XLT BRACE
XLT PORTAL

ENGINEERED TIMBER BRACING AND PORTAL SYSTEMS

BY XLAM

XLT

XLT is a range of products by XLAM that bring the benefits of mass timber to residential and light commercial construction. The XLT range includes `ready made' panels, structural flooring, beams, bracing and portal structures.

Mass timber is strong, sustainable, durable and offers impressive structural properties. The XLT range is made from Australian grown plantation radiata pine offering painless onsite alterations, easy handling and fast install. Using timber alternatives means that you can minimise the reliance on fabricated steelwork and pair timber XLT products with timber framing.

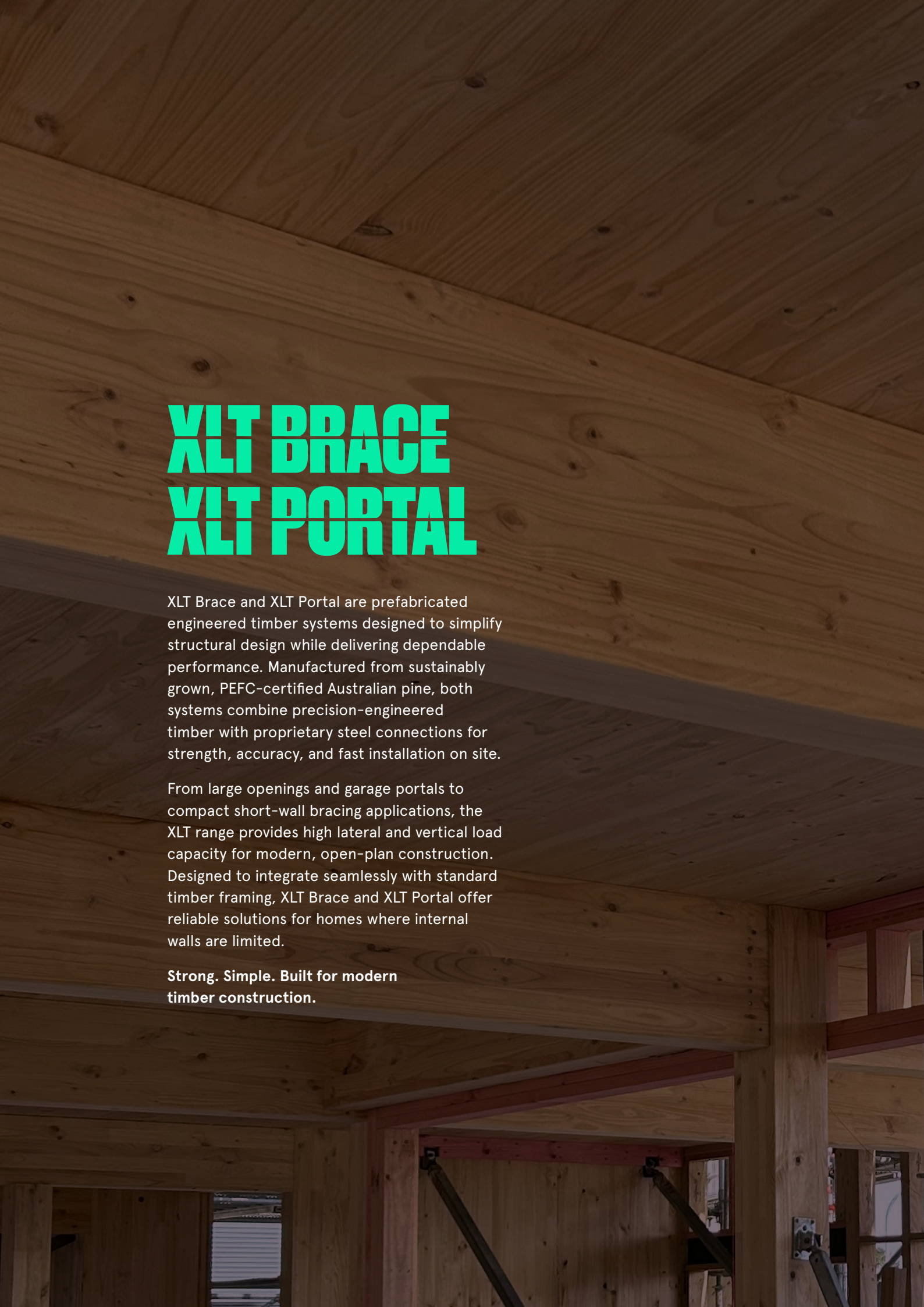
CodeMark Australia
Certificate CM70140

AUSTRALIAN GROWN & MADE

Responsible Wood

PEFC
PEFC/21-31-15

XLAM



XLT BRACE
XLT PORTAL

XLT Brace and XLT Portal are prefabricated engineered timber systems designed to simplify structural design while delivering dependable performance. Manufactured from sustainably grown, PEFC-certified Australian pine, both systems combine precision-engineered timber with proprietary steel connections for strength, accuracy, and fast installation on site.

From large openings and garage portals to compact short-wall bracing applications, the XLT range provides high lateral and vertical load capacity for modern, open-plan construction. Designed to integrate seamlessly with standard timber framing, XLT Brace and XLT Portal offer reliable solutions for homes where internal walls are limited.

Strong. Simple. Built for modern timber construction.

XLAM

A privately owned mass timber manufacturer with facilities across Australia and New Zealand. As Australasia's first CLT (cross-laminated timber) manufacturer, we're leading the way in making mass timber accessible.

Since 2010, XLAM have been at forefront of CLT and GLT (glue laminated timber) manufacturing in the southern hemisphere, completing more than 1,000 commercial builds. XLAM now bring the benefits of mass timber to residential and light commercial construction through a range of ready-made timber products.

A HYNE GROUP COMPANY

XLAM are uniquely positioned to produce mass timber products with the advantage of ready access to high-quality timber feedstock. As a part of the Hyne Group, we access timber from our sister business Hyne Timber, who operate some of the region's largest and most sophisticated mills.

Our production sites are strategically located near our mills for efficient production of our XLT product range.

MADE FROM SOLID WOOD

XLAM's XLT Brace and XLT Portal are precision-engineered structural solutions designed for strength, efficiency, and flexibility in construction. Made from sustainably grown, PEFC-certified plantation pine, these products are lightweight yet durable, making them easy to handle and install.

Produced under strict quality controls, every component is accurate, consistent, and ready to integrate seamlessly. With minimal onsite waste and streamlined installation, XLT Brace and XLT Portal offer a smarter, sustainable solution that saves time, reduces costs, and ensures reliable, long-term performance.

XLT BRACE EMBEDDED IN STUD WALL

IMAGE COURTESY OF MULTINAIL

XLT BRACE
XLT PORTAL

SYSTEM BENEFITS

Designed for Modern Homes:
Tailored to meet the needs of open-plan living with fewer internal walls and larger openings.

Superior Structural Performance:
High lateral and vertical load capacity ensures stability and strength across a wide range of applications.

Sustainability Built In:
Manufactured from 100% PEFC-certified plantation Radiata Pine, supporting renewable and responsible forestry.

Formaldehyde-Free:
Bonded using formaldehyde-free adhesives for a healthier, more sustainable build.

Termite and Fungal Resistant:
Available with CodeMark-certified T3 Green (H3) treatment for protection against termites, borers, fungal decay, and rot.

ON THE JOB SITE

Optimised for Timber Frames:
Designed to integrate with standard wall framing, offering a complete timber solution without the need for steel.

Fast and Efficient Installation:
Prefabricated systems with simplified screw connections reduce labour and installation time.

Adjustable On Site:
Easily modified to suit different wall heights and opening widths.

Ready-to-Go Systems
Supplied as a complete kid of parts, with connection hardware included for streamlined onsite assembly.

Improved Thermal Performance:
Minimises thermal bridging and supports energy-efficient building envelopes.


XLT BRACE

XLT BRACE

XLT Brace is a prefabricated short wall bracing system designed for simplicity, strength and efficiency.

Manufactured from 90 mm thick engineered timber members, XLT Brace integrates seamlessly with standard timber framing and is anchored using Multinail Stronghold tie-down brackets.

Engineered for high lateral resistance, XLT Brace provides a reliable solution for modern homes where internal walls are limited. It can be used as a standalone bracing element or in combination with the XLT Portal to meet specific design requirements.

STRENGTH BUILT INTO OPEN SPACES

XLT Brace combines stiffness, sustainability, and precision to deliver superior bracing performance.

- High-capacity lateral resistance for open-plan layouts
- Quick installation with pre-drilled connection points
- Compatible with conventional timber wall framing
- Made in Australia from PEFC-certified Radiata Pine

XLT Brace delivers exceptional performance and lasting reliability for residential and light commercial projects.

XLT BRACE

XLT BRACE CONFIGURATION

The XLT Brace is supplied as a complete prefabricated kit, featuring engineered timber members and Multinail Stronghold tie-down brackets for fast, accurate installation. Designed for high lateral resistance, it integrates seamlessly with standard timber wall framing and can be used as a standalone bracing element or in combination with the XLT Portal system for added structural support.

Standard sizes and configurations are outlined in the following tables.

Species	Radiata Pine
Width	90mm
Length	3.6m, 4.8m, 5.4m, 6m (> 6m made to order)
Depth	200mm, 240mm, 300mm, 360mm, 400mm, 450mm
Joint Group	JD5
Tie down bracket	Multinail Stronghold tie down brackets (STD320)

CodeMark Australia
Certificate CM70140

Detailed product description and install instructions available at xlam.co/xltportalinstall

The XLT Brace system can be used in both load-bearing and non-load-bearing wall applications to resist lateral racking forces in accordance with AS 4055:2021. Design bracing capacities for XLT Brace widths from 200 mm to 600 mm are outlined below.

Bracket location & stud wall arrangement	XLT Beam Width	Category 1				Category 2			
		Wall Height (mm)				Wall Height (mm)			
		2440	2590	2740	3000	2440	2590	2740	3000
STD320 bracket inside 90mm XL-10 OR outside without stud 	200	2.2	1.8	1.5	1.1	2.2	1.8	1.5	1.1
	240	3.8	3.1	2.6	2.0	3.8	3.1	2.6	2.0
	300	6.6	6.2	5.2	3.9	6.6	6.2	5.2	3.9
	360	7.9	7.5	7.0	6.4	7.4	7.0	6.6	6.0
	400	8.8	8.3	7.8	7.2	8.3	7.8	7.3	6.8
	450	9.9	9.3	8.8	8.1	9.3	8.7	8.3	7.6
	500	11.0	10.4	9.8	9.0	10.4	9.8	9.2	8.4
	550	12.1	11.4	10.8	9.9	10.4	9.8	9.2	8.4
	600	13.2	12.5	11.8	10.8	12.4	11.7	11.1	10.1
STD320 bracket outside with single stud 90mm XL-10 	200	2.2	1.8	1.5	1.1	2.2	1.8	1.5	1.1
	240	3.8	3.1	2.6	2.	3.8	3.1	2.6	2.0
	300	7.4	6.2	5.2	3.9	7.4	6.2	5.2	3.9
	360	9.5	8.9	8.4	6.9	8.9	8.4	7.9	6.9
	400	10.4	9.7	9.2	8.4	9.7	9.2	8.7	7.9
	450	11.5	10.8	10.2	9.3	10.8	10.2	9.6	8.8
	500	12.6	11.8	11.2	10.2	11.8	11.1	10.5	9.6
	550	13.7	12.9	12.2	11.1	12.9	12.1	11.5	10.5
	600	14.8	13.9	13.2	12.0	13.9	13.1	12.4	11.3
STD320 bracket outside with double studs 90mm XL-10 	200	2.2	1.8	1.5	1.1	2.2	1.8	1.5	1.1
	240	3.8	3.1	2.6	2.0	3.8	3.1	2.6	2.0
	300	7.4	6.2	5.2	3.9	7.4	6.2	5.2	3.9
	360	11.0	10.4	9.0	6.9	10.4	9.8	9.0	6.9
	400	11.9	11.2	10.6	9.4	11.2	10.5	10.0	9.1
	450	13.0	12.3	11.6	10.6	12.2	11.5	10.9	9.9
	500	14.1	13.3	12.6	11.5	13.3	12.5	11.8	10.8
	550	15.2	14.3	13.5	12.4	14.3	13.5	12.7	11.6
	600	16.3	15.4	14.5	13.3	15.4	14.5	13.7	12.5
STD320 bracket outside with single+double studs 90mm XL-10 	200	2.2	1.8	1.5	1.1	2.2	1.8	1.5	1.1
	240	3.8	3.1	2.6	2.0	3.8	3.1	2.6	2.0
	300	7.4	6.2	5.2	3.9	7.4	6.2	5.2	3.9
	360	10.2	9.6	9.0	6.9	9.6	9.1	8.6	6.9
	400	11.1	10.5	9.9	9.0	10.4	9.9	9.3	8.5
	450	12.2	11.5	10.9	9.9	11.5	10.8	10.2	9.4
	500	13.3	12.6	11.9	10.8	12.6	11.8	11.2	10.2
	550	14.4	13.6	12.9	11.7	13.6	12.8	12.1	11.0
	600	15.6	14.6	13.8	12.6	14.6	13.8	13.0	11.9

IMPORTANT NOTE:
The specified bracing capacity tables are based on an anchor capacity of 54kN in tension. If the anchor design requires a lower anchor capacity (for example if limited by slab edge or corner distances), then the capacity of the capacity tables must be reduced proportionally with the design capacity of the anchor.

For full span tables, tie-down brackets, knee joint steel tension plates, and concrete anchor details, refer to the XLT Portal & Brace Technical Document.

XLT PORTAL

XLT PORTAL

The XLT Portal is a prefabricated engineered portal frame system that combines structural strength, precision, and design flexibility for modern timber construction.

Each system comprises 90 mm thick members configured as two columns and one beam, joined using proprietary steel plate and screw connections to form robust knee joints. The columns integrate neatly within standard stud wall framing and are anchored using Multinail Stronghold tie-down brackets.

APPLICATIONS:

- Single and double garage portals
- Open-plan living spaces
- Large window and door openings

Made from PEFC-certified Australian plantation pine, the XLT Portal delivers exceptional lateral and vertical load resistance—engineered for where wall lengths are limited and design freedom is essential.

ENGINEERED STRENGTH FOR LARGE OPENINGS

XLAM's XLT Portal is designed to provide dependable structural performance in applications where strength and stability are critical.

Through the integration of engineered timber members and precision steel connections, the system delivers:

- High-capacity lateral and vertical load resistance
- Fast installation and minimal site disruption
- Consistent, repeatable performance
- Reduced reliance on steel fabricators

From garages to glazed openings, XLT Portal makes it easier to design open, light-filled spaces—without compromising structural integrity.

Proudly made in Australia by XLAM from responsibly grown plantation pine.

XLT PORTAL

The XLT Brace and XLT Portal are prefabricated engineered timber systems designed for strength, precision, and ease of installation. Made from sustainably grown, PEFC-certified Australian pine, both systems utilise XLT Beams and proprietary steel connections to deliver dependable structural performance. From large openings and garage portals to short wall bracing applications, XLT provides high lateral and vertical load capacity for modern, open-plan construction.

KEY SPECS

CODEMARK CERTIFIED
Independently certified in Australia and New Zealand for compliance and peace-of-mind.

FAST AND EFFICIENT INSTALLATION
Quick to install with fewer screws and simple connections, saving time and reducing on-site labour.

IMPROVED THERMAL PERFORMANCE
Minimises thermal bridging and supports a more energy-efficient building envelope.

CARBON ABSORBED
492 kg CO_2 stored per m^3

PLANTATION REGROW TIME
~0.16sec per m^3

SYSTEM OVERVIEWS

COMPLETE, READY-TO-INSTALL SYSTEM

The XLT Portal system is supplied as a prefabricated kit, making installation simple and efficient on site.

EACH KIT INCLUDES:

- **XLT Beam 90** columns and beam (2 columns + 1 beam) – manufactured by **XLAM**
- **Multinail** steel knee joint connectors (8 plates)
- **Multinai**l column base tie-down brackets (STD320) (4 brackets)

AVAILABLE SIZES:

The system is available in three standard sizes – **XLT Portal 300, 360, and 400** – to suit a range of span and load requirements.

XLT Portal	Column (2)		Beam (1)	
	d	b	d	b
XLT Portal 300	300	90	300	90
XLT Portal 360	360	90	360	90
XLT Portal 400	400	90	400	90

XLT PORTAL

STRUCTURAL PERFORMANCE – XLT PORTAL

The XLT Portal system can be used in both load-bearing and non-load-bearing wall applications to resist lateral racking forces, in accordance with AS 4055:2021 and AS 1684 Parts 2 and 3.

Design bracing capacities for the XLT Portal system are provided in the table below.

XLT Portal Type	300	360	400
Opening Height (mm)	Bracing Capacity (kN)		
2440	12.1	16.2	18.5
2590	10.5	14.1	16.4
2740	9.2	12.5	14.4
3000	7.5	10.3	11.9

Notes:

1. The portal height is taken from floor level to top of column, allow depth of portal beam over the column. (total portal height = opening height + 300/360/400)
2. Allow portal column width on each side of opening. (total portal width = opening width +600/720/800mm)
3. Bracing values assume moisture content of timber is not exceed 15%, this must be maintained during and after deliver and installation.

TIE-DOWN CONNECTION

For installations on timber floors, each XLT Portal column must be tied down using M12 threaded rods at the column base.

The supporting timber joists or beams must be designed by a structural engineer to resist both compression and tension forces from the tie-down, in line with AS 1720.1.

For detailed design and installation information, including span tables, tie-down brackets, knee joint steel tension plates, concrete anchors, and more, refer to the XLT Portal Technical Document.

STRUCTURAL PERFORMANCE – XLT BRACE

The XLT Brace system delivers reliable lateral bracing performance, achieved with 17 predrilled pan head screws (8 mm diameter, 100 mm or 150 mm length) fixed into standard XLT Beam and paired with Multinail's STD320 bracket.

Bracing capacities are provided for Category 1 and Category 2 applications (as defined in AS 1720.1–2010), with values available for nominal wall heights. Capacities for intermediate heights can be easily interpolated to suit your design.

Category 1	Category 2
Structural members for houses for which failure would be unlikely to affect an area* greater than 25m^2; OR secondary members in structures other than houses	Primary structural members in structures other than houses; OR elements in houses for which failure would be likely to affect an area* greater than 25m^2

MULTINAIL™

XLT Brace and XLT Portal are developed in collaboration with Multinail, incorporating Stronghold tie-down brackets for a complete, compliant system.

XLAM

BUILD LIKE THE WORLD DEPENDS ON IT.

XLT ORDERS

For more information regarding XLT products, contact XLAM:

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XLAM.COM.AU

MASS TIMBER MADE EASY.

XLT

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AUSTRALIAN GROWN & MADE

Responsible Wood

PEFC
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CodeMark Australia
Certificate CM70140

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