

Meyer TIMBER®

LVL COMPLIANCE

There are a lot of new LVL products coming into the market and many of them are being integrated into the supply chain, but how do you know they comply? When sourcing LVL from overseas there is a responsibility on the supplier to ensure the manufacture, properties and branding are such that there are no false product claims. The Australian Standard for LVL is the AS/NZS 4357 series, which comprises 5 parts ranging from general specification to methods of testing for formaldehyde. AS/NZS 4357 can also determine compliance with the National Construction Code (NCC) as it is an acceptable manufacturing document as per Section 8 of AS1720.1 which is a primary reference standard of the NCC.

If a product claims to comply with AS/NZS 4357 the requirements are very specific, and include:

- The adhesive used in the manufacture must be a phenolic Type A Bond. No other adhesive is allowed if AS/NZS 4357 compliance is specified.
- A product name is required on each piece. LVL does not have a defined set of properties like F, MGP, Glulam, or Plywood grades. The properties are matched to the actual product, which is referenced by the product name. Examples of this supplied by Meyer Timber® are hySPAN, MT-LVL E12, or Siegerspan.
- The set of structural properties relates back to test methods in the AS/NZS 4357 and AS4063 series. Especially for overseas products this needs high level technical input:
 - Stiffness (or MoE) data from European standard data sheets is usually taken as E_{local} whereas Australian values are E_{global} . The difference accounts for shear deformation which is in the order of 5% higher (on solid rectangular sections) for E_{local} so on face value European LVL looks better.

- Some tests are performed differently and need to be normalised (if possible) for publication of Australian values. Shear tests are one example of this. If test methods cannot be normalised then local testing to AS/NZS 4357 needs to occur to obtain the required property.

- Note that some properties can be obtained through AS1720.1 via strength group determination which is species based. This should however also be assessed as LVL behaves differently to solid sawn timber.

- Continuous verification of production batches is required to ensure the major properties, being stiffness and bending strength, remain above published values. European standards work on a rolling average of the last 100 samples, but AS/NZS 4357 works on a 30 sample rolling calculation. This means any variance such as seasonal fibre will have a larger effect on these properties.
- Branding is very specific on what is required. It includes the product name above, adhesive, formaldehyde levels and treatment if applied.

With the spotlight being put onto compliance of building products following issues with combustible cladding it is the responsibility of the supplier (importer) to ensure that the appropriate due diligence has been undertaken and continual monitoring occurs. At Meyer Timber® we take this seriously and can assure you that any products supplied by Meyer Timber have been rigorously assessed to meet the required specification. If you are unsure or want clarification on any of these aspects don't hesitate to ask your LVL supplier.

George