

# Windows can now star

New Zealand windows are now on the list of products that can be evaluated for an ENERGY STAR®, thanks to help from BRANZ. This gives assurance to those wanting windows with superior thermal performance.



**ENERGY STAR®** is the leading international standard for energy-efficient consumer products, allowing products with superior energy efficiency to be identified across a range of categories.

The blue ENERGY STAR® logo helps industry and consumers to identify qualified products and make informed choices in selecting energy-efficient products that reduce energy usage.

## **Windows get with the programme**

In New Zealand, the Energy Efficiency and Conservation Authority (EECA) operates the ENERGY STAR® programme. This has 19 different product categories, including whiteware and electronic equipment.

On 20 October 2014, windows for New Zealand housing were included as a new product category.

## **Energy efficiency of windows**

Windows in housing don't directly use energy in the same way a television uses energy to operate. However, they are responsible for the loss and gain of space heating and cooling energy.

As this energy flow can be optimised by careful design and material selection, energy-efficient windows for housing are now included as a product category of ENERGY STAR®.

## **Obtaining an endorsement**

Before any product category is included in the ENERGY STAR® programme, its energy use and operation must be well understood, and it must be fit for purpose. BRANZ undertook research for EECA to assist the launch of the programme for windows.

To be endorsed with the ENERGY STAR® logo, a window must also:

- comply with *ENERGY STAR for windows - Specification criteria for windows*
- meet the durability, structural, weather-tightness, safety and thermal requirements of the New Zealand Building Code
- be independently verified.

BRANZ has also worked with the Window Association of New Zealand (WANZ) to show how their members' products can comply with these EECA requirements.

This resulted in the launch of the window industry's Window Energy Efficiency Rating

---

Scheme (WEERS) (see *Build* 140, pages 72-73).

This service is not available to non-WANZ members. However, BRANZ has developed an assessment for non-WANZ members' windows to see if they meet the ENERGY STAR® requirements, as set out by EECA.

#### **ENERGY STAR® window requirements**

All windows used in New Zealand homes must meet the Building Code requirements, and this is a mandatory step in complying with ENERGY STAR®.

BRANZ has tools to check that the thermal performance of windows exceed an R-value

of 0.32 m<sup>2</sup>K/W and can also provide the independent verification necessary.

This method allows windows with uPVC, timber, fibreglass, steel or aluminium frames to be assessed against the ENERGY STAR® criteria.

Consequently, a BRANZ assessment means that any supplier of domestic windows in New Zealand can access the ENERGY STAR® endorsement label provided by EECA.

The ENERGY STAR® endorsement means window manufacturers, suppliers and consumers can have confidence that qualified products meet an independent standard of superior thermal performance.

#### **Use of the standard**

ENERGY STAR® is widely recognised in New Zealand and is an easy way for window manufacturers, suppliers and consumers to identify higher-performing energy-efficient windows.

Based on BRANZ research, it is available to all new windows designed for housing in New Zealand. 

**For more**  For details on ENERGY STAR®-qualified windows, visit [www.eeca.govt.nz/resource/energy-star-window-specification](http://www.eeca.govt.nz/resource/energy-star-window-specification). For verification services, contact BRANZ at [window.test@branz.org.nz](mailto:window.test@branz.org.nz).