Window Energy Rating Scheme

Making Your Home More Comfortable with Energy Efficient Windows

The Star Rating Scheme for Windows in Australia

www.wers.net
Windows

Windows are possibly the most complex and interesting elements in the fabric of our homes and buildings. They provide light and fresh air, and offer views that connect our interior living spaces with the great outdoors.

However, windows can also represent a major source of unwanted heat gain in summer and significant heat loss in winter.

Energy Efficient Windows

Today, remarkable new framing and glazing materials have changed the energy performance of windows in a radical way.

Energy efficient windows will make your home or building more comfortable, dramatically reduce your energy costs and help to create a brighter, cleaner, healthier environment.

Window Energy Rating Scheme (WERS)

WERS rates the energy impact of residential and commercial windows in homes and buildings anywhere in Australia. With up to 40%* of a home’s energy for heating lost through windows and up to 87% heat gain through windows, this can severely increase heating and cooling loads. Improving their thermal performance reduces energy costs and Australia’s greenhouse gas emissions.

The aim of the scheme is to help consumers evaluate the relative energy performance of different types of windows and then make an informed decision suited to their needs.

WERS is an independent scheme owned and managed by the Australian Window Association with the full support of the window industry. Independent of any one manufacturer, WERS is a fair, rigorous and credible system for rating the energy performance of windows. WERS follows all AFRC protocols and processes.

How Does the Rating System Work?

WERS rated windows will carry a label which certifies that the window has been simulated by an independent accredited simulator and approved by WERS auditor. The window’s cooling and heating performance are rated separately on a scale of 0 – 10 stars – the more stars the better. These ratings indicate the effect the window will have on the energy performance of the whole house.

In support of the rating labels, the window manufacturer can issue a certificate for that window type, spelling out in clear detail its energy performance.

“The correct selection of window frames and glazing, is one of the major items in achieving thermal comfort in a building. Our members find that WERS rated products are the key to achieving the desired window frame and glazing combinations”

Association of Building Sustainability Assessors

Disclaimer: Any advice, recommendation, information, assistance or service provided by the AWA is given in good faith and is believed by the party to be appropriate, but is given without any liability or responsibility on the AWA’s behalf.

*40% heat loss and 87% heat gain. Cover images supplied by Trend Windows. #Certified Products Tables visit www.wers.net/residential/certified-products
Window Ratings

To provide consumers with a simple benchmark, a comprehensive range of representative windows has been rated for their energy performance which is illustrated in terms of stars. No stars shows that the window is a very poor performer, 10 stars means the best possible performance and a whole new world of energy efficiency and interior comfort.

Manufacturers participating in WERS may offer custom rated high performance products which exceed the results shown below. Check the Certified Products Table* to see just how much benefit can be gained from a correctly selected window.

It is important to remember that window placement and site orientation also have an impact on the type of windows required within a home or building. Your WERS accredited manufacturer can advise you on the right windows to suit your home or building. Look for the sign that ensures your window manufacturer is WERS accredited.

Certified Performance Data Figures for:
- Thermal Transmittance (U-Value) W/m².K
- Solar Heat Gain Coefficient (SHGC)
- Visible Light Transmittance
- Air Infiltration When Window Closed L/m².s

WERS Certificate

*When compared to the base case window (WERS generic window 1). Actual heating and cooling outcomes may vary with house design, orientation and occupant lifestyle.

WERS was established in 1995 and data is calculated using WERS software developed with the co-operation of the Australian Greenhouse Office (AGO), Australian Glass and Glazing Association (AGGA) and the Australian Window Association (AWA). The computer modelling software is the same as that used by the U.S. National Fenestration Rating Council (NFRC) and results are generated to the NFRC Environmental Conditions. Results are for the total window system.

As part of a commitment to improving the energy efficiency of Australian buildings, the Australian Government supports the Window Energy Rating Scheme. Energy efficient windows are a great opportunity to reduce a household’s need for heating and cooling, save money on energy bills, reduce Australia’s appetite for energy and help our environment.

Department of Climate Change and Energy Efficiency

Window Energy Rating for Windows

XYZ Company

Energy Performance Ratings - NFRC-100 Results

<table>
<thead>
<tr>
<th>U-Value (W/m².K)</th>
<th>SHGC</th>
<th>Air Infiltration L/m².s</th>
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<tbody>
<tr>
<td>3.7</td>
<td>0.41</td>
<td>5.0</td>
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Additional Performance Ratings

<table>
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<th>Visible Transmittance</th>
<th>Air Infiltration L/m².s</th>
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<tbody>
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Comparative House Energy Savings*

33% better for heating
52% better for cooling

*When compared to the base case window (WERS generic window 1). Actual heating and cooling outcomes may vary with house design, orientation and occupant lifestyle.

Certified Products Tables visit www.wers.net/Certified-Products-Residential

All results shown in leaflet are not real performance numbers and may have no correlation to real products.

Table:

<table>
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<tr>
<th>Window ID</th>
<th>Glazing</th>
<th>Cooling Stars</th>
<th>Heating Stars</th>
<th>Uw</th>
<th>SHGCw</th>
<th>Tvv</th>
<th>Air Inf.</th>
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<tbody>
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<td>★★★★☆</td>
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