



Purchasing wood panels: All you need to know.



Purchasing the right wood panel products... ticks all the boxes.

To ensure you get wood panel products that meet your needs and legal obligations you need to be able to tick all these boxes.

- QUALITY**
- SAFETY**
- LEGALITY**

Worryingly there are reports of wood products that are not fit for purpose being used in local construction.

i The Australian Industry Group (AiG) reported in November 2013 the nature and size of the issue. Report available at: www.aigroup.com.au/policy/reports/archive2013

The AiG highlights the impact that non-compliant building products are having on the building industry. Since this report was tabled in 2013 there have been several high profile product failures including:

- Electrical wiring
- Facading

THE AUSTRALIAN WOOD PANELS INDUSTRY

The Australian wood panels industry manufactures around 1.48 million m³ of products such as Particleboard, MDF and Plywood valued at \$2 billion per year and employs around 4000 people. In most cases manufacturing is located in regional communities providing opportunities for local people.

Non-compliant products are present in the Australian market and there are significant financial as well as health and safety risks associated with the use of such product. To ensure products are fit for purpose, safe and you meet your legal obligations please read the details under the information tabs relating to you.

The Engineered Wood Products Association of Australasia (EWPAA) operates a product certification scheme that is accredited by JAS-ANZ. This Scheme requires that a production facility maintains a documented process control system, conducts in-mill end product testing and has rigorous internal audit procedures. The mills are subject to third party audits by the EWPAA. Additionally, end product quality is independently verified by an external body (EWPAA) by testing and inspection of test samples both supplied by the mill and selected independently of the mill in the open market and during audits.

When purchasing Wood Panel products, look for credible product certification marks, such as the EWPAA mark (pictured below).





QUALITY

Products meeting Australian Standards are fit for purpose in Australian conditions. Product certification assures this.



SAFETY

Non-compliant wood panel products can lead to unsafe conditions in the workplace and at home.



LEGALITY

Legal wood products are correctly identified and are made from legally sourced materials. They comply with all regulatory requirements. Certification assures this.

WHAT COULD POSSIBLY GO WRONG?

Sub-standard materials can lead to structural failure and this has happened.

FORMWORK STANDARDS

For Formwork plywood to comply with AS 3610 and meet safety regulations:

1. It must meet AS 6669-Formwork Plywood and be structurally rated in accordance with AS/NZS 2269
2. Bonding quality must comply with AS/NZS 2269 or AS/NZS 2271
3. The sheet label must include:
 - a. The manufacturer's name or registered mark
 - b. The words 'formwork plywood' or product description

c. Reference to AS 6669, or where structural properties of AS/ NZS2269 are claimed, reference to both of these standards.

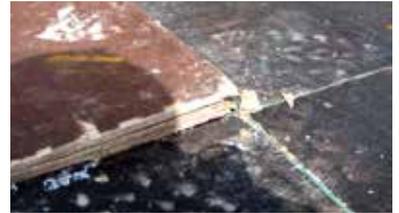
d. The surface quality

e. The grade of the veneers

f. The bond type of the glue-line

g. The stress grade of the sheet. If different, the stress grades both parallel and perpendicular to the face grain in that order, eg. F17/ F14.

h. The section properties. For listed constructions the panel construction code. For non-standard constructions, the (I) and the (Z) values as determined by AS/NZS2269.



As can be seen from the photo above, the product is clearly substandard material without any product marking. Bonding between veneers was non-existent on some corners and subsequent testing showed that the product did not meet the bond quality requirements of the required Australian Standards.

The result was that the formwork had to be deconstructed and replaced at the cost of the supplier.

NON-CONFORMING FORMPLY

In April 2014 a pack (25 sheets) of imported "Formply" was purchased in the Sydney market. This product was sold as Formply Type A bond, F17.

Subsequent testing of this product showed:

- a. 40% of the sheets failed the A-bond test.
- b. The indicated strength was F14 and if the bending strength criteria for Formply were applied the F-Grade would be F11.

c. There were significant issues with the joints in the plywood, primarily this related to the use of non-structural joints (see photograph) and they were not bonded with a durable structural adhesive.

d. The branding of the products stated that it was F17 which is false and misleading as the tests show it is only F14 under AS/NZS 2269.0. Further the product is clearly labelled as Formply and therefore AS6669 should be the reference standard.



Photograph of non-structural joints in imported plywood.

It was the opinion of the report that the product was potentially unsafe and should not be used in structural applications.

GOVERNMENT WARDROBE AND JOINERY DESIGN AND PROCUREMENT FAILURES LEAD TO \$1.3 MILLION PROJECT COST BLOWOUT (Industry Edge)

A northern NSW multi-unit building project cost developers a reported additional \$1.3 million when imported wardrobes and joinery were the cause of a non-compliance order issued by Housing NSW. The entire project had to be renovated and completed with Australian made

wardrobes and joinery products after emission levels 'soared through the roof'.

Unfortunately, Housing NSW's own Design Requirements make no mention of the relevant Australian Standards.

The entire project had to be renovated and completed with Australian made compliant products after imported products were found to be non-compliant.

QUALITY

The best way to purchase products that are of the most suitable quality is to buy based on product standards.

According to Standards Australia the purpose of standards are four fold:

“Voluntary or mandatory applications. Standards that specify requirements to achieve minimum objectives of safety, quality or performance of a product or service.

Regulatory compliance. Standards that are used to specify minimum least-cost solutions to technical requirements expressing characteristics, performance and design criteria compatible with legislative requirements.

Contractual purpose. Standards that serve as purchasing specifications or technical conditions of contract between two parties.

Guidance. Standards that may be intended for educational purposes.”

There are Australian Standards for wood panel products such as Plywood, Particleboard, MDF, & LVL-OSB. They specify the quality and performance requirements for products in the Australian environment.

 To view a list of the relevant standards relating to wood panel products visit our website: www.ewp.asn.au

Even if there is no specific reference to the relevant standards in regulations often they are referred as part of contractual arrangements. The fact that a product conforms to an Australian Standard ensures that it is fit for purpose and use in the local applications that the standard relates too.

Products that do not conform to Australian Standards may not be suitable for Australian conditions. In many cases a design is based on the assumption that a product meets a set of performance criteria and most often these relate to an Australian Standard. If the product does not meet the appropriate performance criteria it follows that the design may be flawed and the product may fail in that application.

The best way to ensure that a product meets an Australian Standard is to purchase products that are independently certified by a third party.

Product Certification is a special case of product conformity assessment. It is an independent verification of compliance by the Certification Body (CB).

The CB attests to the conformity of the product based on its evaluation of the product. This evaluation can be conducted by the CB itself or may be outsourced to laboratories, inspection bodies or auditors/assessors. In Australia the EWPAAs operate as a CB and provides an independent verification of wood panel product conformity to the Australian and various other standards.

 To learn more about Australian Wood Panels Certification Schemes go to: www.ewp.asn.au/?q=certification

Unfortunately, there is product in the market that is fraudulently labelled or mislabelled in such a way as to imply that it meets Australian Standards. If a product has a claim appearing on it that it is certified there is a simply way to check.

To verify if the claims made by a manufacturer that their products are certified requires the gathering of some information.

1. What is the manufacturer's name?
2. What is the product?
3. What standard is the manufacturer claiming to meet?
4. What is their certification number?
5. Who is the certifying body?
6. Who is the accreditation body?
7. Obtain a copy of their certificate.

Much of this information can be found either printed on the product or on the pack label or simply ask the supplier.

Once you have this information you should be able to go to the Certification Bodies web-site and check if the company is certified. You should also be able to go to the Accreditation Bodies web-site and verify that the CB is legitimate i.e. accredited.

 For more details refer to our website: www.ewp.asn.au

We recommend that when purchasing wood panel products that you specify that they meet the relevant Australian Standard and preferably they are certified that they meet this standard. In this way you have the best chance of purchasing a product that is fit for purpose in your application. Purchasing EWPAAs certified products ensures this.

SAFETY

Safety should be a key consideration to a buyer. There are obligations under the relevant OH&S regulations that impact on buying decisions.

In the SafeWork Australia model work place health and safety bill and regulation there is a requirement for importers, designers, buyers, manufacturers and installers to ensure that structures and plant are safe.

Many wood panel products perform a structural duty and the impact on safety can be catastrophic if non-compliant products are used.

If for example a failure of formwork was to occur and it was found that non-conforming plywood was used in the installation then all those mentioned above would have liability under the Regulation so there is a legal obligation as well. It does not require a catastrophe to fail the duty under the Act, just because no one gets hurt doesn't mean your obligation has been met.

The Model WHS Act Section 19-25 details the general duty of care of designers, manufacturers, importers, suppliers, installers and managers not to expose others to occupational health and safety risks.

The model WHS Regulation Part 5 and 6 details more specific duties for these persons relating to Plant, Structures and Construction.

SafeWork Australia provides general guidance in these responsibilities and also provides specific guidance on Formwork, False Work and this guidance makes it clear that these items are structures and the components that make them up are plant.

Specific consideration should be given to these materials as designs will often specify product conformance to various Australian Standards. Lack of conformance to the Standards may cause failure of the structure and pose significant safety risks under the WHS Act. There are specific requirements in the WHS regulations relating to construction under Section 6.

In particular Formwork and Falsework component designers are responsible for designing components that are safe to manufacture, assemble and use for the purpose they were designed for. The Formwork and Falsework components are *plant*.

Anything constructed to support a load, including Formwork and Falsework, can be referred to as a *structure*. Design of structures and plant are inter-related and designers may have multiple responsibilities.

An importer of plant must:

- ensure that the plant is inspected having regard to the information provided by the manufacturer; and
- if the information provided by the manufacturer requires the plant to be tested– ensure that the plant is tested in accordance with that information; (Ch5 Model WHS reg)

A person with management or control of Formwork and Falsework at a workplace has a responsibility to have Formwork and Falsework inspected and maintained so that it is safe. This includes inspections before the Formwork and Falsework is loaded, after loading and after any repairs, alterations or additions to Formwork and Falsework are made.

In this regard the regulation is clear that these persons have a specific duty to ensure that plant and structures are suitable for the purpose that they are intended and therefore must ensure that the product they specify is fit for purpose. It does not seem unreasonable for an importer to ensure that products conform to applicable Australian Standards that relate to a particular design.

By purchasing products certified to the relevant standards by third party certifiers such as EWPA you can be assured that the product meets the requirements of the performance standards and also perform in suitable designs.

 For more information on OH&S duties visit our website:
www.ewp.asn.au

 For more detailed information please consult the model WHS Act at:
www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-whs-act/pages/model-whs-act
or Regulation at:
www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/model-whs-regulations

 Specific Guidance documents are also available from SafeWork Australia at:
www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/guide-whs-regulations

 Specific Guidance from SafeWork Australia for Formwork and False Work is available at:
www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/guidance-formwork-falsework

LEGALITY

There are a number of legal obligations that importers, buyers and users of wood panel products need to comply with.

The *Illegal Logging Prohibition Act 2012* came into force in November 2012 to ensure that timber products have not been sourced from illegally logged forests.

It is now an offence to intentionally, knowingly or recklessly import illegally sourced timber including wood panel products such as Plywood, LVL, particleboard and MDF.

To conform to the requirements a suitable due diligence process needs to be undertaken.

Due diligence can be summarised as a four-step process:

- Step 1. Gathering information about the timber or timber product you are importing
- Step 2. If appropriate, using a Timber Legality Framework or Country Specific Guidelines.
- Step 3. Assessing the risk the timber or timber product you are importing has been illegally logged
- Step 4. Where necessary, undertaking extra steps to reduce the risk the timber you are importing has been illegally logged.

i More detailed guidance on the due diligence process and the regulations can be found in the due diligence documents published by DAFF which can be found at: www.agriculture.gov.au/forestry/policies/illegal-logging/information-resources

i The FWPA has published a set of guidance materials and a model due diligence system which is available free of charge by registering at: www.timberduediligence.com.au

Importers will also be asked to make a declaration to Customs about compliance with the due diligence requirements. This will be in the form of a Community Protection Question asked as part of the import declaration process.

LEGAL REQUIREMENTS OF THE NATIONAL CONSTRUCTION CODE (FORMERLY THE BCA)

There is also a legal requirement on contractors to ensure that products that conform to the required standards are used. Examples include the National Construction Code (NCC Formerly the Building Code of Australia, BCA) for plywood.

For example Regulations on structural plywood used in buildings include references to a number of Australian Standards. The NCC Volume 2 references AS/NZS 2269: Plywood – Structural for wall cladding and this Standard is also referenced by other Australian Standards. These Standards require structural plywood to be branded to reflect stress grades, the Australian Standards they have met, and the manufacturer's name or registered trademark.

Building surveyors and inspectors who carry out frame inspections should ensure that any structural plywood is appropriately branded in accordance with AS/NZS 2269 Plywood – Structural. If the product does not have the correct markings or you cannot verify that it meets the requirement of the Australian Standard then it does not comply with the NCC and the legal requirements will not be met.

LEGAL REQUIREMENTS OF AUSTRALIAN CONSUMER LAW (ACL) AND THE COMPETITION AND CONSUMER ACT 2010 (CCA)

There are significant legal requirement defined in Australian Consumer Law (ACL). Product claims on labelling, packaging or promotional material, including claims made about the product's compliance with mandatory and voluntary standards must be able to be substantiated. Specifically, the ACL prohibits businesses from giving a false or misleading impression about their goods or services. Businesses must not engage in conduct that misleads or deceives or is likely to mislead or deceive and must not make false or misleading representations about the quality or characteristics of its goods or services, including its:

- history
- place of origin
- standard, quality, grade, nature or composition of or manufacturing process
- sponsorship or approval
- performance characteristics.

We have found that some imported products make false claims about their performance. Product testing may be sought to substantiate claims about product compliance with relevant standards. It should be noted that most wood panels standards have a particular requirement for testing with a statistical significant number of samples required to demonstrate compliance to the standard. A one off sample does not substantiate compliance.

We believe the best way to ensure that you purchase products that comply with standards is to ensure they are certified by a third party such as the EWPA.



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