



Engineered Wood Products Association of Australasia

response to Questions on Notice

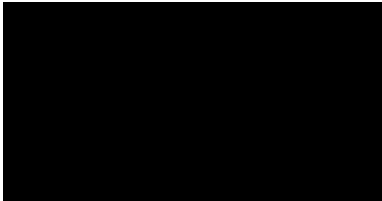
provided to

Senate inquiry into non-conforming building products

10 August 2018

Thankyou for providing opportunity to comment on matters not able to be covered as part of the committee's hearing on 2 August in Canberra. Please find EWPPAA comments to questions below. To differentiate between questions and responses, committee questions have been left in plain text, and responses provided in italics.

Regards,



Dave Gover
CEO

Questions:

1. What impacts do NCPs have on Australian manufacturers and those importing companies who do the right thing?
 - a) What is the cost differential between those producing conforming product and having it tested versus those who don't?

NCPs have a significant impact on manufacturers of conforming products. There are direct costs of verification of product conformity which are relatively easy to quantify. However, there are also much greater indirect costs which are difficult to quantify. There are also manufacturing costs which are incurred by manufacturers committed to product conformity which are able to be avoided by manufacturers of non-conforming products.

EWPPAA estimates of quantifiable costs are in the order of \$150,000 to \$450,000 or more per year, depending on the size of the manufacturer.

EWPA works with manufacturers in countries with much lower costs than Australian manufacturers. Our experience with these manufacturers is that the cost of manufacturing a conforming product in countries with lower costs is not significantly different to manufacturing a conforming product in Australia. This has been confirmed by a consultant working with wood processors in Asia. Manufacturers in these countries are struggling to compete with non-conforming products in the Australian market, and as a result no longer supply their conforming products to the Australian market.

Direct costs of verifying product conformity include product testing, internal monitoring of manufacturing processes, auditing, and certification.

There is little prescription in Australian/New Zealand wood products standards of how often verification activities should be done. In the case of Australian and New Zealand manufacturers of structural wood products, the EWPA knows that the manufacturers typically destructively test approximately 0.2% of product. This frequency is typically increased in response to risk indicators in the manufacturing process. The cost of this testing is dependent on the scale of the manufacturer. For a large manufacturer the cost is approximately \$250,000 per year. For smaller manufacturers, the cost is approximately \$20,000 per year. EWPA certification requires independent verification testing of at least one sample per day at an additional cost of \$10,000-\$15,000 per year. Third party auditing costs are approximately \$6,000-10,000 per year. Direct costs of ensuring conformity for EWPA certified manufacturers vary by size of operation from \$36,000 to \$275,000 per year.

Indirect costs are potentially substantially greater, and more difficult to quantify. Indirect costs include adequate training of staff, quarantining of potentially non-conforming product, and writing off material that can not be determined to be conforming.

To be able to reliably manufacture conforming products, manufacturers need to have an adequate understanding of the manufacturing process, manufacturing standards, and the product applications. Many manufacturers of conforming products employ or contract at least one specialist who is responsible for ensuring that products are fit-for-purpose and conform with technical requirements. Such a role is likely to cost a manufacturer \$120,000-180,000 per year. Manufacturers who are not committed to product conformity are unlikely to make an investment in a conformity leadership role. They are more likely to be producers who copy and cannibalise the product and market development work of industry leaders.

Manufacturing process operators need to have an understanding of the process they are controlling, and how to manage that process. This includes ensuring that operators are trained to monitor a process, identify problems, and take appropriate action. Without education and training systems it is highly unlikely that conforming products are reliably and repeatably produced.

Manufacturers who have operators educated in identifying and correcting process issues will also have procedures for quarantining product that is of concern so that more intensive testing can be completed. Quarantining of product invariably ties up warehousing space for storage, separation, sampling, and sorting of product. It also incurs costs of materials for testing and labour for sampling and testing. It is unusual for quarantining of product to not interfere with manufacturing efficiencies. If a product is not be able to be determined as conforming, a manufacturer committed to supplying conforming product has the additional cost of writing down or writing off the product.

Manufacturers who supply non-conforming products avoid the costs of quarantining, additional testing, and potential write downs. By not making a commitment to ensuring conformity, they are likely to put non-conforming

product with latent defects to market and benefit from revenue generated from sales rather than costs incurred from write downs.

Manufacturing costs associated with making a conforming engineered wood product include equipment and material costs.

Veneer-based structural products manufactured in Australia and New Zealand are typically made by either structurally grading veneer through specialist grading and sorting equipment, or non-destructive testing of product through specialist equipment. The result of this process is a structural material with known structural properties.

EWPAAs have evidence that indicates that the same equipment is not used by manufacturers in other countries. This evidence includes structural test results which indicate that material is not adequately sorted, and claims of structural performance that do not align with the forest resource that products are manufactured from. APA, the North American equivalent of EWPAAs, has identified similar issues in the US market.

Veneer-based structural products in Australia and New Zealand are also required to use particular adhesives to ensure the glue bond is durable. These adhesives are expensive, and need to be used in controlled conditions. Where a manufacturer is not committed to conformity, they may substitute adhesives, or add fillers to the adhesive to reduce their costs. The result can be a glue bond that is not durable, and not suitable for structural use. EWPAAs have test results and case examples of situations where the adhesives have not been appropriate, or have not been applied appropriately for structural products.

2. Third party accreditation:

Evidence to this committee indicates that there needs to be some kind of accreditation/system for high risk products that includes as pillars:

- Clear standards;
- Certificate of compliance attached to product documentation (acknowledging they can be fraudulently copied)
- Testing regime (that tries to avoid golden samples, only testing at the start of product development and not ongoing etc.)
- The lab that used meets certain criteria, both for the lab generally and specifically for particular tests that are carried out.
- Penalties and enforcement

a) Is this the kind approach that you want to see?

EWPAAs support this approach and notes that each of these pillars needs to be present for the system to work. The following comments are made with regard to specific pillars.

Clear standards: The wood products industry in Australia has some clear product standards. These standards have been developed over time by technical experts who work in industry, independent researchers, and product users. However, standards alone have not been a barrier to non-conforming products, even when it is possible to empirically or physically demonstrate that product does not conform.

Certificate of compliance: EWPAA is of the view that this should be a certificate of conformity, and where practical to do so a statement of conformity should be applied to the product, not just to documentation. This is particularly the case where product is used in detached dwellings where project paperwork is less likely to be managed or retained.

The issue of fraud can be partially dealt with by requiring product certifiers to provide easily accessible on-line certification registers for verification of the manufacturer's and product's details. Fraud is then reduced to a manufacturer passing their product off as someone else's, and will likely be pursued directly by the brand owner.

Testing regime: Testing must avoid golden samples, interference in sampling, and type testing only. EWPAA contends that for life safety products, testing should be required internally by the manufacturer, samples should be provided for continuous verification by an independent party, and samples should be independently taken from the market place from time to time. Independent market surveillance is necessary to ensure that the manufacturer does not game the sampling and testing process.

Lab competency: Laboratories must be competent in execution of tests as described. Currently a laboratory can be accredited for completing tests using a variation on the test method as long as they state what the variation is. Where they are not able to test as described, there should be a requirement for demonstrating equivalency or conservatism of a test variation.

Laboratories should also be required to participate in inter-lab proficiency programs where the test is for an attribute which affects life safety.

Enforcement: Enforcement is fundamental to ensuring product conformity. It is the EWPAA's opinion that the lack of consequence for supply of non-conforming building products leads to cavalier supply chains.

By way of example, the EWPAA received an enquiry from a bike shop owner who had seen some formply, looked around online at buying and selling prices, and thought importing would be an easy way to make money. He had no knowledge of plywood, so called EWPAA to find out more about the product. Once he had an understanding of the product, its applications and the cost of failure, he made a moral decision to not get involved in supply of the product. If he had not made that moral decision, he could have set up a business distributing a product for high risk applications without knowing if it conformed, without knowing how it should be used, and with little personal consequence if the product failed.

In a similar scenario, EWPAA is aware of a dentist who saw an opportunity to import and distribute cement, a product they knew little about, but saw an opportunity to make money without much personal risk.

Unless there is the ability to provide penalties and enforce conformity, it is the EWPAA's opinion that the supply chain will attract entrepreneurial and opportunistic characters who are not technically equipped, not motivated, or not motivated to be equipped for supply conforming building products, and supply of non-conforming products will continue unabated.

- b) One concern about third party accreditation is that the third party body managing the accreditation can effectively be a Government supported "monopoly" itself. If there were to be Government endorsed accreditation, how manage problems like this?

In the case of ensuring that products conform with standards, a monopoly could foreseeably be problematic through discriminatory use of power, poor provision of service, or cost ineffectiveness. However, the greater concern with respect to non-conforming products is whether the process of accreditation and certification is effective. EWPAA contends that the priority issue is ensuring that product conformity requirements are applied consistently. Competition-based models risk inconsistent interpretation or application, and risk accreditation bodies migrating to providing the path of least resistance to their clients. Government monopolies are a way of protecting the public from harm, and in this instance, a monopoly may be the appropriate course of action.

Concerns of discrimination, poor service, or cost of service are matters of governance and process. An appropriate charter, impartiality process, and appeals process can be used to deal with discriminatory decision making. Cost of service is benchmarkable against other accreditation bodies and able to be interrogated through charts of accounts.

Service provision and reliable conformity should be a key performance measure of an accreditation body.

Whether existing accreditation is providing an effective conformity outcome is questionable. Testing of material certified by JAS-ANZ accredited certifiers has found that some of these products do not conform to the product standards. This outcome does not discourage non-conforming products, but legitimises them. In a recent review of CodeMark certification in New Zealand commissioned by the Ministry of Business, Innovation and Employment, Deloitte raised concerns about the technical competence of JAS-ANZ to adequately assess certifier competence. JAS-ANZ responded in a Radio New Zealand article that they bring an understanding of the certification process to the table rather than technical competence.

EWPAA contends that to provide a reliable conformity framework the accreditation body must have adequate technical expertise. Where an accreditation body is responsible for providing accreditation across a range of industries it is unreasonable to expect them to be experts in all or to be able to focus on the issues of a specific sector with technical precision. Other organisations, such as the Australian Building Codes Board in the case of building performance, should be expected to have considerable expertise relating to products in their sector and contemporary issues of performance and expectations. They bring technical competence to the table. The EWPAA is of the view that building products industry specific accreditation provided by ABCB or a similarly technically focused organisation, with oversight of certification processes from JAS-ANZ (or some similar arrangement that ensures that technical expertise is engaged in the accreditation process) would deliver a better outcome.

- c) In support of certification is Shergold & Weirs Recommendation “We recommend that the BMF agrees its position on the establishment of a compulsory product certification system for high-risk building products.”
- What is your view on this recommendation?
 - If this recommendation were to be implemented, what should be included in “high risk products”?
 - What should be some guiding criteria?

Firstly there is perhaps an issue of semantics. EWPAA challenges the language quoted from the Shergold and Weir report. “High-risk building products” are products that are of high likelihood of failure resulting in injury, death, or illness. By that definition, non-conforming building products are high-risk building products and should not be

certified. Conforming building products on the other hand are products for which risk is controlled in high risk applications. Certification is an independent statement attesting to the product's capacity to manage risk. The language should therefore be '...establishment of a compulsory certification system for products intended for high risk applications.'

As a guide, the National Construction Code identifies performance criteria for buildings, including structure, fire, emergency access and egress, fire services, lifts, emergency systems, weatherproofing and damp, sanitation, and ventilation. These and in some cases, other aspects should be considered as potential life safety applications. If a product is intended for a certain application which is a life safety application it should be considered a life safety product. For example, structural plywood is intended to be able to be used for flooring, bracing, and other structural applications, and resist applied load actions without failing - a life safety application. However, structural plywood is also used for dog kennels, shed shelves, packing crates and countless other utility applications. The manufacturer must manufacture with the intended use of greatest risk in mind, unless they can specifically control the application that the individual product is going to be used in. Use of product in non-critical applications does not negate the life safety performance requirements of the product.

EWPA is not opposed to compulsory certification of products intended for use in high risk applications. However, there are risks that need to be addressed, as evidenced by the existing compulsory plumbing products certification scheme, Watermark. EWPA is aware of cases where Watermark certified products have been certified without conforming to Watermark requirements, or have been fraudulently passed off as certified. Any compulsory certification needs to address these issues. It must also be recognised that it is not the certification which results in conformity – it is the technical rigor and independence that is applied through the certification process. If mandatory certification is going to be entertained, please do something to ensure that there is genuine technical competence and accountability on the part of the certifier.

Certification bodies take many forms. Some, such as EWPA, are industry associations. Others are commercial businesses. They have different technical expertise, and are subject to accreditation by people with different levels of technical expertise. They have different expectations from different clients, and different relationships.

As an industry association EWPA is mandated by its members to provide an impartial and independent verification of product quality specifically for wood products. The motivation for this is to ensure that the reputation generally of the products they produce is upheld, users of products see them as being reliable, and they continue to have unfettered access to construction applications. All of the participants in the EWPA product certification schemes commit to this, and the EWPA administers testing and surveillance activities on the basis that the industry collectively is committed to product performance and building safety.

As an industry association, we are not funded to provide a tick-the-box certification mark to a client. We are funded by a group of competitors who want to ensure their competition is not cheating, or jeopardising their markets through potential reputational damage.

This requires technical competence in assessment activities, and EWPA members recognise the EWPA for the knowledge that is brought to the process. A recent comment from a manufacturer CEO was that the EWPA don't just come and check procedures, but rather ask hard questions, and sometimes things the manufacture hadn't thought of themselves.

Commercial certification providers might be across a range of different industries. This might include different building products like wood, steel, glass, or aluminium. It might also be completely different sectors such as food

or disability services. The ability of a certification body to make insightful and probing enquiry diminishes with breadth.

Asking probing questions sometimes leads to uncomfortable conversations. Engaging in uncomfortable conversations requires technical competence, otherwise you can be manipulated, misled or deceived and steered around a potential problem. As an industry body, our members have made it clear that they expect us to have capacity for and engage in those hard conversations, and when we do have them they know we will have the same hard conversation with their competitors when needed. We are seen to be the independent umpire on issues of product quality and conformity.

If certification is offered solely as commercial activity the relationship is potentially quite different. Commercial entities exist for profit, and where that is the underlying driver for providing assessment of conformity there is risk of conflict of interest. This same risk has been identified in the privatisation of building certification. A difficult conversation is made more difficult when a potential outcome is the loss of a client and loss of revenue. If there is a reluctance to upset a client, there is a risk that significant issues get overlooked.

Any mandatory certification **must** be underpinned with technical competence.

3. Page 3 of your submission to the 45th Parliament is helpful in explaining how the importing supply chain has evolved, in your view to limit legal exposure in Australia. Is there any other information on this topic that you would like to offer to the committee?

The supply chain has diversified significantly in recent years. The intention of the submission was not to suggest that this was to limit legal exposure, but rather to highlight that less legal exposure has been an outcome. Less checks and balances and more conflicted parties in the supply chain are also an outcome, so issues of non-conforming building products are less likely to be challenged. This has had knock-on effects in the supply chain which further increases risk of non-conforming product.

The traditional supply chain model for imported product was akin to a manufacturer distribution model. Manufacturers (domestic and overseas) sold to importer/distributors, who sold to merchants, who sold to builders and product users, who installed product. Distributors and merchants were invested in a long-term viable supply chain. If they provided an unfit product to their customer, the customer would seek recompense, or would take their business elsewhere, and the supplier's business was negatively affected.

This meant that distributors and merchants had a motive to ensure that products were fit for purpose, and would typically seek out manufacturers with a solid reputation.

With on-line purchasing shortening global supply chains 'pop-up distributors' are on the rise. It is incredibly simple to go online, find a product to import, set up an online marketing portal and move the product to market. It is also possible for the developer, project builder, or sub-contractor to import directly in project lots, to source from pop-up distributors, or to find an opportunistic importer to bring product in on their behalf. In doing this they reduce their costs. However, they also assume risk as the importer, or accept that it will be difficult to hold their opportunistic importer responsible for product issues. Should they find they have been supplied a non-conforming product, they have no or little come-back on their supply chain, and given the product is in their ownership, they are commercially conflicted to use it. The result of the shortened supply chain is that there is less commercial

accountability. This is made even worse given that non-conforming product may go undetected until after the building is finished and on-sold.

With reduced price product available in the market, pressure is put on the traditional supply chain to reduce cost, with traditional distributors forced to look for cheaper supply. Whilst many do this with the intention of seeking reputable manufacturers there are cases of distributors finding that initial conformity has been acceptable, but has quickly deteriorated once the commercial relationship has been established. Those distributors are then in a position where they have to sort out their new supplier, go back to known reputable suppliers if they are still able to, or are caught in the web of cut-price non-conforming products.

4. Some submissions have recommended exploring requirements for entities in the supply chain to carry some form of recall insurance and/or some kind of licensing to sell building products.
 - a) In your mind, could this address some of the problems in the supply chain we are seeing now?

Insurance is a blunt instrument for a complex problem. It is a remedy to the use of non-conforming products, **not** a means to prevent them being in the market in the first place. Any suggestions to use insurance to counter problems of non-conforming products in supply chains are likely to have unintended and significant negative consequences if used as the tool for combatting non-conforming products. Non-conforming products may not be identified until after buildings are finished, and an insurance company is therefore not able to act in a timely manner to prevent widespread use of non-conforming products. There is potential for recall and or rectification costs to be very high, which is likely to result in insurers fighting against product recalls to limit their liability. Where exposure is considered to be high, it may become difficult or incredibly expensive to get insurance, even for suppliers who are rigorous in their approach to determining conformity. For example, insurance costs for building surveyors has increased dramatically in the wake of flammable cladding investigations. The result is that building surveyors who have not done and are unlikely to do any work with flammable cladding are financially impacted by the decisions of a few.

Further, insurance is not likely to be helpful if supplier businesses are wound up.

Rather than insurance as a remedy, what is needed is a culture of accountability. It is a requirement of EWPAAs product certification that a manufacturer carry public liability insurance to cover a significant product failure. It is also a requirement of certification that the manufacturer commits to work with their customers to appropriately rectify faults that are a result of a product non-conformity. EWPAAs certified manufacturers do not see this as the driving reason for product conformity. More important is maintaining their reputation as a supplier, and maintaining the reputation of the products they produce. They are accountable for the performance of their product. The insurance is seen simply as a safety net if something goes badly wrong.

Enforcement of regulation is the means by which a culture of accountability can be created. Accountability should extend to the cost of rectifying non-conforming product issues.

Licensing to sell building products may provide a means for regulating distribution channels. However, licensing needs clear criteria of competence and obligations. It also needs to be enforced. The effectiveness of other licensing systems in the building industry need to be considered before considering licensing of the supply chain.

b) Or are there better ways to address these problems?

A public scheme might be a way to ensure that building owners are not unwittingly left responsible for non-conforming building products. This is outside the scope of EWPAA expertise, but there are numerous examples of public 'insurance' which have been funded through some form of mandatory levy. Examples include Queensland Home Warranty Insurance, Queensland Community Ambulance Cover, and New Zealand Earthquake Commissions EQCover. However, as is the case with recall insurance, this approach provides a remedy to protect current and future building owners. It does not do anything to counter non-conforming products. On its own, it could make the problem worse.

Ends.