

Ai GROUP SUBMISSION

Australian Senate Enquiry into
Non-Conforming Building Products

AUGUST 2015



About the Australian Industry Group

The Australian Industry Group (Ai Group) is a peak industry association in Australia which along with its affiliates represents the interests of more than 60,000 businesses in an expanding range of sectors including: manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. The businesses which we represent employ more than one million people. Ai Group members operate small, medium and large businesses across a range of industries. Ai Group is closely affiliated with more than 50 other employer groups in Australia alone and directly manages a number of those organisations.

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Enquiry terms of reference

Ai Group's submission has been prepared to address the following terms of reference for the Senate Enquiry:

- a. the economic impact of non-conforming building products on the Australian building and construction industry;
- b. the impact of non-conforming building products on:
 - i. industry supply chains, including importers, manufacturers and fabricators;
 - ii. workplace safety and any associated risks;
 - iii. costs passed on to customers, including any insurance and compliance costs; and
 - iv. the overall quality of Australian buildings;
- c. possible improvements to the current regulatory frameworks for ensuring that building products conform to Australian standards, with particular reference to the effectiveness of:
 - i. policing and enforcement of existing regulations;
 - ii. independent verification and assessment systems;
 - iii. surveillance and screening of imported building products; and
 - iv. restrictions and penalties imposed on non-conforming building products; and
- d. any other related matters.

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EXECUTIVE SUMMARY

Over the past decade there has been a growing body of anecdotal reports from business about the use of non-conforming products (NCP). Local producers that conform with relevant standards and regulations can be at a competitive disadvantage when the price at which competing product is sold reflects lower levels of attention to the quality that is required under Australia's conformance framework. The accumulation of reports of NCP has coincided with the rapid growth of new centres of global production, the high Australian dollar and the greater penetration of imports into many sectors of the economy.

Ai Group believes that Australia has adequate standards and regulations. However the operation of the conformance framework (that is comprised of all regulations, codes of practice, standards, certification or accreditation schemes that bring about product conformance in the building and construction sector) has gaps and weaknesses. The lack of independent verification and insufficiently visible regulatory authorities is making the conformance framework ineffective and unfair. The end result is undermining confidence in the regulatory system and an uneven playing field.

Ai Group believes that Australian industry and consumers have the right to expect schemes that are rigorous to ensure that there is a fair go for all importers and manufacturers in achieving the quality safety and fairness objectives while keeping red tape to a minimum.

Ai Group formed the Construction Product Alliance (the "Alliance") in 2014 to encourage wider buy in and co-operation from / between Government and industry on the issue of NCP.

Ai Group recommendations draw on those previously made in our Report and from the Alliance's submission¹ to State and Territory Building Ministers.

Recommendation 1 – That States and Territories improve surveillance and audit activities and implement stronger penalty regimes to improve conformance with the National Construction Code (NCC) and other building regulations.

Recommendation 2 – That the Commonwealth, States and Territories and industry promote awareness of the role of regulatory bodies in the building and construction sector and in particular how to report NCP.

Recommendation 3 – That States and Territories expedite the development of the Inter-Governmental Agreement to underpin the Electrical Equipment Safety System (EESS).

Recommendation 4 - That State and Territories review their building certification arrangements to clarify the responsibilities of building certifiers and assess the adequacy of existing arrangements in preventing the installation of NCP.

Recommendation 5 – That the Commonwealth request the Australian Building Codes Board (ABCB) to:

- i. Modify the current evidence of suitability criteria in the NCC to stipulate that high risk products to carry only third party certification; and
- ii. Develop and publish guidance material in the form of a handbook regarding the use of risk-based assessments to determine the appropriate evidence of suitability under the NCC.

Recommendation 6 – That the Commonwealth, States and Territories, and industry consider strategies to increase stakeholder awareness of third party certification schemes as a tool for achieving product conformance.

¹ Dated 16 July 2015 – see also Annexure B

Recommendation 7 - That the Commonwealth, and States and Territories evaluate the feasibility of building product legislation placing responsibility for product conformance at point-of-sale. The evaluation should consider:

- i. costs and benefits, and
- ii. risks that arise with purchases made outside of Australian borders.

Recommendation 8 – That the Commonwealth, States and Territories and industry establish a taskforce to develop a strategic plan that incorporates short, medium and long term responses to the issue of NCP.

Recommendation 9 – That the Commonwealth, and States and Territories assess the feasibility of establishing a confidential reporting system to facilitate the reporting of instances of NCP.

Recommendation 10 – That the Commonwealth, States and Territories and industry conduct a pilot to determine the feasibility of establishing a single national building products register for conforming product based on industry and Government certification schemes.

Recommendation 11 – That the Commonwealth, States and Territories and industry establish a national portal to increase public and industry awareness of information available on NCP.

Recommendation 12 – That the Commonwealth encourage the Australian Technical Infrastructure Alliance (ATIA) and members to work collectively and individually with industry to develop strategies for:

- i. identifying and addressing any weaknesses in the chain of infrastructure services including:
 - a. Measurement science
 - b. Standards Development
 - c. Testing and Testing accreditation
 - d. Certification and Certification accreditation

that may contribute to NCP; and

- ii. developing appropriate risk-based models for third party certification schemes that may be used by industry.

These recommendations are expanded on in Section 2 *Improvements to the Current Regulatory Framework*.

Much of the source material for this submission has been drawn from Ai Group's report "*The quest for a level playing field: The non-conforming building product dilemma*" (the "Report") and the Alliance's submission to State and Territory Ministers..

Ai Group's Report was based on the survey responses from 222 participants and interviews / discussions with a similar number of stakeholders. Ai Group recommends that the Report be read in conjunction with this submission.

Ai Group adopted the following definition of NCP:

Products that: do not meet regulatory, Australian or industry standards; are not fit for their intended purpose; are defectively made or not of acceptable quality; contain false and misleading claims; do not meet performance claims (whether intentionally or unintentionally) or are intentionally counterfeit.

Ai Group notes that definition of NCP does not include situations where product may be incorrectly installed or where product design renders it unsuitable for the installation.

1. IMPACTS OF NON CONFORMING BUILDING PRODUCTS

Australian companies (both importers and manufacturers) are facing increasing pressures to maintain viability in the face of increasing competition. A level playing field in terms of product conformance is fundamental to ensure that markets do not become distorted and that businesses and consumers will continue to have confidence in products that they purchase.

Economic impact (TOR a.)

i. Value

The building and construction industry accounts for 8.0% of Australia's gross domestic product (GDP), and employs around 9.0% of the workforce. The industry contributed \$108.4 billion to the Australian economy in the 2013–14 financial year. At the end of June 2014, the building and construction industry generated \$359 billion in total income and employed 1,073,000 persons.

ii. Impact

Builders have reported the percentage of overall contract value resulting in re-work due to NCP needing to be replaced / rectified at between 0.25% - 2.5% of overall contract value. Cost components involved in the rectification work include additional: labour; machinery; fuel; liquidated damages etc. Worker safety issues are also exacerbated when rectification work is done due to exposing workers to the additional work and additional safety issues due to rectification sometimes needing to be done after works are commissioned (lane closures and access to areas controlled by other parties (e.g. electrical sub-stations)).

The leaky homes crisis in New Zealand is an ongoing construction and legal crisis due to weather tightness problems causing decay of timber framed buildings constructed between 1994 and 2005. Extreme cases made buildings structurally unsound whilst other buildings became unhealthy to live in due to mould within the damp timber framing. The repairs and replacement cost was estimated to be \$6.44 - \$11.3 billion in 2009.

The direct cost of the Infinity Cable recall has been estimated to be in the order of \$80 m but this does not include any estimates for the realisation of worst case risks (e.g. fire or electrocution) or adverse valuations to homes where cable either cannot be or only be partially removed.

Impact on supply chains (TOR b. i.)

Ai Group's Report found that 92% of all respondents to Ai Group's survey reported NCP in their supply chains. Local producers conforming to relevant standards and regulations can be at a competitive disadvantage when the price at which a competing product is sold reflects lower levels of attention to the quality that is required under Australia's conformance framework. Immediate business impacts of this uneven playing field are usually in the form of eroded margins and reduced revenues. According to this survey, that is happening to 45% of companies in this sector.

A typical comment from an electrical importer:

"The market has grown, but our market share has dropped. We've suffered massive decreases in our margins and needed to retrench nearly 30% of our workforce over the past year. Lost opportunity is the main issue with NCP. The threat is that the market keeps demanding lower prices which is impacting on our margins, employment numbers, technical support capabilities, R&D and product innovation. Electrical accessories in the U.S. and Europe now have no innovation because margins are so low."

Comment from a fabricator:

“Non-conforming competitors don’t have the same business costs as we do. They counterfeit our compliance information. We have to take legal action. They obviously don’t test their products, don’t do load tables, don’t mark products correctly, don’t have a quality system. This is costing our business margin and jobs. We’ve got 40 people in a factory in [regional town] that is not sufficiently profitable and we have dropped our staffing levels. There has definitely been commercial damage to our business from non-conforming products”

The Infinity Cable recall is a reminder that NCP is still a threat to even well regulated sectors and that the risks to consumers and costs of rectification to supply chain participants are significant. The ACCC estimates that there are up to 40,000 installations Australia wide and that cables installed in 2010 will be a risk (failing insulation may create shock and fire hazards) to consumers by 2016. 4000 km of cable was sold and estimates place rectification in the order of \$80 million². This recall took place because the importer sold cable that did not comply to the ageing standards. The importer was placed into liquidation and now wholesalers have to accept liability for rectification costs.

Ai Group’s report found that there is significant NCP penetration in the building and construction sector although not all sectors were impacted negatively. The report also found that NCP does negatively impact Australian businesses.

Impact on safety (TOR b. ii.)

Companies have pointed to a range of NCP safety risks that can only emerge over time. Safety and product compliance are linked.

Standards Australia states that

“Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to.”

Products that can be shown to be conforming with relevant standards are less likely to be a risk to consumers and workers.

Comment from the steel sector:

“The industry has been very lucky that there have been no serious accidents lately. In the past, the industry was very safety conscious. So that previous safety culture may be protecting the market until now. But there is a slow erosion of safety. The technical people within the product supply market are still safety conscious, however the sales and marketing people within competitors are pushing to reduce costs and hence reduce safety levels. There is potential for the safety standards to keep slipping caused by an erosion of price, products manufactured to lower specifications, unclear legislation, watered down regulations and greatly reduced regulatory resourcing.”

Comment from the aluminium and glass sector:

“(Our manager) ... continually grapples with the conflict between safety compliance and winning a project (when competing against companies who supply) NCP.”

The Infinity Cable recall demonstrates that safety issues from NCP are real and may not manifest themselves for years.

Ai Group’s Report found that NCP can increase safety risks to employees and the public.

² news.com.au, *Cable girl scandal could cost \$80 million*, 22 Sep 2014

Impacts on the overall quality of Australian buildings (TOR b. iv.)

During research for its Report, Ai Group encountered numerous examples of NCP in Australian buildings that created ongoing additional maintenance costs.

Steel products can be affected over time due to strain ageing, accelerated corrosion and deformation under load. Understrength steel materials can allow increased structural deflection which increases the risk of strain aging. There is the possibility for non-conforming assets to deteriorate at a quicker rate resulting in increased maintenance costs over time.

There is potential for asset values to be affected over time due to products like electrical lighting, electrical accessories and electrical cable needing to be replaced before their design life. Apart from the risk to the assets from fire, comments received pointed to a need for increased maintenance due to the high failure rates of non-conforming electrical products.

Window companies noted that UV stabilisers lacking in seals was reported as potentially creating water ingress problems in the long term. There is a 6 year statutory replacement period for low rise domestic construction and contractual obligations apply for other building types.

A case was encountered with a home valued at over a million dollars requiring remedial work estimated at \$800,000 (including all glass doors, windows and other building components). No glass doors or windows complied with the relevant Australian Standards.

Ai Group's Report found that NCPs can impact long term asset values. See Appendix B of Ai Group's Report for a list of published issues that are attributed or partly attributed to NCPs.

2. IMPROVEMENTS TO THE CURRENT REGULATORY FRAMEWORKS

Ai Group's Report found that overall there are effective standards and regulations in place; however, surveillance and enforcement activities are lacking and contribute to the gaps and weaknesses in the building products conformance framework.

2.1 Policing and enforcement of existing regulations (TOR c. i.)

Ai Group's Report found that there are three main areas of weakness when considering policing and enforcement of existing regulations. Firstly there is minimal action and visibility of building regulators in terms of surveillance and enforcement. Secondly there is confusion on the role of the responsibility of regulators. Thirdly (in the electrical sector) there is lack of harmonisation of electrical safety regulations between jurisdictions.

a. Action and visibility of building regulators

Greater action and visibility by regulators can send a strong signal to the market that there are consequences for allowing the inclusion of NCP into the Australian building product supply chain.

The Ai Group's report stated:

... the lack of independent verification and visible regulatory authority is making the conformance framework ineffective and unfair. The end result is undermined confidence in the regulatory system.

Ai Group recommends that state building authorities increased their activity and resourcing for surveillance and audit activities of high risk building products during construction and post installation. This activity should be considered to support existing state building regulations that reference the National Construction Code, along with other existing state regulations that apply to high risk products such as electrical items.

Recommendation 1 – That States and Territories improve surveillance and audit activities and implement stronger penalty regimes to improve compliance with the NCC and other building regulations.

b. Role and the responsibility of regulators

Australia has a complex maze of overlapping regulators with a variety of responsibilities in the building and construction sector including the ACCC, Water Efficiency and Labelling Standards (WELS), Greenhouse and Energy Minimum Standards (GEMS), Australia Communications and Media Authority (ACMA). In addition the State and Territory building authorities are responsible for the NCC. This results in confusion for stakeholders when NCP is detected.

Ai Group found that 43% of respondents had not lodged a complaint when encountering NCP. Of these, close to half indicated that: they did not know who to complain to; they did not know how to lodge a complaint; or reported that complaints previously lodged did not achieve a result.

The following statements were typical;

"There is no authority that I can think of to go to."

"I've got no idea who we could approach, no one is doing audits [and] no warning alerts [are] issued."

Respondents reported that when regulators were approached nothing was done:

"... you have to put stuff on a platter for them .. [they] are very hard to engage – I'm not aware that they have ever pursued anyone."

“No government agencies [have done] testing in last 15 years”

Recommendation 2 – That the Commonwealth, States and Territories and industry promote awareness of the role of regulatory bodies in the building and construction sector and in particular how to report NCP.

c. Harmonisation of electrical safety regulations between jurisdictions

Electrical sector respondents to Ai Group’s Report reported issues with inconsistent regulatory approaches to surveillance and enforcement of electrical safety standards across the jurisdictions. This has been a source of frustration and creates red tape for importers and manufacturers of electrical equipment.

A typical comment:

“All states should align their electrical safety regulations. The ERAC EESS registration requirements should help to quickly identify relevant importers. Additional regulatory funding should provide for additional market surveillance and the ability to audit specific problem areas”

Note that ERAC is the Electrical Regulatory Authorities Council.

Ai Group notes that there has been progress since 2013 on the implementation of the EESS with resources currently focused on an Inter-Governmental Agreement to provide a legal underpinning to the operation of the EESS in jurisdictions. All States and Territories have given varying levels of commitment to embrace the scheme however NSW has adopted the stance that they *“have not made a decision to either participate or not participate in the scheme”*

Recommendation 3 – That States and Territories expedite the development of the Inter-Governmental Agreement to underpin the EESS.

2.2 Independent verification and assessment systems (TOR c. ii.)

The regulation of building products is covered by a range of state legislative instruments that require building work to be carried out in accordance with the requirements of the NCC. Under state and territory building laws building certifiers are responsible to assess the conformance of all components of a building and are empowered by the various state Acts to issue construction, compliance and occupancy certificates. These certificates are linked back to the requirements of the NCC and referenced standards pertaining to the various building components. The issuing of a final occupation certificate indicates that the building works are conforming with the NCC including all materials, products and workmanship.

Evidence is required to demonstrate compliance with certain technical standards referenced by the NCC to the satisfaction of the building approval authority (certifier). The type of evidence that is required can vary from product to product. Further, most products can choose which form of evidence they choose to provide to a consumer. These may involve the products being tested by either first, second or third party verification, or not tested at all.

Ai Group has identified three significant weaknesses in this system of conformance namely: an over reliance on building certifiers, lack of risk based evidence criteria in the NCC; and allowance of first party certification for high risk products.

a. Building certifiers

A respondent in Ai Group’s Report stated that there is:

“too much responsibility placed on building certifiers by the current conformance framework and inadequate clarity of their role”

Comments from respondents included:

“The building industry including certification is high pressure, highly competitive, low margins. There is currently a race to the bottom in terms of price and quality in the area of certification. Builders use the certifier who is cheapest and easiest to work with. i.e. responsive and likely to certify. Building certifiers who do a good job of checking compliance of all aspects simply don’t get the next job.”

“The Government regulations have incorrectly set expectations about the role of building certifiers. The certifier’s role is not to check everything. The certifier performs basic or rudimentary inspections, is not on site every day and can’t check every product installed against its standard or an alternative solution. The expectations are clearly wrong and this is a real problem for building certifiers and the industry as a whole. Even validating the basic components is not easy. How is a building certifier supposed to validate every component? The certifier can never get all certificates for every product. Neither can the builder.”

Recommendation 4 - That State and Territories review their building certification arrangements to clarify the responsibilities of building certifiers and assess the adequacy of existing arrangements in preventing the installation of NCP.

b. Evidence criteria

Ai Group supports the following discussion from the Alliance’s submission to the Building Ministers.

“The evidence of suitability provisions in the NCC (Volume 1 A2.2/Volume 2 Part 1.2) are very broad and need to be rewritten to differentiate between the varying levels of assurance (i.e. third party certification is more credible than self-declaration) and the types of building materials and systems that should align with these levels of assurance; and differentiate between material conformance and design conformance. The NCC evidence criteria have been highlighted as one of the weaknesses in the conformance framework.

In the longer term the CPA recommends that the NCC evidence of suitability criteria be reviewed with a view to aligning high risk building materials and systems with a particular level of evidence.

In the shorter term CPA recommends that a guide or handbook be published that provides information on preferred selection of evidence to suit the risk of the building material or system.”

Recommendation 5 – That the Commonwealth request the Australian Building Codes Board (ABCB) to:

- i. Modify the current evidence of suitability criteria in the NCC to stipulate that high risk products carry only third party certification; and
- ii. Develop and publish guidance material in the form of a handbook regarding the use of risk-based assessments to determine the appropriate evidence of suitability under the NCC.

c. First party certification

First party certification involves the product supplier attesting to their compliance with the relevant technical standards.

A respondent in Ai Group’s Report stated that

“inadequate ... first party certification” contributes to gaps and weaknesses in the framework.”

Other comments included:

“Fabricators and engineers are assessing their own work, signing their own compliance certificates (forms 15 and 16) and building certifiers are relying solely on those forms for their conformity

assessment. *Third party checks to guarantee conformance are not mandatory.*"

"A letter stating a first party declaration without a test report is more useless than a piece of toilet paper."

Ai Group has observed an increasing interest in third party certification schemes (TPCS) in industry sectors exposed to NCP. This trend will continue particularly if the ABCB modifies the NCC evidence criteria to require third party certification for high risk products.

Ai Group supports the following comment from the Alliance.

With the exception of third party schemes such as Watermark and the Electrical Equipment Safety Scheme that are regulated, these schemes are voluntary and use market mechanisms for compliance. There are a number of TPCS operated by industry associations, as highlighted in the APCC Guide³, that are extremely effective and potentially provide a model for other sub-sectors to follow. Given TPCS provides a much higher level of assurance for "deemed to satisfy" provisions in the NCC consideration should be given to promoting these schemes and given a level of endorsement that gives confidence to industry stakeholders.

Recommendation 6 – That the Commonwealth, States and Territories, and industry increase stakeholder awareness of third party certification schemes as a tool for achieving product compliance.

2.3 Surveillance and screening of imported building products (TOR c. iii.)

Ai Group understands that there is minimal (if any) surveillance carried out at the point of importation for building products by Australian Customs. Regulatory controls for building products are typically post installation. The various States and Territories place legislative requirements on building certifiers prior to issuing the occupancy certificate. This system holds the installer accountable rather than the distributor, importer or manufacturer.

Regulatory controls post installation may identify NCP compared to point-of-sale controls when the sale does not take place in Australia. Examples are purchases made on the internet or in the country of manufacture. The product is imported directly thus bypassing the normal supply chain. This is an emergent and very serious issue as regulators do not have a legal framework to enforce conformance where the point of sale is outside of Australia's borders.

Notwithstanding Ai Group believes that the incidence of NCP can be reduced if responsibility for product conformance is established at point-of-sale for manufacturers and product suppliers. Ai Group supports the following argument from the Alliance.

"To be effective in preventing non-conforming products from being incorporated into buildings and other structures, the CPA submits that checkpoints need to operate across the supply chain to support the building certification regime. This would include:

- *Effective processes at the point of import (for products manufactured internationally)*
- *Enforcement at point of sale (for local and internationally manufactured products)*
- *Compliance at point of building certification*

The point of sale proposal has the benefit of placing responsibility on manufacturers to provide appropriate evidence to distributors, wholesalers and retailers to satisfy them that the products that they are selling actually comply with relevant standards and fit for purpose responsibilities.

Point of sale is important because of the inherent inability of the public and the general industry to obtain assurance as to products from other processes. Point of sale thus provides an additional, achievable level of

³ Australian Procurement and Construction Council, *Procurement of Construction Products: A guide to achieving compliance*

assurance that assists in closing the loop on a conformance regime especially when coupled with other components of a holistic approach.”

Recommendation 7 - That the Commonwealth, and States and Territories evaluate the feasibility of building product legislation placing responsibility for product conformance at point of sale. The evaluation would need to consider:

- i. costs and benefits, and
- ii. risks that arise due product purchases made outside Australian borders.

2.4 Restrictions and penalties imposed on non-conforming building products (TOR c. iv.)

Ai Group argues that a substantial plank in obtaining product conformance is a visible enforcement strategy. This by necessity requires penalties that have deterrent value.

A comment from a respondent:

“There is a total lack of enforcement. The system is there however regulators are not resourced and lack the will to act. The situation of non-compliant product is not taken seriously and regulators do not act on complaints nor impose penalties”.

Ai Group does not express a view as to what level of penalty should be applied. However Ai Group considers that active surveillance and enforcement are conducted by State and Territory building authorities and that penalties are applied that have deterrent value.

3. OTHER RELATED MATTERS

3.1 Government Leadership

Ai Group supports the following Alliance position.

“The establishment of a task force will demonstrate to consumers, industry and other stakeholders that substantial proactive action is being taken by governments in conjunction with key industry groups to address issues in a coordinated and strategic manner.”

Given the ability of industry and government to each take specific action to address various aspects of the issues being faced, the taskforce should comprise key stakeholders charged with responsibility for steering the work of the taskforce.

The task force should be required to identify all of the areas and activities that combine to impact on the key issues and to establish sub-groups of key industry and government representatives with experience in the identified areas. The sub-groups should be given responsibility for developing coordinated outcomes to their delegated tasks. This approach will both ensure that the issues are examined by entities with the relevant experience and knowledge as well as expedite assessment of the issues.”

Recommendation 8 – That the Commonwealth, States and Territories and industry establish a taskforce with to develop a strategic plan which incorporates short, medium and long term responses to the issue of NCP.

Ai Group notes that the Building Ministers Forum on 31 July 2015 resolved to form a Senior Officials Working Group to review strategies for dealing with NCP and then report back to Ministers in 6 months. It is not clear at this stage as to what role industry will play in this Working Group.

3.2 Confidential reporting

Ai Group’s Report found that many industry stakeholders were unaware of how they could safely report NCP and which authority had responsibility for such reporting. Ai Group understand that the Queensland Building & Construction Commission has recently established a process to allow reporting of NCP and where required to provide industry with notice regarding a product or material.

There are also examples of reporting schemes overseas which might provide a useful starting point to consider application in Australia. The UK Structural and Civil Engineering and Health and Safety sectors are supported by the UK Government through “Structural Safety”, an authority that operates a confidential reporting on structural safety scheme (“CROSS”) that allows stakeholders to report anonymously on unsafe building products and practices in structures. This has been very successful in lifting the awareness of NCP in the industry through reporting back to stakeholders on incidents and has positively influenced change to improve safety in the UK construction industry.

Ai Group notes that Engineers Australia has undertaken work in researching the feasibility of establishing a CROSS like system in Australia. An impediment to confidentiality in Australia is the process of discovery when there is litigation. This processes requires both parties to the dispute to disclose all information pertinent to the case thus destroying any confidentiality. It is also difficult for industry to share NCP information on NCP and NCP incidents due to confidentiality clauses in construction contracts, and sensitivity of relationships in the building products supply chain.

The key to the success of any reporting scheme is anonymity coupled with a rigorous review of the facts. Ai Group supports an anonymous NCP reporting scheme for use in Australia as it would enable industry to make regulators aware of emerging problems before they become major safety risks. However Ai Group considers that it is not possible for this type of scheme to be operated by industry and it would be more successful if such a scheme were operated under the auspices of governments but with industry support and

input. Such a scheme could be modelled on REPCON⁴ operated by the Australian Transport Safety Bureau for Aviation, Transport and Rail that facilitates the submission of anonymous reports.

Recommendation 9 – That the Commonwealth, and States and Territories assess the feasibility of establishing a confidential reporting system to facilitate the reporting of instances of NCP.

3.3 Building products register

Ai Group supports the following Alliance position.

“Under state building laws building certifiers are responsible for the issue of building and occupancy permits that attest to the materials being suitable for use in accordance with the NCC. To do this building certifiers rely heavily on documentation from product suppliers as certifiers are not on site to see or test every component of construction. However, building certifiers are faced with a range of certificates, technical documents, reports and other information, such as labels, that they must sift through and determine whether they are appropriate to use as evidence of suitability.”

The CPA believes that there is an opportunity to create a national building products register (a brand) which brings together the existing competent regulatory and voluntary industry schemes already operating in Australia, and creates additional interest for other industry sectors to develop schemes to become part of such a register. The register could be modelled on the Electrical Equipment Safety System and based on prior work by the Housing Industry Association.

A single register which recognises schemes that provide verification against the requirements of the NCC would provide a streamlined avenue for designers, builders, contractors and building certifiers to access reliable product compliance information. The establishment of a register also creates an incentive for those products not currently participating in schemes to join as education and awareness would increase the demand for products on the register.

A pilot could be conducted on a specific product sector that is not currently operating a scheme, along with working with existing schemes to determine the most practical way to collectively recognise them through a single register.”

Recommendation 10 – That the Commonwealth, States and Territories and industry conduct a pilot to determine the feasibility of establishing a single national building products register for conforming product based on industry and government certification schemes.

3.4 National Portal

Ai Group’s Report stated that there was:

“Confusion amongst stakeholders about the responsibilities of regulators and insufficient knowledge of the conformance framework;”

and

“These gaps and weaknesses also result in confusion about how and where to report nonconforming product”

The Australasian Procurement and Construction Council (APCC), in consultation with industry, has developed an excellent and useful document, *“Procurement of Construction Products - A guide to achieving compliance”*. However, individual entities from both industry and Government sectors, will continue to develop and distribute information and material on issues relating to NCP.

⁴ See www.atsb.gov.au/voluntary/repcon-aviation.aspx and www.atsb.gov.au/voluntary/repcon-rail.aspx

Ai Group believes that there should be a single portal nationally to disseminate information on NCP related issues including:

- Regulatory and supply chain responsibility.
- Government actions and initiatives.
- Industry actions and initiatives.
- Industry and government contact points.
- Case studies and leading practice examples for certification and surveillance schemes.
- Educative material including the APCC Guide.

The Alliance has established a portal (see www.productalliance.net.au) to provide a focal point for activities including addressing a number of the issues mentioned above. Ai Group believes, however, that a more integrated approach with Government is needed.

Recommendation 11 – That the Commonwealth, States and Territories and industry establish a national portal to increase public and industry awareness of available information on NCP.

3.5 Technical infrastructure

The NCC requires conformance with the performance criteria either through deemed- to-satisfy solutions (technical standards) or alternative solution processes. The evidence of product conformance with these standards maybe first, second or third party attestation. Ai Group’s Report has found that effective product compliance can be achieved through the use of third party certification schemes (TPCS) particularly where high risk product is involved. TPCS have differing levels of rigor (see ISO/IEC Guide 67) and require the effective interplay of regimes surrounding laboratories, conformity assessment bodies and technical standards to be effective.

Australia has a number of mandatory product certification schemes including WaterMark, the EESS, WELS and GEMS. All other schemes are voluntary and operate on market mechanisms. In the absence of regulation the TPCS is the main tool that industry has for combating NCP. Ai Group has observed that the use of voluntary TPCSs by industry are increasing. Ai Group notes that the Alliance continues to work on developing case studies of the most successful industry certification schemes for use by others. On this basis it is critical for industry that certification schemes are robust and credible. A number of issues have been identified by industry where responsibility rests with Australia’s technical infrastructure bodies that can contribute to the incidence of NCP:

- Inconsistent results from international laboratories due to a lack of understanding of Australian Standards and test methodologies
- Fraudulent certificates issued by international entities
- “Shopping” of CABs and laboratories by suppliers
- Slow response times in the contract chain when NCP is reported
- Gaps in technical standards
- Test certificates not traceable to supply chain

Australia’s technical infrastructure is made up of four organisations⁵:

- JAS-ANZ: Government appointed accreditation body for certification and inspection.
- NATA: Australia’s national authority for assessing and recognising the competence and capability of organisations that deliver technical data used in decision making processes.

⁵ Refer to www.atia.org.au

- NMI: Coordinates Australia's national measurement system, establishing and maintaining Australia's measurement standards and ensuring international recognition.
- Standards Australia: Leads and promotes a respected and unbiased Standards development process.

Ai Group believes that these four organisations have a role to play in working with industry to address NCP both individually and collectively. Ai Group understands that these organisations work collaboratively in a forum called the Australian Technical Infrastructure Alliance (ATIA). The stated aim of the ATIA⁶ is:

"The ATIA members work collaboratively with the aim of bringing greater efficiency and performance in quality standards that will lead to improved productivity and growth. The combined authority and experience of the Alliance provides comprehensive advice, products and services to all sectors dependent on the standards and conformance infrastructure⁷."

Ai Group believes that collective and individual action by the technical infrastructure bodies in cohort with industry is required and the ATIA is the appropriate forum for this.

Recommendation 12 – That the Commonwealth encourage the Australian Technical Infrastructure Alliance (ATIA) and members to work collectively and individually with industry to develop strategies for:

- i. identifying and addressing any weaknesses in the chain of infrastructure services including:
 - a. Measurement science
 - b. Standards Development
 - c. Testing and Testing accreditation
 - d. Certification and Certification accreditationthat may contribute to NCP; and
- ii. developing appropriate risk-based models for third party certification schemes that may be used by industry.

⁶ See www.atia.org.au

⁷ See www.atia.org.au

4. SECTOR OBSERVATIONS

Ai Group has provided comment below on the major sectors addressed in the Report.

Electrical

Ai Group's Report found that 100% of respondents in the Electrical product sector reported NCP in their market with 71% of respondents indicating that they have lost revenue, margin and employment numbers as a result.

Respondents report:

- It is too easy to sell electrical product into Australia over the internet and bypass the regulatory system.
- "Golden samples"
- Counterfeited product
- Suppliers / importers declare bankruptcy if a major NCP encountered rather than incurring the cost of a recall
- A perceived reluctance of regulators to act.
- A lack of knowledge about how and where to report NCP.
- Inconsistent regulations and regulatory actions across jurisdictions.
- Increasing rates of counterfeits in the residential, commercial and industrial electrical product markets.
- A reduction in the frequency of electrical inspections.

Many companies expressed concern over the emerging issue of individuals and companies bypassing regulation due to the lack of a legal framework for electrical product imported into the country through sales on the internet. A test laboratory commented:

"We field many enquiries per week from tradesmen that have imported electrical items from (an internet company) and request quotes for getting the items approved, never to hear from them again. We know they have already imported the items, so it's naive to think they've thrown them away"

Reputable electrical companies also report higher costs bases due to recalls than less scrupulous competitors who will shut down if a major recall is encountered e.g. Infinity Cables.

"An electrical importer is recalling \$800,000 worth of product at a cost of \$5m. The units have been shown to have a 1% failure rate resulting from a design fault leading to non-compliance over the medium term. The company made a decision to act responsibly and recall the product knowing that many of their competitors who do not act as ethically would have declared bankruptcy leaving the market without recourse. This has been done in market where margins are just above interest rates. This recall has to be absorbed into the companies cost base."

Ai Group's Electrical Manufacturing Member Reference Group expressed the following view regarding NCP:

"There is a high degree of frustration amongst the electrical product supply industry that products making false claims, not fit for purpose or not conforming to Australian Standards are allowed to remain on the market to the detriment of legitimate product suppliers and considerable safety risks for consumers and employees. This issue is affecting the very viability of legitimate businesses. Jobs are being lost now and we are seeing a downward spiral of product quality and conformity."

Electrical sector companies believe that the national implementation of the EESS (whilst not covering all electrical products) will address many of the industries product conformance shortfalls including a deteriorating standard of imported electrical equipment; lack of traceability; and inconsistency in certification.

See Ai Group's **Recommendation 1** and **3**

Steel

Ai Group's Report stated that 95% of respondents in the Steel product sector reported NCP in their market. 40% of respondents advised that they had suffered reductions in revenue, margin and employment numbers as a consequence.

Steel fabricators as well as steel building products manufacturers are the hardest hit by NCP due to a conformance framework that is overly reliant on first party certification and an increasing exposure to non-conforming imported structures and products.

Examples of NCP in the steel sector.

- Material substitution with lower grade material substituted for high grade material;
- Non-conforming fabricated steel structures;
- High silicon content steel (causing protective galvanising coatings to flake off);
- Non-conforming material test certificates;
- Incorrect steel chemistry, sub-standard mechanical properties and the inclusion of impurities;
- Differences between Australian and overseas standards causing finished structures and coated building products that are not suitable for maximum design loads under Australian standards;
- Non-conforming fasteners causing structural steel collapse;
- Failed pre-qualification audits of structural steel fabricators by a government procurer due to a lack of knowledge in: Australian Standards; welding procedures; plan symbols; work preparation and supervision;
- Pre-stressing steel reinforcing made to low overseas standards and detected on site in Australia;
- Non-conforming steel strand product failed in a casting yard (potentially high WHS consequences);
- Failed balustrading due to incorrect welding, then corrosion (fillet instead of butt weld); and
- Non-conforming steel lintels and drainage grates

The Australian Steel Institute (ASI) commented:

"The construction products industry in Australia is faced with a choice: it can follow a path of the lowest cost denominator in which case be exposed to the worst in quality the world can produce, or , it can implement product conformity systems similar to what is in place in most of the developed world that inform the client of achievement of levels of quality compliance benchmark . Nowhere is this better demonstrated than in the area of structural bolts where Australia has followed a path of lowest global cost, at the expense of functionality and safety, whilst other countries like the USA and the UK have quickly implemented compliance procedures and have avoided our costly failures."

The Bureau of Steel Manufacturers Australia (BOSMA) stated:

"The sale of non-conforming building products in Australia is a form of unfair trade, by which companies whose products do not conform to Standards and building requirements undermine the viability of those firms whose products do conform, while imposing additional and unnecessary costs on the economy, and creating unacceptable risks to public safety. This is not a level playing field."

Steel sector companies including the peak bodies, BOSMA and the ASI, believe that robust, widely recognised risk based third party schemes are needed to combat NCP in the sector.

See Ai Group's **Recommendations 5 and 6**.

Glass and Windows

In the Glass and aluminium product sector, 81% of respondents reported NCP in their market with 65% advising reduced margins, revenue and employment numbers as a consequence.

Respondents reported concerns with:

- the building certification system being a paper collection exercise;
- lack of a visible regulator;
- quality fade/component substitution;
- reduced ability to invest in innovative new products due to a lack of profit margins; and
- quoting at a loss to retain customers.

Typical NCP issues included:

- Fraudulent certificates of product compliance
- UV stabilisers in seal lacking resulting in water ingress
- Glass not conforming to wind ratings creating the risk of shattering

The Australian Window Association (AWA) summarised the views of the sector on the NCP issue.

“The AWA expresses deep concern regarding extent of the NCP products in the industry and questions the resulting impact on SME manufacturers and the contribution to the worst building stock in the country. What level of failure is required before someone does something.”

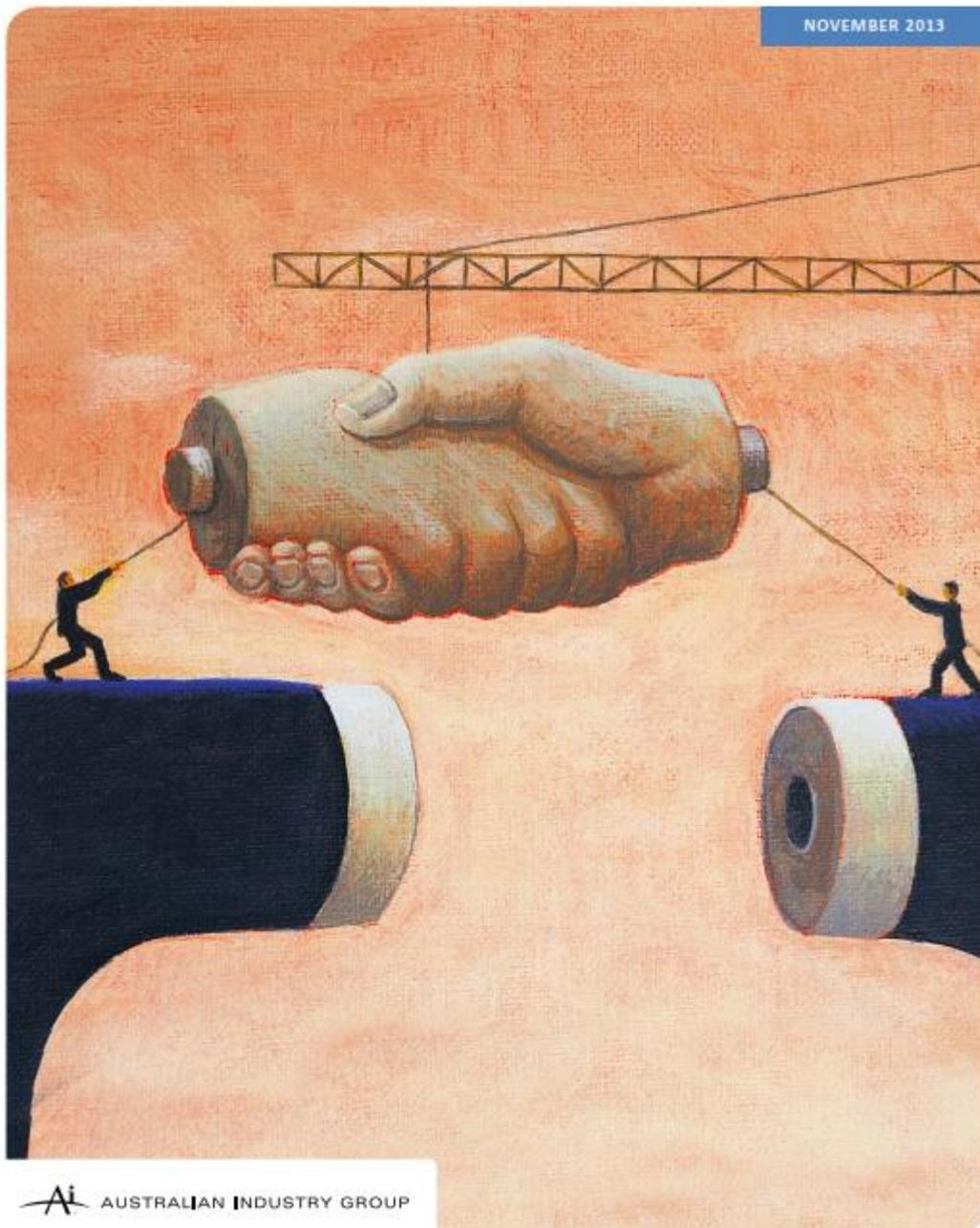
The AWA believes that one of the largest issues facing the industry is fraudulent certificates. The industry believes that an effective method to reduce both NCP and product with fraudulent certification is to apply large pecuniary penalties for the deliberate sale or procurement of NCP.

See Ai Group **Recommendations 1 and 12**

ANNEXURE A – Ai Group Report

Ai Group's Report "*The quest for a level playing field: The non – conforming building products dilemma*" can be found [here](#).⁸

The Australian Industry Group
The quest for a level playing field
The non-conforming building products dilemma



⁸ See <http://www.aigroup.com.au/portal/site/aig/standards/nonconformingproductresearch/>

ANNEXURE B – Alliance submission to Building Ministers



The Construction Product Alliance is a collective of public and private organisations that is working to promote awareness of non-conforming building products and identify opportunities for improved supply chain solutions.

BUILDING MINISTERS' FORUM 31 JULY 2015 NON – CONFORMING PRODUCT ACTION PLAN

OVERVIEW

The Construction Product Alliance (CPA) was formed to identify options for addressing issues relating to the impact of non-conforming building products and in so doing improve the safety, quality and long term sustainability of buildings and other structures.

In its work to date, the CPA has focused its attention on raising awareness of the pressure points in the building and construction product supply chain where regulatory, administrative or operational systems may need review and improvement. The intention is to close the loop on the potential for non-conforming products to result in risk to public safety and minimise the risk of substantial economic impacts for industry participants arising from the discovery of non-conforming products in the built environment.

The CPA believes that a holistic approach involving industry and government is necessary. Industry is unable to solve all of the issues by itself and government is unable to achieve effective regulatory systems in the absence of a partnership with industry.

In short, the CPA has been examining opportunities to close the regulatory and operational loop in the building and construction product supply chain to address the manufacture, supply and use of non-conforming products whether they be manufactured internationally or wholly within Australia.

This paper identifies eight activities that are designed to operate as an Action Plan to assist industry and government to commence a practical process to address the non-conforming product issue.

The activities are:

1. Establish a taskforce comprised of key industry stakeholders and state and federal government agencies with a charter to develop a strategic plan which incorporates short, medium and long term responses to the issue of non-conforming products (NCP).
2. Request the Australian Building Codes Board (ABCB) to:

- Undertake a review of the current evidence of suitability criteria in the National Construction Code (NCC); and
 - Develop and publish guidance material in the form of a handbook regarding the use of risk-based assessments to determine the appropriate evidence of suitability under the NCC.
3. Establish a national portal to increase public and industry awareness of available information on NCP.
 4. Increase stakeholder awareness of third party certification schemes as a tool for achieving product compliance.
 5. Develop and operate a pilot to determine the feasibility of establishing a single building products register for compliant product based on industry and government certification schemes.
 6. Evaluate the feasibility of building product legislation being enforced at point of sale.
 7. State building authorities to review surveillance and audit activities and implement stronger penalty regimes to improve effectiveness in achieving compliance with the National Construction Code (NCC) and other building regulations.
 8. Assess the feasibility of establishing a confidential reporting system to facilitate the reporting of industry concerns around NCP.

ACTION ITEMS

- 1. Establish a taskforce comprised of key industry stakeholders and state and federal government agencies with a charter to develop a strategic plan which incorporates short, medium and long term responses to the issue of non-conforming products (NCP).**

The establishment of a task force will demonstrate to consumers, industry and other stakeholders that substantial proactive action is being taken by governments in conjunction with key industry groups to address issues in a coordinated and strategic manner.

Given the ability of industry and government to each take specific action to address various aspects of the issues being faced, the taskforce should comprise key stakeholders charged with responsibility for steering the work of the taskforce.

The task force should be required to identify all of the areas and activities that combine to impact on the key issues and to establish sub-groups of key industry and government representatives with experience in the identified areas.

The sub-groups should be given responsibility for developing coordinated outcomes to their delegated tasks. This approach will both ensure that the issues are examined by entities with the relevant experience and knowledge as well as expedite assessment of the issues.

- 2. Request the Australian Building Codes Board (ABCB) to:**
 - **Undertake a review of the current evidence of suitability criteria in the National Construction Code (NCC); and**
 - **Develop and publish guidance material in the form of a handbook regarding the use of risk-based assessments to determine the appropriate evidence of suitability under the NCC.**

The *evidence of suitability* provisions in the NCC (Volume 1 A2.2/Volume 2 Part 1.2) are very broad and need to be rewritten to:

- differentiate between the varying levels of assurance (i.e. third party certification is more credible than self-declaration) and the types of building materials and systems that should align with these levels of assurance; and
- differentiate between material conformance and design conformance.

The NCC evidence criteria have been highlighted as one of the weaknesses in the conformance framework. The Ai Group report stated that “*inadequate ... first party certification*” contributes to gaps and weaknesses in the framework.

In the longer term the CPA recommends that the NCC evidence of suitability criteria be reviewed with a view to aligning high risk building materials and systems with a particular level of evidence. In the shorter term, CPA recommends that a guide or handbook be published that provides information on preferred selection of evidence to suit the risk of the building material or system.

3. Establish a national portal to increase public and industry awareness of available information on NCP.

Ai Group’s report ‘*The quest for a level playing field: The non-conforming building product dilemma*’ stated that there was:

“Confusion amongst stakeholders about the responsibilities of regulators and insufficient knowledge of the conformance framework;” and

“These gaps and weaknesses also result in confusion about how and where to report non-conforming product”

The Australasian Procurement and Construction Council (APCC), in consultation with industry, has developed an excellent and useful document, “Procurement of Construction Products - A guide to achieving compliance”. However, individual entities from both industry and government sectors, will continue to develop and distribute information and material on issues relating to non-conforming products.

The plethora of information sources tends to add to industry and public confusion. Accordingly, the CPA submits that there should be a primary point where stakeholders can obtain information on NCP issues including:

- Regulatory and supply chain responsibility.
- Government actions and initiatives.
- Industry and government contact points.
- Case studies and leading practice on NCP themes e.g. certification and surveillance schemes.
- Educative material including the APCC Guide.
- Actions that are taking place to address issues.

The CPA believes that the most effective way to achieve this is through the establishment of a national online portal.

4. Increase stakeholder awareness of third party certification schemes as a tool for achieving product compliance.

The CPA has observed an increasing interest in third party certification schemes (TPCS) in industry sectors exposed to non-conforming product.

With the exception of third party schemes such as Watermark and the Electrical Equipment Safety Scheme that are regulated, these schemes are voluntary and use market mechanisms for compliance. There are a number of TPCS operated by industry associations, as highlighted in the APCC Guide, that are extremely effective and potentially provide a model for other sub-sectors to follow. Given TPCS provides a much higher level of assurance for “deemed to satisfy” provisions in the NCC consideration should be given to promoting these schemes and given a level of endorsement that gives confidence to industry stakeholders.

5. Develop and operate a pilot to determine the feasibility of establishing a single building products register for compliant product based on industry and government certification schemes.

Under state building laws building certifiers are responsible for the issue of building and occupancy permits that attest to the materials being suitable for use in accordance with the NCC. To do this building certifiers rely heavily on documentation from product suppliers as certifiers are not on site to see or test every component of construction. However, building certifiers are faced with a range of certificates, technical documents, reports and other information, such as labels, that they must sift through and determine whether they are appropriate to use as evidence of suitability.

The CPA believes that there is an opportunity to create a national building products register (a brand) which brings together the existing competent regulatory and voluntary industry schemes already operating in Australia, and creates additional interest for other industry sectors to develop schemes to become part of such a register. The register could be modelled on the Electrical Equipment Safety System and based on prior work by the Housing Industry Association.

A single register which recognises schemes that provide verification against the requirements of the NCC would provide a streamlined avenue for designers, builders, contractors and building certifiers to access reliable product compliance information. The establishment of a register also creates an incentive for those products not currently participating in schemes to join as education and awareness would increase the demand for products on the register.

A pilot could be conducted on a specific product sector that is not currently operating a scheme, along with working with existing schemes to determine the most practical way to collectively recognise them through a single register.

6. Evaluate the feasibility of building product legislation being enforced at point of sale.

One of the weaknesses of the current conformance framework is that the primary enforcement point is focused on post installation and applies to the ‘end user’ of the product i.e. it occurs after the product is installed and holds the installer accountable.

There is increasing evidence that regulatory schemes are more effective in reducing the incidence of NCP and increasing consumer and industry confidence when they have effect at the point of sale, such as Greenhouse and Energy Minimum Standards (GEMS) and Water Efficiency Labelling Standards (WELS) Scheme. This mechanism places an onus on the distributor of the product to be responsible for ensuring it is compliant before it is used.

Ai Group, in its report, said that:

“An issue across the product sectors has been the emphasis on conformance at point-of-installation. Ai Group believes that the incidence of NCP can be reduced if control points exist at point-of-sale with greater product conformance responsibility on builders, contractors and product suppliers.”

To be effective in preventing non-conforming products from being incorporated into buildings and other structures, the CPA submits that checkpoints need to operate across the supply chain to support the building certification regime. This would include:

- Effective processes at the point of import (for products manufactured internationally)
- Enforcement at point of sale (for local and internationally manufactured products)
- Compliance at point of building certification

The point of sale proposal has the benefit of placing responsibility on manufacturers to provide appropriate evidence to distributors, wholesalers and retailers to satisfy them that the products that they are selling actually comply with relevant standards and fit for purpose responsibilities.

Point of sale is important because of the inherent inability of the public and the general industry to obtain assurance as to products from other processes. Point of sale thus provides an additional, achievable level of assurance that assists in closing the loop on a conformance regime especially when coupled with other components of a holistic approach.

7. State building authorities to review surveillance and audit activities and implement stronger penalty regimes to improve effectiveness in achieving compliance with the National Construction Code (NCC) and other building regulations.

Greater action and visibility by regulators can send a strong signal to the market that there are consequences for allowing the inclusion of NCP into the Australian building product supply chain.

The Ai Group report stated:

... the lack of independent verification and visible regulatory authority is making the conformance framework ineffective and unfair. The end result is undermined confidence in the regulatory system.

The CPA recommends that state building authorities increased their activity and resourcing for surveillance and audit activities of high risk building products during construction and post installation. This activity should be considered to support existing state building regulations that reference the National Construction Code, along with other existing state regulations that apply to high risk products such as electrical items.

8. Assess the feasibility of establishing a confidential reporting system to facilitate the reporting industry concerns around NCP.

The Ai Group report found that many industry stakeholders were unaware of how they could safely report NCP and which authority had responsibility for such reporting. The Queensland Building & Construction Commission has recently established a process to allow reporting of NCP and where required to provide industry with notice regarding a product or material.

Industry is not in a position to undertake this type of process due to confidentiality clauses in construction contracts, and sensitivity of relationships in the building products supply chain, which make it very difficult to circulate current and reliable information relating to incidents involving non-conforming product.

There are also examples of reporting schemes overseas which might provide a useful starting point to consider application in Australia.

The UK Structural and Civil Engineering and Health and Safety sectors supported by the UK Government through "Structural Safety", an authority that operates a confidential reporting on structural safety scheme that allows stakeholders to report anonymously on unsafe building products and practices in structures. This has been very successful in lifting the awareness of NCP in the industry through reporting back to stakeholders on incidents and has positively influenced change to improve safety in the UK construction industry. The key to the success of such a scheme is anonymity coupled with rigorous review.

The CPA supports a reporting scheme for use in Australia as it would enable industry to make regulators aware of developing problems before they become major safety or structural risks.

However, the CPA considers that rather than this type of scheme being operated by industry it would be more successful if such a scheme were operated under the auspices of governments but with industry support and input.



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