



e-garage®
engineered LVL garage and car port beams



MIL No. 613



e-garage is an engineered solution for beams in stick roofs over garages, car ports and alfresco areas of a residence.

e-garage offers the greatest flexibility in the design of garages and car ports by making it possible to completely replace steel beams. This extremely strong, lightweight product delivers work safety benefits whilst reducing the cost and complexity of construction due to cranes, welders and ballistic nail guns.

All e-garage beams are treated to level H3 providing lasting protection in external above ground applications against fungal decay, termites and other wood boring insects. The H3 treatment used by Wesbeam ensures that e-garage maintains its dimensional stability for length, width, strength and straightness.

Features include:

- Available ex-stock
- H3 treated to provide lasting protection against fungal decay and from termites and other wood boring insects
- Engineered for straightness and consistent performance
- High strength yet lighter and safer to use
- Arrised edges for safer and more comfortable handling
- Manufactured from 100% certified plantation timber
- Manufactured in Australia by a wholly owned Australian company
- Wesbeam has full Chain of Custody aligned with the Australian Forestry Standard (AFS) – AS4707 and Program for the Endorsement of Forest Certificate (www.pefc.org)

e-garage Specification

e-garage is manufactured from structural laminated veneer lumber in accordance with AS/NZS 4357.

e-garage is treated to H3 level in accordance with AS/NZS1604.4

e-garage Span Tables

Wind Classification N3

Limits on deflection
 Dead load: span/300 or 20mm max.
 Live load: span/250 or 20mm max.
 Wind load: span/150 or 20mm max.

Garage Beams

Single Span

Garage Beam Section D x B (mm)	Roof Mass (kg/m ²)	Single Span					
		Roof Load Width "RLW" (m)					
		0.6	1.2	1.8	2.4	3.0	3.6
		Maximum Span (mm)					
240 x 47	40	6400	5300	4700	4200	3900	3600
	90	5200	4200	3700	3300	3100	2900
240 x 65	40	6800	5900	5200	4700	4300	4100
	90	5700	4600	4100	3700	3400	3200
240 x 77	40	7000	6100	5400	4900	4500	4200
	90	6000	4900	4300	3900	3600	3400
300 x 77	40	8100	7100	6500	6100	5700	5400
	90	7000	6100	5400	4900	4500	4300

Continuous Span

Garage Beam Section D x B (mm)	Roof Mass (kg/m ²)	Continuous Span					
		Roof Load Width "RLW" (m)					
		0.6	1.2	1.8	2.4	3.0	3.6
		Maximum Span (mm)					
240 x 47	40	7900	6800	6200	5700	5200	4900
	90	6700	5600	4900	4500	4100	3900
240 x 65	40	8500	7300	6700	6200	5800	5500
	90	7200	6200	5500	5000	4600	4300
240 x 77	40	8700	7600	6900	6400	6100	5700
	90	7400	6400	5700	5200	4800	4500
300 x 77	40	10100	8900	8100	7600	8400	6900
	90	8800	7600	6900	6400	6100	5700

e-garage Span Tables

Wind Classification N3

Limits on deflection
 Dead load: span/300 or 20mm max.
 Live load: span/250 or 20mm max.
 Wind load: span/150 or 20mm max.

Alfresco Beams

Single Span

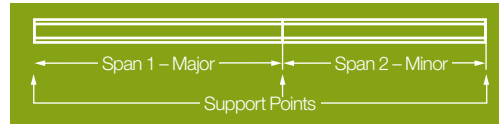
Alfresco Beam Section D x B (mm)	Roof Mass (kg/m ²)	Single Span					
		Roof Load Width "RLW" (m)					
		0.6	1.2	1.8	2.4	3.0	3.6
		Maximum Span (mm)					
240 x 47	20	7100	6000	5400	5000	4700	4300
	40	6400	5300	4700	4200	3900	3600
	60	5800	4700	4100	3800	3500	3200
	90	5200	4200	3700	3300	3100	2900
240 x 65	20	7500	6500	5900	5500	5200	4800
	40	6800	5900	5200	4700	4300	4100
	60	6300	5200	4600	5500	5100	3800
	90	5700	4600	4100	3700	3400	3200
240 x 77	20	7700	6700	6100	5700	5400	5000
	40	7000	6100	5400	4900	4500	4200
	60	6500	5500	4800	4400	4000	3800
	90	6000	4900	4300	3900	3600	3400
300 x 77	20	8900	8000	7300	6800	6400	6100
	40	8100	7100	6500	6100	5700	5400
	60	7600	6600	6000	5500	5100	4800
	90	7000	6100	5400	4900	4500	4300

Continuous Span

Alfresco Beam Section D x B (mm)	Roof Mass (kg/m ²)	Continuous Span					
		Roof Load Width "RLW" (m)					
		0.6	1.2	1.8	2.4	3.0	3.6
		Maximum Span (mm)					
240 x 47	20	8900	7500	6800	6300	5800	5400
	40	7900	6800	6200	5700	5200	4900
	60	7300	6300	5600	5000	4700	4400
	90	6700	5600	4900	4500	4100	3900
240 x 65	20	9400	8100	7300	6800	6500	6200
	40	8500	7300	6700	6200	5800	5500
	60	7800	6700	6100	5600	5200	4900
	90	7200	6200	5500	5000	4600	4300
240 x 77	20	9600	8400	7600	7100	6700	6400
	40	8700	7600	6900	6400	6100	5700
	60	8100	7000	6300	5900	5400	5100
	90	7400	6400	5700	5200	4800	4500
300 x 77	20	11100	10000	9100	8500	8000	7600
	40	10100	8900	8100	7600	8400	6900
	60	9500	8200	7500	7000	6600	6300
	90	8800	7600	6900	6400	6100	5700

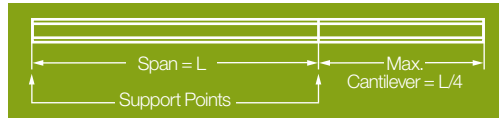
Continuous Beams

Consider the e-garage or alfresco beam as a continuous span if Span 1 (Major) is not greater than 2 times Span 2 (Minor). If Span 1 is greater than 2 times Span 2 consider as a single span.



Cantilevers

It is permissible to cantilever e-garage and alfresco beams. The maximum allowable cantilever is 25% of the main e-garage or alfresco beam span.



Site Protection

Wesbeam e-garage and alfresco LVL beams need to be protected from surface and/or end checking due to cyclic climatic changes caused the elements while the beams are stored on site, during construction and after final installation. This can be achieved by:

- Covering the LVL beams while stored on site
- Applying a primary protection coating prior to or immediately after erection
- Applying a full protection system immediately after construction is completed

It is strongly recommended that all treated e-garage products installed in weather exposed situations are painted, stained or sealed within 30 days to maintain optimum serviceability, appearance and dimensional stability.

H3 Treatment Guarantee

Wesbeam e-garage and alfresco LVL beams are H3 treated using a Protim® LOSP treatment manufactured by Osmose Australia. Osmose Australia offer a guarantee for Protim® LOSP treated outdoor wood products, including Wesbeam e-garage and alfresco LVL beams.

Where e-garage and alfresco LVL beams are cut, notched, drilled or rebated to suit site conditions, all exposed areas must be resealed with a suitable resealing product such as Protim® Solignum XJ Clear Timber Protective (XJ Clear) available from authorised Wesbeam distributors. Refer to the Wesbeam Technical Information Sheet - Guidelines for the Remedial Treatment of Preservative Treated Wesbeam LVL and e-joists for more information.

A copy of the Osmose Australia guarantee for Protim® LOSP treated outdoor wood products can be obtained at http://www.osmose.com.au/pdfs/Osmose%20GENERIC%20Guarantee%205_12_2012.pdf