

THERE IS NO END TO
HYSPAN'S POSSIBILITIES.



Hyspan
Laminated Veneer Lumber

Hyspan® LVL is laminated veneer lumber specifically manufactured for a wide range of structural applications in residential housing, commercial buildings and other structures.

Hyspan® is manufactured in Australia from Radiata Pine veneers which are rotary peeled, dried and laminated together under heat and pressure in continuous long lengths. The grain direction of all veneers is orientated in the longitudinal direction. The adhesive system provides a Type 'A' Bond (marine) which has proven performance for in excess of 50 years.

What can builders and specifiers expect from Hyspan?



Specifiers and builders can expect uniform and true cross sections from Hyspan.

High structural reliability

Hyspan is significantly more uniform than normal sawn timber because of its unique laminated construction. Greater uniformity equates to more reliable performance. Provided Hyspan is installed correctly, unhappy customers and time consuming call backs will become a distant memory.

Strong but lightweight

Hyspan has a high strength-to-weight ratio when compared with other commonly used structural materials. This means lighter members and therefore improved productivity on-site.

Straight and true cross sections

Hyspan is ripped from a 1.2 metre wide continuous length. The result is straight members with uniform and true cross sections.

Stability and accuracy

Hyspan is a seasoned, manufactured product which has little tendency to warp, bow, shrink, twist or split. Unlike conventional sawn timber or nail plate jointed timber, Hyspan can be width sawn or docked on-site to the required size or lengths without affecting the design properties.

Easier and more economical to install

When building with Hyspan there's no need to plane or straighten members. Normal wood working tools and techniques can be used. This means real time and cost savings on-site. Fixing of Hyspan is achieved in exactly the same way as for seasoned softwood timber (Joint Group JD4).

Guaranteed quality

Hyspan is product certified by the Plywood Association of Australia (PAA). Certification given by JAS-ANZ accredited bodies is recognised as 'Evidence of Suitability' in the Building Code of Australia. Protect the integrity of your building design and do not accept look alike materials.

Look for the Hyspan product branding.





Hyspan is often used in place of heavy and difficult to install steel.

Hyspan, the lightweight alternative.

The sections depicted below show the reduced cross section requirement for Hyspan when used as roof beams compared with unseasoned (imported) Oregon.



Roof Beam Comparison

Figure (i)
150 x 45 mm Hyspan
equivalent to 200 x 50
F7 Unseasoned Oregon



Figure (ii)
300 x 63 mm Hyspan
equivalent to 350 x 100
F7 Unseasoned Oregon

Where can builders and specifiers use Hyspan?

Hyspan is an innovative product ideally suited to residential and commercial buildings. Compared to traditional sawn timber, Hyspan shows significant installed cost savings when used in any number of different structural applications. Hyspan is especially well suited where long lengths and clear spans are required. - refer to the 'Quick Reference Guide' (right).

What are the structural properties for Hyspan?

The structural properties for Hyspan have been determined by testing as required by AS/NZS 4357 Structural laminated veneer lumber. The design properties given below are therefore suitable for working stress design in accordance with AS 1720.1-1988 SAA Timber structures code, Part 1: Design methods.

Characteristic strength properties and other required design data for limit states design in accordance with AS 1720.1-1997 Timber structures, Part 1: Design methods, are also available in the technical brochure 'Limit States Design with Hyspan'. Just call 1800 808 131 to obtain your copy.

| DESIGN PROPERTIES FOR HYSpan | | |
|------------------------------------|-----------------|------------|
| Modulus of elasticity | E | 13,200 MPa |
| Basic working stresses | | |
| Bending | F _b | 16.0 MPa |
| Tension parallel to grain | F _t | 10.0 MPa |
| Compression parallel to grain | F _c | 13.0 MPa |
| Shear in beams | F _s | 1.7 MPa |
| Compression perpendicular to grain | F _p | 4.7 MPa |
| Shear at joint details | F _{sj} | 1.8 MPa |
| Joint strength group | | JD4 |

Note: Hyspan has not been assigned an F grade. Specification of the name Hyspan signifies the applicability of the properties given in the table above and meets the stress grade identification requirements of AS 1720.

Quick Reference Guide

for use of Hyspan:

Residential Housing

- Bearers
- Bearers for Pole Frame Construction
- Floor Joists
- Lintels
- Ceiling Joists
- Hanging Beams
- Counter Beams
- Strutting Beams
- Underpurlins
- Hip or Valley Rafters
- Rafters
- Roof Beams
- Verandah Beams
- Garage Roof Pitching Beams
- Garage Roof Strutting Beams
- Truss Members

Commercial Buildings

- Roof Purlins
- Wall Girts
- Box Beams and 'I' Beam Flanges
- Portal Frames
- Floor Joists and Bearers
- Trusses

Hyspan longer by nature.

STANDARD HYSPAN SECTIONS AND THEIR APPROXIMATE MASS

| | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|
| 95 x 36 | 2.2 kg/m | 95 x 45 | 2.8 kg/m | 95 x 63 | 3.8 kg/m | 150 x 75 | 7.2 kg/m |
| 130 x 36 | 3.0 | 130 x 45 | 4.2 | 130 x 63 | 5.2 | 300 x 75 | 14.4 |
| 150 x 36 | 3.5 | 150 x 45 | 4.4 | 150 x 63 | 6.0 | 400 x 75 | 19.2 |
| 170 x 36 | 4.0 | 170 x 45 | 5.0 | 170 x 63 | 6.9 | 525 x 75 | 25.2 |
| 200 x 36 | 4.7 | 200 x 45 | 5.8 | 200 x 63 | 8.0 | 600 x 75 | 28.8 |
| 240 x 36 | 5.6 | 240 x 45 | 6.9 | 240 x 63 | 9.7 | | |
| | | 300 x 45 | 8.6 | 300 x 63 | 12.1 | | |
| | | 360 x 45 | 10.4 | 360 x 63 | 14.5 | | |
| | | 400 x 45 | 11.5 | 400 x 63 | 16.1 | | |
| | | | | 450 x 63 | 18.1 | | |
| | | | | 600 x 63 | 24.1 | | |

All sizes available in lengths to 12 metres, longer lengths and other sizes available subject to enquiry.

DETAILED INFORMATION AT YOUR FINGERTIPS

Our comprehensive range of technical brochures for design and installation including easy-to-use span tables.



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