AUSTRALIAN OWNED AND MANUFACTURED

wesbeam
building better wood

e-beam+ [F17]

engineered LVL F17 hardwood substitute

JD3 rated for greater connection strength

H2S termite treated

Distinctive blue colour makes it easy to spot in the warehouse or on site

Made in Australia

AUSTRALIAN MADE

PRODUCT CERTIFIED

paa ENGINEERED WOOD
Chain of Custody AS4707
Mill No. 613

JAS-ANZ

Wesbeam e-beam+ [F17] LVL Span Tables

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

e-beam+ [F17] LVL is a direct substitute for F17 hardwood at competitive prices and is engineered to maximise the efficient use of material and time. e-beam+ [F17] LVL will meet and/or exceed the F17 KD Hardwood Structural Design Properties prescribed in AS1720.1 – 2010 in all residential and commercial applications.

- The only F17 Hardwood substitute that has a JD3 Joint Grouping on both the face and edge of the LVL member
- Engineered for straightness, consistency and guaranteed performance
- Available in lengths from 3.6m to 7.2m with other lengths available as special manufacture up to 12.6m
- Available in full range of section sizes
- Can be easily treated to H2 and H3 Hazard Levels. When the e-beam+ [F17] LVL is treated to a H2S Hazard Level in the Wesbeam mill it is guaranteed for 25 years against termite attack when used South of the Tropic of Capricorn
- Available ex-stock
- Competitively priced
- High load bearing capacity
- High strength yet lighter and safer to handle
- Chamfered edges for safer and more comfortable handling
- Made from plantation timber veneers
- Fully supported by Wesbeam e-house and nail plate manufacturers' software
- Manufactured in Australia by a wholly owned Australian company
- Wesbeam has full Chain of Custody aligned with the Australian Forestry Standard (AFS); and Program for the Endorsement of Forest Certification (www.pefc.org)

About e-beam+ [F17] LVL

e-beam+ [F17] LVL 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+ [F17] LVL Data

The Tables and other technical data provided in this publication are only applicable to e-beam+ [F17] LVL manufactured by Wesbeam. This data should not be used for look-alike or substitute products. Use of the e-beam+ [F17] LVL 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 in AS1720.1 – 2010 where for all LVL structural elements used in residential houses ø = 0.9.

Terminology, Definitions and 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 – 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+ [F17] 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+ [F17] 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.

e-beam+ [F17] LVL treatment

e-beam+ [F17] LVL can be easily treated to H2S, H2 and H3 Hazard Levels.

e-beam+ [F17] LVL size and length availability

e-beam+ [F17] LVL Size and Length Availability

Depth (mm)	Thickness (mm)		Length Availability
	35mm	45mm	
90	■	■	3.6m, 4.2m, 4.8m, 5.4m, 6.0m, 6.6m and 7.2m Other lengths are available by special manufacture up to 12.6m * Available in lengths of 6.0m only
120	■	■	
140	■	■	
170*	■		
190	■	■	
240	■	■	
290		■	

Note: Shaded areas indicates available.

Rafters

WInd Classification N3

Limits on Deflection
Dead load: span/300
Dead load – end of overhang: 10mm max.
Live load: span/250
Live load – end of overhang: 10mm max.
Wind load: span/150
Wind load – end of overhang: 20mm max.

e-beam+ [F17] LVL 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 x45	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
120 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
120 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
140 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
140 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

Rafters continued

WInd Classification N3

Limits on Deflection
Dead load: span/300
Dead load – end of overhang: 10mm max.
Live load: span/250
Live load – end of overhang: 10mm max.
Wind load: span/150
Wind load – end of overhang: 20mm max.

e-beam+ [F17] LVL 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
170 x 35	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
190 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
190 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
290 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

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

Roof Beams

Ridge, Intermediate, Eave and Bressummer Beams

WInd Classification N3

Limits on Deflection
Dead load: span/300
Dead load – end of overhang: 10mm max.
Live load: span/250
Live load – end of overhang: 10mm max.
Wind load: span/150
Wind load – end of overhang: 30mm max.

e-beam+ [F17] LVL 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)												
140 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
140 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
190 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
190 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
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
290 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
Maximum Continuous Span (m)												
140 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
140 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
190 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
190 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
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
290 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

Roof Beams

Ridge, Intermediate, Eave and Bressummer Beams

WInd Classification N3

Limits on Deflection
Dead load: span/300
Dead load – end of overhang: 10mm max.
Live load: span/250
Live load – end of overhang: 10mm max.
Wind load: span/150
Wind load – end of overhang: 30mm max.

e-beam+ [F17] LVL 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)												
140 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
140 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
190 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
190 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
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
290 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
Maximum Continuous Span (m)												
140 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
140 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
190 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
190 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
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
290 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

Counter Beams

Supporting Hanging Beams

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 15mm max.
Live load: span/270 or 15mm max.

e-beam+ [F17] LVL 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)							
140 x 35	3.4	3.2	3.0	2.9	2.8	2.7	2.6	2.5
140 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
190 x 35	4.4	4.1	3.8	3.6	3.5	3.2	3.1	3.0
190 x 45	4.8	4.5	4.3	4.1	3.9	3.8	3.7	3.6
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
290 x 45	6.4	6.0	5.6	5.3	5.1	4.8	4.7	4.6

Verandah Beams

WInd Classification N3

Limits on Deflection
Dead load: span/400 or 10mm max.
Live load: span/250 or 12mm max.
Wind load: span/200

e-beam+ [F17] LVL 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)													
120 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
120 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
140 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
140 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
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

Verandah Beams continued

WInd Classification N3

Limits on Deflection
Dead load: span/400 or 10mm max.
Live load: span/250 or 12mm max.
Wind load: span/200

e-beam+ [F17] LVL 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)													
190 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
190 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
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
290 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

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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 10mm max.
Live load: span/250 or 12mm max.
Wind load: span/200

e-beam+ [F17] LVL 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)									
140 x 35	2.9	2.7	2.6	2.5	2.4	2.3	2.1	2.0	1.9	1.8
140 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
190 x 35	3.6	3.3	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5
190 x 45	3.7	3.5	3.3	3.2	3.0	2.9	2.9	2.8	2.7	2.7
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
290 x 45	5.0	4.8	4.5	4.2	4.1	4.0	3.9	3.8	3.7	3.6
2/290 x 45	5.8	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.4	4.3

e-beam+ [F17] LVL 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)									
140 x 35	2.3	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.4
140 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
190 x 35	2.9	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.9	1.8
190 x 45	3.1	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2.0	2.0
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
290 x 45	4.1	3.9	3.7	3.5	3.4	3.2	3.2	3.1	3.0	2.9
2/290 x 45	4.9	4.6	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.6

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 1684.2.
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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 10mm max.
Live load: span/360 or 10mm max.

Sheet Roof and Ceiling															
e-beam+ [F17] LVL 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)															
140 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
140 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
2/140 x 35	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
190 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
190 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
2/190 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
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
290 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
2/290 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

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 1684.2.
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 continued

In Lower Storey Load Bearing External Walls

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 10mm max.
Live load: span/360 or 10mm max.

Tile Roof and Ceiling															
e-beam+ [F17] LVL 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)															
140 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
140 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
2/140 x 35	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
190 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
190 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
2/190 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
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
290 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
2/290 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

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 1684.2.
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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 10mm max.
Live load: span/250 or 15mm max.
Wind load: span/200

e-beam+ [F17] LVL 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)					
120 x 35	1.8	1.7	1.6	1.3	1.3	1.2
120 x 45	2.0	1.8	1.7	1.5	1.3	1.3
140 x 35	2.2	2.0	1.8	1.6	1.4	1.3
140 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
190 x 35	3.0	2.9	2.8	2.3	2.1	2.0
190 x 45	3.3	3.2	3.0	2.6	2.4	2.3
2/190 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
2/240 x 45	4.3	4.0	3.9	3.4	3.3	3.2
290 x 45	4.2	4.0	3.8	3.4	3.2	3.1
2/290 x 45	5.0	4.8	4.7	4.1	3.9	3.8

e-beam+ [F17] LVL 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)					
120 x 35	1.4	1.2	1.0	1.1	0.9	0.8
120 x 45	1.5	1.4	1.3	1.2	1.1	1.0
140 x 35	1.7	1.5	1.3	1.2	1.2	1.0
140 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
190 x 35	2.6	2.5	2.4	1.8	1.7	1.6
190 x 45	2.9	2.7	2.6	2.1	2.0	1.8
2/190 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
2/240 x 45	3.8	3.6	3.5	3.0	2.9	2.7
290 x 45	3.7	3.6	3.4	3.0	2.8	2.7
2/290 x 45	4.5	4.3	4.2	3.6	3.5	3.3

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 1684.2.
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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 10mm max.
Live load: span/250 or 15mm max.
Wind load: span/200

e-beam+ [F17] LVL 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)									
120 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
120 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
140 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
2/140 x 35	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
2/140 x 45	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
190 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
190 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
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
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
2/290 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

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 1684.2.
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.

Floor Joists

Supporting Floor Loads only

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 15mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.
Dynamic load: 2mm

e-beam+ [F17] LVL 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
120 x 35	3.3	0.8	2.6	0.8	2.4	0.7	2.5	0.7	2.3	0.6
120 x 45	3.6	0.9	2.8	0.8	2.7	0.8	2.7	0.8	2.5	0.7
140 x 35	3.8	0.9	3.0	0.9	2.9	0.8	3.0	0.8	2.7	0.8
140 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
190 x 35	4.7	1.3	4.3	1.1	4.0	1.1	4.2	1.1	3.8	1.0
190 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
290 x 45	6.7	1.9	6.3	1.8	6.1	1.7	6.0	1.7	5.7	1.6
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
120 x 35	3.9	0.8	3.1	0.7	2.9	0.7	3.0	0.7	2.7	0.6
120 x 45	4.2	0.9	3.4	0.8	3.2	0.8	3.3	0.7	3.0	0.7
140 x 35	4.4	0.9	3.8	0.9	3.4	0.8	3.6	0.8	3.2	0.7
140 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
190 x 35	5.5	1.3	5.1	1.1	4.9	1.1	4.8	1.1	4.5	1.0
190 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
290 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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 15mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.
Dynamic load: 2mm

e-beam+ [F17] LVL 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
120 x 35	2.9	2.6	2.4	2.5	2.3	3.6	3.1	2.9	3.0	2.7
120 x 45	3.1	2.8	2.7	2.6	2.5	3.8	3.4	3.2	3.3	3.0
140 x 35	3.3	3.0	2.9	2.8	2.6	4.1	3.7	3.4	3.5	3.2
140 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
190 x 35	4.3	4.0	3.8	3.8	3.5	5.2	4.8	4.7	4.6	4.4
190 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
290 x 45	6.1	5.8	5.6	5.6	5.3	7.3	6.9	6.7	6.6	6.3

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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 15mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.
Dynamic load: 2mm

Tile Roof And Ceiling																		
e-beam+ [F17] LVL 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
2/120 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
2/120 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
2/140 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
2/140 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
2/190 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
2/190 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
2/290 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

Sheet Roof And Ceiling																		
e-beam+ [F17] LVL 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
2/120 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
2/120 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
2/140 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
2/140 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
2/190 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
2/190 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
2/290 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

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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 12mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.

e-beam+ [F17] LVL 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)											
2/90 x 35	1.9	1.7	1.6	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1
2/120 x 35	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.7	1.6	1.5	1.5
2/140 x 35	2.9	2.7	2.6	2.4	2.3	2.2	2.2	2.0	1.9	1.8	1.7	1.7
2/140 x 45	3.1	2.9	2.7	2.6	2.5	2.4	2.3	2.1	2.0	1.9	1.8	1.8
2/170 x 35	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2.0	1.9
2/190 x 35	3.8	3.6	3.4	3.2	3.1	3.0	2.9	2.7	2.5	2.4	2.3	2.2
2/240 x 35	4.4	4.1	4.0	3.8	3.7	3.6	3.4	3.2	3.1	2.9	2.8	2.7
2/290 x 45	5.1	4.9	4.7	4.5	4.3	4.2	4.1	3.9	3.8	3.6	3.5	3.3
Maximum continuous span												
2/90 x 35	2.3	2.2	2.0	1.9	1.9	1.8	1.7	1.6	1.4	1.4	1.3	1.2
2/120 x 35	3.2	3.0	2.8	2.7	2.5	2.4	2.4	2.2	2.0	1.9	1.7	1.7
2/140 x 35	3.6	3.4	3.2	3.1	2.9	2.8	2.7	2.6	2.3	2.1	2.0	2.0
2/140 x 45	3.7	3.5	3.4	3.2	3.1	3.0	2.9	2.7	2.6	2.4	2.2	2.1
2/170 x 35	3.9	3.7	3.5	3.4	3.3	3.2	3.1	2.9	2.7	2.4	2.3	2.1
2/190 x 35	4.4	4.2	4.0	3.9	3.7	3.6	3.5	3.4	3.1	2.9	2.7	2.6
2/240 x 35	5.1	4.8	4.6	4.4	4.3	4.2	4.0	3.9	3.7	3.5	3.3	3.1
2/290 x 45	6.3	5.9	5.7	5.5	5.3	5.1	5.0	4.8	4.6	4.4	4.3	4.2

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 lessthan 45 mm.

Bearers

Supporting Single or Upper Storey Load Bearing Walls

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 12mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.

e-beam+ [F17] LVL 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)															
2/90 x 35	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
2/120 x 35	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
2/140 x 35	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
2/140 x 45	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
2/170 x 35	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
2/190 x 35	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
2/240 x 35	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
2/290 x 45	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
Maximum continuous span (m)															
2/90 x 35	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
2/120 x 35	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
2/140 x 35	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
2/140 x 45	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
2/170 x 35	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
2/190 x 35	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
2/240 x 35	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
2/290 x 45	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

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 continued

Supporting Single or Upper Storey Load Bearing Walls

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 12mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.

e-beam+ [F17] LVL 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)															
2/90 x 35	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
2/120 x 35	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
2/140 x 35	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
2/140 x 45	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
2/170 x 35	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
2/190 x 35	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
2/240 x 35	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
2/290 x 45	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
Maximum continuous span (m)															
2/90 x 35	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
2/120 x 35	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
2/140 x 35	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
2/140 x 45	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
2/170 x 35	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
2/190 x 35	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
2/240 x 35	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
2/290 x 45	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

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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 12mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.

Tile Roof and Ceiling												
Ground Floor Load Width 'FLW' (m)												
e-beam+ [F17] LVL Section D X B (mm)	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)												
2/90 x 35	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
2/120 x 35	1.5	1.4	1.3	1.4	1.3	1.2	1.4	1.3	1.2	1.3	1.2	1.2
2/120 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
2/140 x 35	1.7	1.6	1.5	1.6	1.5	1.4	1.6	1.5	1.4	1.5	1.4	1.3
2/140 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
2/170 x 35	2.0	1.8	1.7	1.8	1.7	1.6	1.8	1.7	1.6	1.7	1.6	1.5
2/190 x 35	2.3	2.1	1.9	2.1	2.0	1.9	2.1	2.0	1.9	2.0	1.9	1.8
2/190 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
2/240 x 35	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
2/290 x 45	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)												
2/90 x 35	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
2/120 x 35	2.0	1.8	1.6	1.9	1.6	1.5	1.9	1.6	1.5	1.6	1.5	1.4
2/120 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
2/140 x 35	2.3	2.1	1.9	2.1	1.9	1.8	2.1	1.9	1.8	1.9	1.8	1.6
2/140 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
2/170 x 35	2.6	2.4	2.1	2.4	2.1	2.0	2.4	2.1	2.0	2.2	2.0	1.8
2/190 x 35	3.1	2.8	2.5	2.9	2.5	2.4	2.9	2.5	2.4	2.6	2.4	2.1
2/190 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
2/240 x 35	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
2/290 x 45	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

WInd Classification N3

Limits on Deflection
Dead load: span/300 or 12mm max.
Dead load – end of overhang: Overhang/150 or 6 mm max.
Live load: span/360 or 9mm max.
Live load – end of overhang: Overhang/180 or 4.5mm max.

Sheet Roof and Ceiling												
Ground Floor Load Width 'FLW' (m)												
e-beam+ [F17] LVL Section D X B (mm)	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)												
2/90 x 35	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
2/120 x 35	1.6	1.5	1.5	1.5	1.4	1.4	1.5	1.4	1.4	1.4	1.3	1.3
2/120 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
2/140 x 35	1.9	1.8	1.7	1.7	1.6	1.6	1.7	1.6	1.6	1.6	1.5	1.5
2/140 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
2/170 x 35	2.1	2.0	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.7	1.7
2/190 x 35	2.5	2.3	2.2	2.3	2.2	2.1	2.3	2.2	2.1	2.1	2.0	2.0
2/190 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
2/240 x 35	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
2/290 x 45	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)												
2/90 x 35	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
2/120 x 35	2.2	2.0	2.0	2.0	1.9	1.8	2.0	1.9	1.8	1.7	1.7	1.6
2/120 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
2/140 x 35	2.5	2.4	2.3	2.3	2.2	2.1	2.3	2.2	2.1	2.0	1.9	1.9
2/140 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
2/170 x 35	2.8	2.7	2.6	2.6	2.5	2.4	2.6	2.5	2.4	2.3	2.2	2.1
2/190 x 35	3.3	3.1	3.0	3.0	2.9	2.8	3.0	2.9	2.8	2.7	2.6	2.5
2/190 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
2/240 x 35	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
2/290 x 45	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.

specification

Veneer

Thickness	Constant through the product thickness
Species	Plantation timber
Joints	Outer 2 plies are scarf jointed 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

Treatment levels as per AS/NZS 1604.4
H2S treated. Can be specified as untreated, H2 or H3 treated subject to special manufacturer.

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building better wood

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