



## Executive Summary

The Engineered Wood Products sector is significant with a turnover in Australia of approximately \$2.1B and a workforce, mostly regional, of 4,200.

The sector is experiencing significant problems with product non-compliance that is affecting the health and safety of construction workers and occupants of buildings. It is also affecting Australian Industries ability to compete on a “level playing field”.

Testing of product purported to meet Australian/New Zealand Standards has shown alarming levels of non-compliance of mostly imported product when compared to companies producing to a credible product certification program. Details of non-compliance rates from laboratory testing are detailed in this submission.

However, mandatory certification has not proved to be effective in the electrical and plumbing sectors due to an increase in fraudulent certification, and the EWPPAA does not advocate mandatory certification. Instead, it is recommended that an Independent Compliance Body be set up within the ACCC to investigate documented non-trivial complaints and prosecute where appropriate.

The legislative framework already exists for such action under the misleading information sector of the Competition and Consumer Act 2010.

Severe financial penalties need to be imposed where it is proved that an organisation is either selling non-compliant product, or where they are importing it directly for use in Australia.

It is suggested that an Independent Compliance body be self-funded directly from the significant infringement penalties for convictions.

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**EWPPAA**

## 1. Introduction

The Engineered Wood Products Industry is important to Australia. It manufactures 1.55 million m<sup>3</sup>/year of Particleboard, Fibreboard, Plywood and Laminated Veneer Lumber (LVL) value at around \$2.1B. It employs approximately 4,200 people, the majority of which are in the regional areas of South Australia, Western Australia, Queensland and NSW.

Australian production supplies close to 80% of demand, with the balance supplied mostly from China, Malaysia and New Zealand.

Australian producers of wood products recognise that they must be competitive with imported products, but there are serious concerns that competition is frequently not on “a level playing field” due to some imported product not meeting Australian/New Zealand Standards.

This submission is **not** about erecting barriers to imports. It is about ensuring that consumers in Australia can have confidence in products in the market place.

## 2. Impact of non-compliance on the supply chain. Non-compliant product impacts the supply chain at a health and safety, as well as a financial level.

### (a) Health and Safety impacts of non-compliant product.

**Construction Phase:** The structural performance of plywood and LVL formwork for concrete pours is the largest risk. Designers use the grade properties of the product to design formwork that is strong enough for the loads experienced during concrete pours. Inadequate properties clearly pose a significant risk to construction workers through catastrophic failure.

**Completed Buildings:** Occupants of buildings are exposed to risk of injury or death if structures do not perform their function to protect against storms and cyclones. Since cyclone Trace decimated Darwin in 1974, building codes have been developed to ensure performance at wind speeds encountered once every 50 years (residential) or longer (for infrastructure buildings) but these rely on the structural properties of the products used.

A more insidious issue is the risk of formaldehyde emission from engineered wood products. Formaldehyde is a known carcinogen and accordingly NICNAS\* recommends maximum emission levels for exposure. Because it is significantly cheaper to manufacture EWP's\*\* from glues that emit higher levels of formaldehyde, there is an economic driver toward non-conformance of branded emission class. This affects the safety during construction (e.g. cabinetry manufacture where workers are exposed to fresh product for long periods of time) and occupants of buildings.

**(b) Financial Impacts of Non-compliant product.**

Broadly, these can be summarised as:

- Cost of rework in the construction industry (examples that EWPAA<sup>+</sup> have encountered – concrete pour structural failure, concrete repairs required because of poor finish, replacement of cabinetry in hotel development due to excessive formaldehyde emission);
- Insurance cost of structural failure during storm.

**3. Evidence of the extent of non-compliant product from EWPAA testing.**

The EWPAA operates a NATA\*\*\* accredited laboratory to test structural and physical properties and formaldehyde emissions of EWP's. It conducts on-going test of member's product from Australia, New Zealand, Fiji and PNG as part of the JAS-ANZ accredited product certification programs that it operates. The product certification consists of:

- Annual or bi-annual audits of the process control and quality systems of the manufacturing site;
- Daily or weekly testing of structural, physical and emission properties of product;
- Marketplace surveillance inspection of product;
- Proficiency testing to ensure that the manufacturer's laboratory test equipment can accurately determine batch compliance with Standard.

The EWPAA also conducts ad-hoc testing of non-members (generally imported) product.

A summary of the number of tests and the results of the tests are shown on the following page. Member's products are those which are part of the EWPAA's product certification scheme. Non-member's products are generally imported both certified by other certification agencies (or at least branded as such non-certified).

From these results, it is clear that manufacturing product under an independent, rigorous certification scheme markedly reduces the incidence of non-compliance substantially.

*	NICNAS	National Industrial Chemicals Notification and Assessment
**	EWP's	Engineered Wood Products
***	NATA	National Association of Testing Authorities Australia
+	EWPAA	Scheme Engineered Wood Products Association of Australasia Ltd.

Members Products - ED Data				
<b>Plywood 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
BQ	8616	167	2%	
MP	298	31	9%	
CHOH	535	3	1%	
<b>LVL 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
BQ	4514	22	0%	
MP	220	8	4%	
CHOH	247	0	0%	
<b>I Beam 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
BQ	1159	14	1%	
CHOH	79	0	0%	
<b>Formwork 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
Adhesion	219	14	6%	
W/Absorp	236	0	0%	
Cure	237	0	0%	
Durability	234	1	0%	
<b>Particleboard 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
Thickness	566	17	3%	
MC	583	0	0%	
Th Swell	575	2	0%	
WBS	420	19	4%	
CHOH	907	19	2%	
IB	579	0	0%	
SS	398	0	0%	
MoE	180	1	1%	
MoR	578	2	0%	
SWA	166	13	7%	
GBQ	177	3	2%	
Th Stab	176	0	0%	
<b>MDF 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
Thickness	272	9	3%	
MC	282	0	0%	
Th Swell	243	8	3%	
WBS	119	5	4%	
CHOH	307	4	1%	
IB	256	5	2%	
SS	252	3	1%	
MoE	235	0	0%	
MoR	254	6	2%	

Non Members Products - ED Data				
<b>Plywood 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
BQ	161	95	37%	
MP	21	4	16%	
<b>LVL 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
BQ	0	8	100%	
CHOH	2	0	0%	
<b>Formwork 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
Adhesion	24	12	33%	
W/Absorp	26	0	0%	
Cure	23	1	4%	
Durability	24	0	0%	
<b>Particleboard 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
Thickness	3	1	25%	
MC	7	0	0%	
Th Swell	5	1	17%	
WBS	2	1	33%	
CHOH	15	0	0%	
IB	4	1	20%	
SS	4	0	0%	
MoE	1	2	67%	
MoR	6	2	25%	
Th Stab	1	0	0%	
SWA	1	0	0%	
GBQ	1	0	0%	
Th Stab	1	0	0%	
<b>MDF 01.01.2013 - 15.07.2015</b>				
Test	Pass	Fail	% Fail	
MC	1	0	0%	
Th Swell	2	0	0%	
WBS	0	1	100%	
CHOH	8	4	33%	
IB	1	1	50%	
SS	3	0	0%	
MoE	1	0	0%	
MoR	0	2	100%	

**Key**

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|--|--|--|
| <b>BQ</b> = Bond Quality                             | <b>MP</b> = Mechanical Properties tests            | <b>CHOH</b> = Formaldehyde                             |
| <b>Adhesion</b> = Surface film adhesion to substrate | <b>W/Absorb</b> = Water absorption of surface film | <b>Cure</b> = Extent of polymerisation of surface film |
| <b>Durability</b> = Durability of surface film       | <b>MC</b> = Moisture content                       | <b>Th Swell</b> = Thickness swell                      |
| <b>WBS</b> = Wet Bend Strength                       | <b>IB</b> = Internal bond strength                 | <b>SS</b> = Surface soundness                          |
| <b>MOE</b> = Modulus of Elasticity in Bending        | <b>MOR</b> = Modulus of Rupture in Bending         | <b>SWA</b> = Surface water absorption                  |
| <b>GBQ</b> = Glue Bond Quality (flooring)            | <b>Th Stability</b> = Swelling resistance          |  |

#### 4. **Current Regulatory Framework problems.**

Australia has extremely good product standards via either Australian or joint Australian/New Zealand standards system. These reflect the product characteristics necessary to provide safe and reliable performance. The National Building Code (NBC) references many of these.

The Competition and Consumer Act (2010) adequately addresses misleading product information, such as a brand not truly representing the properties of a product.

However, the EWPAA is frustrated by the failure to police existing regulations to prevent the use of non-compliant building products. The problems that we see are:

- There are no surveillance mechanisms to identify non-compliant product. Without surveillance, non-compliance issues are simply not being identified;
- There are a large number of small importers of EWP's. Many of these are small companies with very limited paid up capital or assets and disappear if significant product quality issues arise. This makes prosecution difficult and not cost effective;
- Reliance on product failure like the Docklands Cladding Fire is not a good indicator of the extent of the problem of non-compliant product, since the frequency of severe events (fire, storm, and cyclone) is relatively low. There is no data on the less obvious compliance issues, such as air quality in caravans, temporary buildings and cabinetry;
- The combination of lack of surveillance, difficulty and speed of legal process avenues and lack of meaningful penalties for selling non-compliant product mean that potential profit from importing non-compliant product outweighs the risk of penalties for selling misrepresented product.

In summary, the lack of product surveillance (irrespective of source) together with the lack of financial disincentives for importing/selling non-compliant product generate an environment where non-compliance levels are significant and the public is put at risk.

The situation is analogous to compliance with road speed limits. If there were very few police, no speed detection devices, and infringement penalties were low, it is probable that speed compliance rate would also be lower.

Clearly, a more effective way to address product non-compliance is to have an organisation that undertakes surveillance in response to non-spurious complaints and applies significant penalties in the case of non-compliance.

#### 5. **Identification of Non-compliant Product.**

The identification of non-compliant product must be non-discriminatory and apply to all EWP's, both domestically produced and imported.

The existing situation where the EWPAA undertakes market surveillance could be strengthened to formalise some testing of all product. This would be sufficient to document a complaint to an independent compliance body (ICB).

The cost of extended marketplace surveillance by the EWPAA needs to be addressed by ensuring that a portion of penalties of non-confirming product sale are repatriated back to the EWPAA by the ICB.

Most of the building products industry is represented by peak bodies similar to the EWPAA, so the model proposed is broadly applicable.

It is emphasised that the decision by the ICB to prosecute non-compliance should not be based on the initial surveillance by the EWPAA or equivalent. Initial surveillance should be sufficient to document the basis for non-compliance in a manner detailed enough to ensure that the ICB can determine whether further action is warranted.

In all cases, complaints need investigation by the ICB with representative product testing by a NATA certified test facility of ICB's choosing. This will ensure independence and impartiality of investigation of a complaint.

## **6. Preferred option for enforcing regulation to prevent use of non-compliant product.**

Mandatory product certification is **not** an effective mechanism to reduce the incident of non-compliant product. Both the plumbing and electrical product sectors are experiencing difficulties with non-compliance despite mandatory certification. These sectors are currently dealing with fraudulent certification and documentation, resulting in product in the market that has appropriate certification, but is still non-compliant.

The EWPAA is also seeing fraudulent certification of EWP's particularly in the area of formply. This is potentially very serious, as construction site managers who correctly undertake correct specification and inspection of formply as part of their due diligence in providing a safe working environment for employees and contractors are being misled by this product misrepresentation.

It is proposed that the only effective way to reduce non-compliant product use is to make it an offence to either:

- (a) Sell non-compliant or misrepresented product;
- (b) Use non-compliant or misrepresented product where it is directly imported by the first user.

Severe financial penalties need to be imposed for conviction, as this must act as a deterrent and must fund the cost of the operation of surveillance, testing, investigation and legal proceedings.

The ACCC is the appropriate organisation to fulfil this function, as the Competition and Consumer Act 2010 already provides the legislative framework. However, it is essential that the ACCC has an Independent Compliance Body that provides the resources to:

1. Assess all documented non-trivial complaints related to product non-compliance;
2. Organise independent testing to prove complaint within a legal context;
3. Prosecute breaches of non-compliant sale or first use.

It is suggested that an Independent Compliance Body be funded directly from non-compliance infringement penalties.

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