

AUSTRALIAN WINDOW ASSOCIATION  
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Energy Efficiency Inquiry  
Productivity Commission  
LB2 Collins Street East  
MELBOURNE VIC 8003

To whom it may concern

The Window Industry plays a significant role within the Australian Building Industry, employing more than 15,000 people and contributing in excess of \$1.5b to the Australian economy.

The Australian Window Association represents the interests of the Australian suppliers, manufacturers and fabricators of windows and glazed doors in areas related to education, national codes and standards and compliance and accreditation for structural, acoustic and energy efficiency performance. The AWA has membership representing 90% of Australian window production and is led by an executive committee and advised through a technical committee comprising technical management from G. James, Crane Aluminium Systems, Boral, Trend, Bradnams, Stegbar, Pilkingtons, Capral Aluminium, Canterbury Windows, A&L Windows, Wideline and suppliers. A list of members can also be found on our website [www.awa.org.au](http://www.awa.org.au).

The AWA recognises that the terms of reference for this inquiry cover a very large and diverse range of issues and the AWA is only able to provide views on those matters relating to the manufacture and performance of windows and glazed doors. The AWA also recognises the influence and impact that all other building components have on each other and supports a total building envelope approach to energy efficiency.

The Building Code of Australia (BCA) is the guide to minimum performance requirements in the construction of buildings in Australia, and includes (for certain classes of buildings) guidelines on the minimum energy efficiency levels that should be achieved. There are, however, a number of states or territory based energy efficiency schemes which are different from those in the national BCA.

One of the outcomes that AWA would like to see the ABCB co-ordinate the various energy efficiency schemes around Australia and an alignment with the compliance methodologies within for all classes of buildings, including agreement on environmental conditions reporting. The assessment and regulation of energy efficiency must be scientifically sound, verifiable and nationally consistent.

In addressing windows specifically:

The window and glass associations, with significant financial support from the AGO, developed WERS (Window Energy Rating Scheme) to not only produce total window

system energy data files for NatHERS, FirstRate and BERS but to also establish a level playing field for manufacturers within this market.

The concept is similar to that used for household appliances. The star ratings are based on the relative, *whole-house* energy improvement caused by the use of a given window compared with using the base-case product (single-glazed clear, thermally unbroken aluminium frame which currently comprises most of the building stock and is arguably the most inefficient for energy).

A Specific Customer Rating provides an exact rating for a product, based on its exact materials and specifications for frame, glazing and other components. Weather tightness is based on reported air infiltration data obtained according to the AS 2047 test. A Custom Rating is the better option for manufacturers who wish to distinguish their product from others and who wish to maintain seamless continuity between research & development and the rating process.

Even if a homeowner does not heat or cool, the ratings still indicate which windows will yield the most comfortable house. WERS is based on extensive international research and experience and has been developed specifically for Australian conditions. The star rankings are valid for all orientations, a wide range of window sizes and both raised timber and concrete slab-on-ground floors.

Companies who participate are subject to a license, an audit and can be asked to withdraw if they make false energy performance claims. A license includes auditing, manuals and training. It is open to all manufacturers, not restricted to members of the AWA and AGGA.

The changes to DTS energy efficiency methods being introduced into the 2005 BCA using an elemental approach to mathematically calculate the energy performance of windows is, in the opinion of the AWA, regressive and extremely crude and negates the 8 years of scientific and accurate energy performance measurement established through the WERS method that has been developed for and accepted by the window industry and which treats the window as a total engineered unit. This is in line with international practice (reference USA, Europe, Canada and Britain).

The AWA and the AGGA put forward a nationally consistent approach with computer simulation and third party accreditation. This has not been taken up by Australian regulators who claim it is a proprietary scheme despite financial support and endorsement from the Australian Greenhouse Office, yet these schemes are used widely overseas and supported by their respective governments.

A conscious effort to reduce greenhouse gas emissions for the benefit of future generations requires minimum performance standards to be set. The Window Industry most strongly advocates the adoption of the total window approach in all energy regulation and the necessity for all energy performance claims to be third party verified.

Thank you for the opportunity to present our comments to this enquiry.

Yours Sincerely



Tracey Gramlick  
**Technical Director**