

BANG FOR YOUR BUCK:

NON-COMPLIANCE AND ITS CONNECTION TO PERSONAL INJURY



INTRODUCTION

Manufacturing and construction guidelines exist in order to guarantee a minimum acceptable standard of production. In Australia, the standards related to architecture and construction specifically include the Australian Standards and the Building Code of Australia (BCA). In order to give specifiers and users confidence in their building products, the CodeMark Product Certification Scheme (CodeMark) was created as a third-party offshoot of the BCA. CodeMark is designed to evaluate and certify products utilised within the building supply chain that have been produced to an acceptable quality. Products with CodeMark certification reliably demonstrate that they “meet the specified requirements... for how the product is to be used in a particular class of building”.¹

Despite these standards being in place, there is still an overabundance of non-conforming and non-compliant products and practices present within the Australian market. More than nine out of ten firms reported non-conforming products in their supply chains according to a 2013 survey, with figures reported being as high as 95 per cent within the steel industry and 82 per cent within glass and aluminium industries.² Of those who indicated non-conforming products were present, it was suggested that the market penetration of such products were between 11 and 50 per cent of what was available.³

Whether their origins stem from lower-grade foreign imports or locally, the widespread presence of these products present a number of significant risks; extra costs may be incurred due to its shorter lifespan or if something needs to be replaced if it is found to be non-conforming or non-compliant; lower-grade products have the potential to jeopardise building and structure safety; and they additionally can increase the likelihood of personal injury.⁴

Government and industry-backed organisation NATSPEC is looking to tackle this issue through a National Construction Products Register, isolating the products that have been certified from those that pose an unacceptable risk and thus increasing awareness around the necessity of regulation and using conforming products in a compliant way.⁵

While a lower price tag might be an attractive proposition initially, it is imperative that manufacturers and specifiers understand the true risks associated with non-conforming and non-compliant products. Products that *do* comply with standards are more likely to be produced to a higher quality and thus less likely to fail. Additionally, they also likely represent higher investment into research and development, paving the way for innovative solutions that still maximise cost efficiency and safety.



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THE DANGERS OF NON-CONFORMANCE AND NON-COMPLIANCE

In best-case scenarios, the discovery of non-conforming and non-compliant products can require a costly retrofit. However, the alternative is their undetected implementation and unknowing use, potentially leading to massive damage further down the track, personal injury and even death. This alternative, worst-case scenario has played out in an unfortunate number of instances, such as the Lacrosse Tower Fire – where a non-compliant, highly flammable cladding material was used on the façade, allowing a fire started from a cigarette to climb 13 stories in 15 minutes.⁶

Furthermore, specifying the highest quality products and installing them in compliant ways is important not just for the integrity of the final building and the safety of those inside, but also to minimise risk for those undertaking work on the building – both during construction and for ongoing maintenance.

WORKING FROM HEIGHT: WHEN SAFETY AND ACCESSIBILITY ARE PARAMOUNT

Freestanding ladders are commonly used in trade and maintenance industries to access elevated areas undergoing construction or used for storage. Falls from ladders are normally associated with construction sites where risk levels may be seen as higher than elsewhere. However, the truth is that only a fifth of the 232 workers that were killed following a fall from height between 2003 and 2011 were on a construction site.⁷ The remaining four fifths were undergoing tasks such as maintaining roofs or air conditioning units.⁸

The most common cause of the falls were ladders, responsible for 37 of the total 232 fatalities and more than any other cause for the 7730 serious injury claims made.⁹ The national Work Health and Safety Act (WHS Act) requires that “the health and safety of [workers] is not put at risk from work carried out as part of the conduct of the business or undertaking.”¹⁰ To assist with that, legislation does currently exist to consider other, more stable methods of gaining access to elevated areas before utilising freestanding ladders – raising awareness that even if something is technically a conforming product, it can still be used in a non-compliant way and thus lead to injury. One study in Denmark revealed that the tipping or tilting of the ladder that occurred when a person lent too far sideways was the main cause of falling.¹¹ Twenty per cent of all ladder incidents in Australia between 2003 and 2011 were due to the ladder either moving or collapsing.¹²



Pull-down access ladders are permanently fixed to the building and are thus safer and structurally more stable than freestanding ladders, removing any possibility of the ladder tilting, tipping or collapsing

PULL-DOWN ACCESS LADDERS: A SAFER ALTERNATIVE

Regardless of attempts made to reduce ladder usage and the likelihood of ladder-related incidents, attic, bulkhead and ceiling access remain necessary for a multitude of reasons. It is rarely practical for building services such as HVAC, water and electricity to be positioned in a spot easily accessible from a fixed floor. Filter replacement and other activities such as the maintenance of pipework, electrical cabling, television antennas or routers and modems for Internet access must often take place in typically inaccessible places, justifying the use of a ladder. However, there is an alternative to freestanding ladders that not only improves safety, but also ease of use.

Pull-down access (PDA) ladders are permanently fixed to the building and are thus safer and structurally more stable than freestanding ladders, removing any possibility of the ladder tilting, tipping or collapsing. Designed specifically to provide access to overhead spaces used for storage and building maintenance, their own storage is self-contained, also only blocking floor-space when in use. Compliance and conformity to standards is still important, and any chosen PDA system should still come with any full-length or standard hand/grab rails. Compliant PDA ladder systems will also avoid modular designs, which will likely require the finished product to be cut to size. While avoiding customised solutions may seem like a cost-saving measure, doing so produces irregularities in tread distances and thus can increase the likelihood of an accident.



TIPS FOR SPECIFYING PULL-DOWN ACCESS LADDERS:

- Ensure the chosen product has been certified with the CodeMark seal.
- Check that the chosen system is not a modular design, which will require it to be cut-to-size and could lead to non-conformity due to irregular tread or rung spacing.
- While not a necessity for domestic applications, check to see if full-length or standard hand/grab rails are available with the chosen system.

AM-BOSS ACCESS LADDERS

AM-BOSS are 100 per cent Australian owned and made, operating to the highest degree of quality for almost 40 years since their inception. In 2003 they became the first brand to manufacture PDA ladders in compliance with the BCA. In 2011 AM-BOSS again lead the industry by becoming the first company to manufacture PDA ladders with CodeMark Certification. Now in 2017, they are still the only brand to offer such confidence without any limiting conditions.

AM-BOSS's PDA ladders are all custom made on a job-by-job basis, meaning that every single job is made to be compliant. While competitors might offer modular options, standardising measurements in order to cut down on costs, the need for these products to be 'cut to size' once installed according to their own specific context limits their ability to comply to regulations. Irregularities in tread distances produced by taking such steps are just one way in which cheaper, lower grade alternatives can jeopardise user safety.

AM-BOSS PDA ladders have been tested and load rated at 150kg, 200+kg and 400kg depending on the Series, and are made with top-quality welded aluminium. For additional peace of mind, AM-BOSS's Domestic Series range features a 20-year warranty, with a 3-year warranty coming with their Commercial Series. Delivered fully assembled to minimise any chances of an accident, complete with architrave, pull-down hook and pole, AM-BOSS PDA ladders are designed to provide maximum peace of mind.



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