

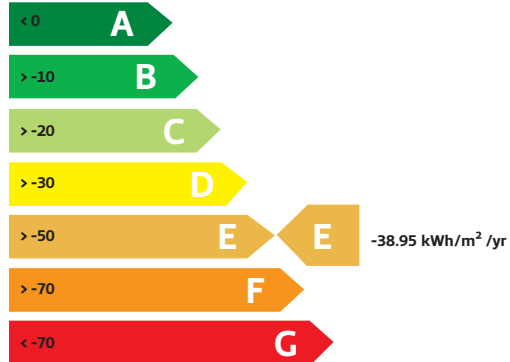


REG No.: IAB/W001/001  
 Manufacturer: ABC Windows Ltd.  
 Window System: ABC Tilt & Turn PVC-U Window System  
 Issue Date: 20/01/2009  
 Valid Until: 20/01/2014

## Window Energy Performance (WEP)

Window Energy Performance Rating for this window is: **E**

### MOST EFFICIENT



ENERGY INDEX (KWH/M<sup>2</sup>/YEAR): **-38.95**

(Energy Index certified by NSAI Agrément and based on Irish standard window. The actual energy consumption for a specific application will depend on the building, the local climate and the indoor temperature)

CLIMATE ZONE **IRL**

### ENERGY PERFORMANCE CRITERIA

Thermal Transmittance	$U_{\text{window}}$	= <b>1.8 W/m<sup>2</sup> .K</b>
Effective Air Leakage	$L_{\text{factor}}$	= <b>0.02 W/m<sup>2</sup> .K</b>
Solar Factor	$g_{\text{window}}$	= <b>0.38</b>

### ADDITIONAL PERFORMANCE CRITERIA

Condensation Resistance	CR	= <b>51</b>
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This label is not a statutory requirement. It is a voluntary label provided as a customer service to allow consumers to make informed decisions on the energy performance of competing products.

FOR FURTHER INFORMATION PLEASE CONTACT NSAI ON THE DETAILS BELOW:

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 Santry, Dublin 9, Ireland  
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# NSAI Agrément Window Energy Performance (WEP) Certification Scheme

For more information, please visit:

**NSAI.ie**



## The NSAI Agrément has introduced an independent Window Energy Performance (WEP) Certification scheme for the Irish consumer market.

**The WEP rating is provided for a standard window to represent typical window sizes. This enables a comparison between different products. Each WEP rating label is specific to a unique window frame and glazing assembly from a single manufacturer. This WEP label is non-transferable.**

The Window Energy Performance (WEP) Certificate will display an overall energy rating, similar to the Building Energy Rating (BER) label, for a defined window and window frame assembly; thus allowing consumers to make an informed selection.

The scheme is applicable to window manufacturers and companies marketing imported windows for domestic buildings. The purpose of the scheme is to independently certify windows for an energy performance (WEP) rating.

The WEP rating fixes numerous parameters in its calculations such as orientation, number of days in a heating season, effects of solar radiation, over shading amongst others, in order to allow useful comparisons between window designs.

**For current fee structure please see [www.n sai.ie](http://www.n sai.ie) or contact the NSAI Agrément at +353 1 8073800.**

## The WEP Certificate value combines the following characteristics to allow consumers to determine how well each window assembly will perform.

**THE THERMAL TRANSMITTANCE** ( $U_{\text{window}}$ ) is a measure of the insulation properties of the window assembly and allows the consumer to compare how effective each window assembly is at containing and conserving heat within a building in the winter. The lower the U-value, the greater the thermal performance of the window.

**THE SOLAR FACTOR** ( $g_{\text{window}}$ ) or Solar Heat Gain Coefficient (SHGC) measures how well a product blocks heat caused by sunlight. Heat gain can be beneficial in winter months but can also present consumers with additional cooling loads in summer months. The Solar Factor is expressed as a number between 0 and 1. A lower Solar Factor means less heat gain.

**THE AIR LEAKAGE** ( $L_{\text{factor}}$ ) is a measure of the air tightness of a specific window assembly. Good quality windows tested to the appropriate standards should have no air leakage and therefore, makes little difference to energy performance however, for leaky windows, the impact is significant. The lower the air leakage value, the greater the air tightness of the assembly.

Finally the **CONDENSATION RESISTANCE FACTOR** (CR), while not directly used in calculating the WEP Rating, is a measure of the ability of a window assembly to resist the formation of condensation on the interior surface of that product. The higher the CR rating, the better that product is at resisting condensation formation. While this rating cannot predict condensation, it can provide a credible method of comparing the potential of various products for condensation formation.

## Window suppliers - benefits and commitments to the scheme:

Companies who manufacture/supply windows and who apply for WEP certification will be required to have their windows manufactured under a documented Quality System (ISO 9001:2000 or similar documented system) which will ensure that their window assemblies are manufactured to a consistent standard. NSAI Agrément will carry out annual surveillance audits to ensure that quality system procedures are in place and are fully adhered to. It is the window suppliers responsibility to ensure that window assemblies achieve the certified standards. WEP certification, while not a statutory requirement, will allow consumers a “fair, accurate and credible” rating system to impartially measure and assess the thermal efficiency of windows. It will also serve as a useful marketing tool for window manufacturers/suppliers.

## How to apply for a Window Energy Performance (WEP) Certificate:

**Before making your formal application to NSAI Agrément you should ask a competent Simulator to undertake a rating of your window(s) on your behalf.**

From this exercise you will obtain an appreciation of the potential rating readily achievable from your window design. If your market requires a different window rating, a re-design may be required. Once the competent Simulator has carried out the rating of the window(s), the simulator then completes the WEP application form and, with all relevant documentation, submits the application form to NSAI Agrément. A production inspection audit of the manufacturing/ Quality System will then be carried out by NSAI Agrément.

When this inspection has been completed and approved by NSAI Agrément and all fees paid, NSAI Agrément will then allocate a registration number and place it on our WEP register of window manufacturers/suppliers. Once approval has been received, the window manufacturer/ supplier is entitled to mark their product(s) with the WEP number and affix the WEP label on their product(s).