

SUBMISSION TO SENATE ENQUIRY

NON-CONFORMING BUILDING PRODUCTS

1. Relevance of this submission to the Terms of Reference (“Terms”)

This submission is made pursuant to item ‘d’ of the Terms – “other related matters”.

The submission will disclose fundamental and persistent weaknesses in current Australian Standards, which the other Terms assume to be adequate benchmarks to assure that certified building products will be safe and fit for purpose.

A Standard which allows the conformance certification of product which neither meets the needs and expectations of consumers, specifiers and regulators, nor the performance attributes required by the Standard itself will result in preventable loss, injury, and sometimes death.

Conformance of product to Standards that are drafted for commercial advantage rather than to protect or benefit the public can have similar impact on building safety to “non-conforming” product being addressed in ‘a’ and ‘b’ of the Terms.

2. Toughened Safety Glass

The Building Code of Australia references AS1288 to mandate the installation of safety glass in buildings in applications where there is a significant possibility of human impact, such as doors, shower screens and low-level glass.

Safety glass is defined in AS2208 as glass which minimises cutting and piercing injury in the event of human impact.

Since 2002 there have been in excess of 2.5 million dwellings completed in Australia and a conservative estimate of the average quantity of toughened safety glass (“TSG”) installed in each dwelling (for example in patio doors and shower screens) would be four pieces, so that a minimum aggregate of ten million pieces would be installed in this period. This does not include schools, aged care facilities, offices or other building classifications, nor does it account for glass installed prior to 2002.

The significance of the 2002 date, is that on 16 November 2001, an executive meeting of the Australian Glass and Glazing Association (“AGGA”) was held in Melbourne, and a formal presentation took place which explicitly provided evidence that current test methods (then and now) allow the certification as TSG of product that does not break safely into small relatively harmless particles, as required for TSG. The slide presentation is attached as NM Appendix A.

The current test requirements are set out in AS2208:1996 (which is referenced by AS1288).

In 2007 a working group (WG) was established by Committee BD-7 of Standards Australia for the purpose of reviewing the AS2208 Standard and developing a draft for consideration (and approval) by BD-7 to be followed by the public review process and publication. As part of the review process members of the WG spent some days carrying out systematic testing which confirmed the existing procedure to be profoundly inadequate, and the WG published a draft Standard which specified a modified test method, so that safe fracture of certified TSG could be assured.

In the seven years since the WG demonstrated that the current version of AS2208 allows unsafe glass to be supplied and installed, and the 16 years since AGGA was formally made aware of the problem, nothing has changed. However, in this time millions of pieces of unsafe glass have been installed in Australia.

The draft of the WG has been “hijacked” by a cabal of BD-7 members (led by AGGA representatives) who have succeeded in preventing changes that would ensure that only glass that would break in accordance with the performance requirements of the Standard could be certified.

The chronology of this hijacking is detailed in NM Appendix B.

The cabal will not permit a simple change to the test method which would prevent dangerous TSG being certified, The current test method does not manifest the long dangerous particles which are likely to occur in the event of human impact, and which the test purports to expose. The cabal deliberately ignores the findings and recommendations based on the results of the systematic testing undertaken by the WG, and indeed on many previous tests undertaken in Australia and elsewhere., all of which have been made available to BD-7.

The cabal proposes to allow long particles (splines) up to 100mm to be generated by certified TSG. There is objective evidence that a spline 9mm long can cause serious piercing injury in adults, and obviously shorter splines in the case of children. (The evidence of this is attached in NM Appendix C, and is the basis of the Stab Resistance Standards published by the UK Police Scientific Development Board and US National Institute of Justice.)

A paper presented to an International glass conference discusses fracture characteristics of TSG and includes photographs of the dangerous splines that result when improperly toughened glass is fractured. There are millions of pieces of such glass installed currently in Australia. A copy of this paper is attached as NM Appendix D.

Detailed representations to ACCC (involving 14 emails with attachments) were to no effect. The ACCC response is attached (NM Appendix E).

Standards Australia is unwilling and/or unable to address this issue, as it was when the glass strength in AS1288 was subverted and they were then instrumental in facilitating irregularities in the BD-7 Committee Voting process to implement a technically incorrect and dangerous glass strength value. I believe this is the subject of a separate Submission.

Subsequent to this episode, two of the Committee members wrote to the CEO of Standards Australia to request an internal review (copy attached as NM Appendix F). No written response was received. However, ██████████ of Standards Australia did respond with an aggressive telephone call to the writer, but no action. ██████████ subsequently was appointed CEO of Standards Australia.

CONCLUSION

Commercial interests have been allowed to subvert the Australian Standard for Toughened Safety Glass which affects every person in Australia, at home, at work, at school – everywhere.

Standards Australia has shown itself to be ineffective in their critical role of assuring building safety in Australia by allowing the subversion of the Standards development, voting and publication processes.

The ACCC has declined to take effective action when provided with detailed evidence, on the spurious grounds that injury data is not available.

This Senate enquiry needs to ensure that Australian Standards for glass and indeed all building elements are not able to be subverted by commercial interests, and are fit for purpose. This will require safeguards to be established so that members of Standards Committees and indeed the public can appeal to an independent review panel (ie independent of commercial and sectional interests), who can adjudicate issues that are not able to be resolved by the relevant Standards Committee.

If this is not done, the other items addressed by this Enquiry become irrelevant for the Standards affected.

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