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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? Product certification to **AS/NZS 4357 - Structural laminated veneer lumber** is a form of LVL compliance as it is an acceptable manufacturing document as per Section 8 of AS1720.1 which is a primary reference standard of the National Construction Code (NCC). Evidence of suitability can take a number of forms with the most common being Codemark, or a certificate from a JAS-ANZ certification body or professional engineer experienced in timber. Any certificate relied upon should be reviewed carefully as only the products directly listed are included and it may include limitations for use such as "vertical use only", "on edge use only", or "not to be used in trusses".

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 meySPAN13, meySPAN14, meySPAN15, meyFRAME10 and meyWALL.
- A set of structural properties which relates back to test methods in the AS/NZS 4357 and AS4063 series. Especially for overseas products this needs high level technical input:
 - Some tests have specific sample sizes and are performed differently to AS/NZS 4357. If test methods cannot be normalised then local testing needs to occur to obtain the required property.
 - Some properties can be obtained through AS1720.1 via strength group determination which is species based. This must be assessed as LVL behaves differently to solid sawn timber.
 - Stiffness (or MoE) data from European standard data sheets is usually taken as E_{local} whereas Australian values are E_{global} . The difference is in the order of E_{local} being 5% higher so on face value European LVL looks better.

- 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, adhesive, formaldehyde levels and treatment if applied.
- Any preservative treatment applied needs to have Codemark or comply to AS/NZS 1604 which has retention requirements and its own specific branding format.

In addition to product certification there are also legislative requirements that must be met. These include the Illegal Logging Prohibition Act, QLD structural timber product identification and treaceability, and general consumer laws designed to protect the end user.

With the spotlight being put onto compliance of building products following the Building Confidence Report 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 us 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.









