | 4.4 | 4.2 | 4.0 | 4.7 | 4.4 | 4.2 | 4.1 | 3.9 | 4.5 | 4.3 | 4.1 | 4.0 | 3.8 |
| 400 x 75 | 5.2 | 4.8 | 4.6 | 4.4 | 4.2 | 4.9 | 4.6 | 4.4 | 4.2 | 4.1 | 4.7 | 4.4 | 4.3 | 4.1 | 4.0 |
| 450 x 63 | 5.4 | 5.1 | 4.8 | 4.6 | 4.4 | 5.1 | 4.8 | 4.6 | 4.4 | 4.3 | 4.9 | 4.7 | 4.5 | 4.3 | 4.2 |
| **Maximum continuous span (m)** | | | | | | | | | | | | | | | |
| 90 x 63 | 1.8 | 1.6 | 1.5 | 1.4 | 1.3 | 1.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 |
| 130 x 63 | 2.5 | 2.2 | 2.1 | 1.9 | 1.8 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 2.1 | 2.0 | 1.9 | 1.8 | 1.6 |
| 150 x 63 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.6 | 2.4 | 2.3 | 2.1 | 2.0 | 2.4 | 2.3 | 2.2 | 2.1 | 1.9 |
| 150 x 75 | 3.0 | 2.7 | 2.5 | 2.4 | 2.3 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 |
| 170 x 63 | 3.2 | 2.9 | 2.7 | 2.5 | 2.4 | 2.9 | 2.7 | 2.6 | 2.4 | 2.3 | 2.8 | 2.6 | 2.4 | 2.3 | 2.1 |
| 200 x 63 | 3.7 | 3.4 | 3.2 | 3.0 | 2.8 | 3.5 | 3.2 | 3.0 | 2.9 | 2.7 | 3.2 | 3.0 | 2.9 | 2.7 | 2.5 |
| 240 x 63 | 4.3 | 4.0 | 3.7 | 3.6 | 3.4 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 | 3.8 | 3.6 | 3.4 | 3.3 | 3.1 |
| 300 x 63 | 5.0 | 4.7 | 4.4 | 4.2 | 4.1 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 4.5 | 4.3 | 4.1 | 4.0 | 3.9 |
| 300 x 75 | 5.2 | 4.9 | 4.6 | 4.4 | 4.2 | 4.9 | 4.7 | 4.4 | 4.3 | 4.1 | 4.7 | 4.5 | 4.3 | 4.2 | 4.0 |
| 360 x 63 | 5.7 | 5.4 | 5.1 | 4.8 | 4.7 | 5.4 | 5.1 | 4.9 | 4.7 | 4.5 | 5.2 | 4.9 | 4.7 | 4.6 | 4.4 |
| 400 x 63 | 6.2 | 5.8 | 5.5 | 5.2 | 5.0 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 |
| 400 x 75 | 6.5 | 6.0 | 5.7 | 5.5 | 5.3 | 6.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.8 | 5.5 | 5.3 | 5.1 | 5.0 |
| 450 x 63 | 6.8 | 6.3 | 6.0 | 5.7 | 5.5 | 6.4 | 6.0 | 5.8 | 5.5 | 5.4 | 6.1 | 5.8 | 5.6 | 5.4 | 5.1 |

1. Sections with depth 200 mm or greater must be restrained against rollover at supports.
2. Bearing length to be not less than 45 mm at end supports or 90 mm at intermediate supports for continuous span except where otherwise indicated by a subscript to the maximum span.
3. For single span bearers the subscript value indicates the required bearing length at end supports.
4. For continuous span, the subscript value indicates the minimum bearing length required at intermediate supports; the bearing length at end supports must be at least one third of the bearing length indicated for the intermediate support but not less than 45 mm.

# Bearers

## Supporting Two Storey Load Bearing Walls
## For N3 wind classification

| Tile Roof and Ceiling | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Ground Floor Load Width 'FLW' (m) | | | | | | | | | | | |
| | 1.5 | | | | | | 3.0 | | | | | |
| | First Floor Load Width 'FLW' (m) | | | | | | | | | | | |
| | 1.5 | | | 3.0 | | | 1.5 | | | 3.0 | | |
| | Roof Load Width 'FLW' (m) | | | | | | | | | | | |
| | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 |
| **Maximum single span (m)** | | | | | | | | | | | | |
| 90 x 63 | 1.1 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 0.9 | 0.8 |
| 2/90 x 45 | 1.2 | 1.1 | 1.0 | 1.1 | 1.0 | 0.9 | 1.1 | 1.0 | 0.9 | 1.0 | 1.0 | 0.9 |
| 130 x 63 | 1.5 | 1.4 | 1.3 | 1.4 | 1.3 | 1.2 | 1.4 | 1.3 | 1.2 | 1.3 | 1.2 | 1.2 |
| 2/130 x 45 | 1.7 | 1.5 | 1.4 | 1.6 | 1.4 | 1.4 | 1.6 | 1.4 | 1.4 | 1.5 | 1.4 | 1.3 |
| 150 x 63 | 1.7 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 | 1.6 | 1.5 | 1.4 | 1.5 | 1.4 | 1.3 |
| 150 x 75 | 1.8 | 1.7 | 1.5 | 1.7 | 1.6 | 1.5 | 1.7 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 |
| 2/150 x 45 | 1.9 | 1.8 | 1.6 | 1.8 | 1.7 | 1.6 | 1.8 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 |
| 170 x 63 | 2.0 | 1.8 | 1.7 | 1.8 | 1.7 | 1.6 | 1.8 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 |
| 2/170 x 45 | 2.2 | 2.0 | 1.9 | 2.0 | 1.9 | 1.8 | 2.0 | 1.9 | 1.8 | 1.9 | 1.8 | 1.7 |
| 200 x 63 | 2.3 | 2.1 | 1.9 | 2.1 | 2.0 | 1.9 | 2.1 | 2.0 | 1.9 | 2.0 | 1.9 | 1.8 |
| 2/200 x 45 | 2.6 | 2.4 | 2.2 | 2.4 | 2.2 | 2.1 | 2.4 | 2.2 | 2.1 | 2.2 | 2.1 | 2.0 |
| 240 x 63 | 2.8 | 2.5 | 2.3 | 2.6 | 2.4 | 2.2 | 2.6 | 2.4 | 2.2 | 2.4 | 2.2 | 2.1 |
| 2/240 x 45 | 3.1 | 2.8 | 2.6 | 2.9 | 2.7 | 2.5 | 2.9 | 2.7 | 2.5 | 2.7 | 2.5 | 2.4 |
| 300 x 63 | 3.4 | 3.1 | 2.9 | 3.2 | 3.0 | 2.8 | 3.2 | 3.0 | 2.8 | 3.0 | 2.8 | 2.7 |
| 300 x 75 | 3.6 | 3.3 | 3.1 | 3.4 | 3.1 | 2.9 | 3.4 | 3.1 | 2.9 | 3.2 | 3.0 | 2.8 |
| **Maximum continuous span (m)** | | | | | | | | | | | | |
| 90 x 63 | 1.5 | 1.3 | 1.1 | 1.4 | 1.2 | 1.1 | 1.4 | 1.2 | 1.1 | 1.2 | 1.1 | 1.0 |
| 2/90 x 45 | 1.6 | 1.4 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 1.3 | 1.2 |
| 130 x 63 | 2.0 | 1.8 | 1.6 | 1.9 | 1.6 | 1.5 | 1.9 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 |
| 2/130 x 45 | 2.3 | 2.1 | 1.9 | 2.1 | 1.9 | 1.8 | 2.1 | 1.9 | 1.8 | 2.0 | 1.8 | 1.7 |
| 150 x 63 | 2.3 | 2.1 | 1.9 | 2.1 | 1.9 | 1.8 | 2.1 | 1.9 | 1.8 | 1.9 | 1.8 | 1.6 |
| 150 x 75 | 2.4 | 2.2 | 2.1 | 2.3 | 2.1 | 1.9 | 2.3 | 2.1 | 1.9 | 2.1 | 1.9 | 1.8 |
| 2/150 x 45 | 2.6 | 2.4 | 2.2 | 2.4 | 2.2 | 2.1 | 2.4 | 2.2 | 2.1 | 2.3 | 2.1 | 2.0 |
| 170 x 63 | 2.6 | 2.4 | 2.1 | 2.4 | 2.1 | 2.0 | 2.4 | 2.1 | 2.0 | 2.2 | 2.0 | 1.8 |
| 2/170 x 45 | 2.9 | 2.7 | 2.5 | 2.7 | 2.5 | 2.4 | 2.7 | 2.5 | 2.4 | 2.6 | 2.4 | 2.3 |
| 200 x 63 | 3.1 | 2.8 | 2.5 | 2.9 | 2.5 | 2.4 | 2.9 | 2.5 | 2.4 | 2.6 | 2.4 | 2.1 |
| 2/200 x 45 | 3.5 | 3.2 | 2.9 | 3.2 | 3.0 | 2.8 | 3.2 | 3.0 | 2.8 | 3.0 | 2.8 | 2.7 |
| 240 x 63 | 3.7 | 3.4 | 3.0 | 3.4 | 3.1 | 2.8 | 3.4 | 3.1 | 2.8 | 3.1 | 2.9 | 2.6 |
| 2/240 x 45 | 4.0 | 3.7 | 3.5 | 3.8 | 3.6 | 3.4 | 3.8 | 3.6 | 3.4 | 3.6 | 3.4 | 3.1 |
| 300 x 63 | 4.3 | 4.0 | 3.8 | 4.1 | 3.9 | 3.5 | 4.1 | 3.9 | 3.5 | 3.9 | 3.6 | 3.2 |
| 300 x 75 | 4.5 | 4.2 | 4.0 | 4.3 | 4.0 | 3.9 | 4.3 | 4.0 | 3.9 | 4.1 | 3.9 | 3.6 |

1. Sections with depth more than three times overall breadth must be restrained against rollover at supports.
2. Bearing length to be not less than 45 mm at end supports or 90 mm at intermediate supports for continuous span except where otherwise indicated by a subscript to the maximum span.
3. For single span bearers the subscript value indicates the required bearing length at end supports.
4. For continuous span, the subscript value indicates the minimum bearing length required at intermediate supports; the bearing length at end supports must be at least one third of the bearing length indicated for the intermediate support but not less than 45 mm.




# Bearers

## Supporting Two Storey Load Bearing Walls
## For N3 wind classification


| Sheet Roof and Ceiling | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e-beam Section D X B (mm) | Ground Floor Load Width 'FLW' (m) | | | | | | | | | | | |
| | 1.5 | | | | | | 3.0 | | | | | |
| | First Floor Load Width 'FLW' (m) | | | | | | | | | | | |
| | 1.5 | | | 3.0 | | | 1.5 | | | 3.0 | | |
| | Roof Load Width 'FLW' (m) | | | | | | | | | | | |
| | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 | 2.4 | 4.5 | 6.6 |
| **Maximum single span (m)** | | | | | | | | | | | | |
| 90 x 63 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 |
| 2/90 x 45 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 |
| 130 x 63 | 1.6 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 |
| 2/130 x 45 | 1.8 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 1.4 |
| 150 x 63 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 |
| 150 x 75 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 |
| 2/150 x 45 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 |
| 170 x 63 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 |
| 2/170 x 45 | 2.4 | 2.2 | 2.1 | 2.2 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 |
| 200 x 63 | 2.5 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 |
| 2/200 x 45 | 2.8 | 2.6 | 2.5 | 2.5 | 2.4 | 2.3 | 2.5 | 2.4 | 2.3 | 2.4 | 2.3 | 2.2 |
| 240 x 63 | 3.0 | 2.8 | 2.7 | 2.7 | 2.6 | 2.5 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 |
| 2/240 x 45 | 3.3 | 3.2 | 3.0 | 3.0 | 2.9 | 2.8 | 3.0 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 |
| 300 x 63 | 3.7 | 3.5 | 3.3 | 3.4 | 3.2 | 3.1 | 3.4 | 3.2 | 3.1 | 3.1 | 3.0 | 2.9 |
| 300 x 75 | 3.8 | 3.7 | 3.5 | 3.6 | 3.4 | 3.3 | 3.6 | 3.4 | 3.3 | 3.3 | 3.2 | 3.1 |
| **Maximum continuous span (m)** | | | | | | | | | | | | |
| 90 x 63 | 1.6 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 |
| 2/90 x 45 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 |
| 130 x 63 | 2.2 | 2.0 | 2.0 | 2.0 | 1.9 | 1.8 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 |
| 2/130 x 45 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.1 | 2.0 | 1.9 |
| 150 x 63 | 2.5 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 |
| 150 x 75 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 |
| 2/150 x 45 | 2.8 | 2.7 | 2.5 | 2.6 | 2.4 | 2.4 | 2.6 | 2.4 | 2.4 | 2.4 | 2.3 | 2.2 |
| 170 x 63 | 2.8 | 2.7 | 2.6 | 2.6 | 2.5 | 2.4 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 |
| 2/170 x 45 | 3.2 | 3.0 | 2.9 | 2.9 | 2.8 | 2.7 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.5 |
| 200 x 63 | 3.3 | 3.1 | 3.0 | 3.0 | 2.9 | 2.8 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 |
| 2/200 x 45 | 3.7 | 3.5 | 3.4 | 3.4 | 3.3 | 3.1 | 3.4 | 3.3 | 3.1 | 3.2 | 3.1 | 3.0 |
| 240 x 63 | 3.9 | 3.7 | 3.6 | 3.6 | 3.5 | 3.3 | 3.6 | 3.5 | 3.3 | 3.3 | 3.2 | 3.1 |
| 2/240 x 45 | 4.2 | 4.1 | 3.9 | 4.0 | 3.8 | 3.7 | 4.0 | 3.8 | 3.7 | 3.7 | 3.6 | 3.5 |
| 300 x 63 | 4.6 | 4.4 | 4.2 | 4.3 | 4.1 | 4.0 | 4.3 | 4.1 | 4.0 | 4.0 | 3.9 | 3.9 |
| 300 x 75 | 4.8 | 4.6 | 4.4 | 4.5 | 4.3 | 4.2 | 4.5 | 4.3 | 4.2 | 4.2 | 4.1 | 4.0 |


1. Sections with depth more than three times overall breadth must be restrained against rollover at supports.
2. Bearing length to be not less than 45 mm at end supports or 90 mm at intermediate supports for continuous span except where otherwise indicated by a subscript to the maximum span.
3. For single span bearers the subscript value indicates the required bearing length at end supports.
4. For continuous span, the subscript value indicates the minimum bearing length required at intermediate supports; the bearing length at end supports must be at least one third of the bearing length indicated for the intermediate support but not less than 45 mm.

Notes

Notes

Notes

specification

**Veneer**

| | |
|---|---|
| Thickness | Constant through the product thickness |
| Species | Plantation timber |
| Joints | Outer 2 plies are scarf jointed<br>Inner plies – scarf and/or butt jointed |

**Moisture Content**

8% – 15% (at time of despatch)

**Dimensional Tolerances**

Available on request

**Straightness**

Available on request

**Density**

650 kg/m$^3$ (approximately)

**Adhesive**

Phenolic – AS 2754.1

**Bond**

Type A – AS/NZS 2098.2

**Joint Group**

JD3 – for nails, bolts and screws

**Finish**

Unsanded faces, sawn edges and arrised edges

**Branding**

Each piece of Wesbeam LVL is branded at least once with the product name for identification and evidence of compliance with manufacturing control standards

**Storage**

Store on level bearers at maximum 1800mm centres well clear of the ground, and cover to keep dry but allow ventilation

**Source**

Plantation timber certified to AS4707 / PEFC

**Condition**

Untreated – but can be specified to H2S, H2 and H3 Treatment levels as per AS/NZS 1604.4

190 Pederick Road
Neerabup WA 6031
Australia

PO Box 217
Wanneroo WA 6946
Australia

**T** (08) 9306 0400
**F** (08) 9306 0444

wesbeam@wesbeam.com
**www.wesbeam.com**

wesbeam
building better wood

© Wesbeam Pty Limited ABN 89 004 268 017
Date of publication March 2015