

ENERGY LABELING FOR WINDOWS in Portugal



SISTEMA DE ETIQUETAGEM
ENERGÉTICA DE PRODUTOS



Why windows labeling?

1. Windows have an important indirect **impact in the energy consumption** of buildings;
2. Allows for **additional and easy to understand information** that leads to a facilitated comparison;
3. **Facilitates the communication** between home owner and the manufacturers/installer of windows;
4. **Boots competition** and distinction between manufactures in order to achieve high efficient products;
5. Will allow for a more easy **relation with building codes and incentives.**



> **A simple understanding and important tool for communicating and to support decisions**

> **Allow for a better choice of efficient windows**



What is Energy Labeling for Windows?

A voluntary labeling system

- A voluntary labeling system that extends the concept of labeling into products that are not EC regulated; Allow manufacturers or installers to distinguish their products based on its energy performance and the labeling concept.

An “open door” for efficient products

- Where home owners can choose efficient products; Where home owners can get additional information about the products installed in their houses.

A marketing tool for promotion

- Where the sector can benefit from a general marketing strategy coming from the established business model; Where manufacturers can leverage their specific marketing on the general marketing provided by the system.

Energy Labeling for Windows

- **ADENE** – Agência para a Energia is the entity that manages the Energy Labeling System for Products (SEEP) and specific the Energy Labeling for Windows. ADENE also manage the platform where the industry sector, the end user, the associations and other actors of system interact between.



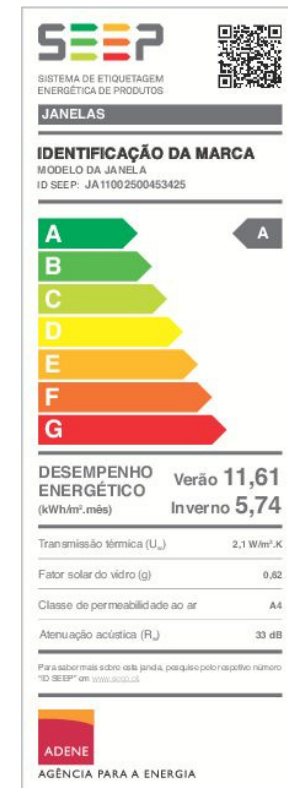
AGÊNCIA PARA A ENERGIA

- **ITeCons – Construction Sciences Research and Development Institute** from the University of Coimbra is in charge of the development of the methodology behind the windows energy performance calculation.



How does the system work?

- **Who issues the energy labels?** Manufacturers, after registering themselves on the on-line platform.
- **What is necessary to support the windows energy performance evaluation?** CE marking results providing full evidence of all the mandatory parameters necessary for the performance evaluation.
- **When can the manufacturer issue labels?** As soon as the products are all characterized in the system by the glass producer, the system owner or the manufacturer.
- **Where are the labels produced?** The labels are produced within the system and provided by it in a PDF format.



How does the system work?

- **What kind of parameters influence the energy performance rating?** The energy performance rating is calculated based on an energy balance of gains and losses.

Key parameters:

- Thermal transmission coefficient of the window U_w – EN ISO 10077-1/-2; EN ISO 12567-1/-2
- Thermal transmission coefficient of the glass U_g – EN 673; EN 674; EN 675
- Thermal transmission coefficient of the frame U_f – EN ISO 10077-2; EN 12412-2
- Solar factor g_w – EN 410
- Solar factor plus shading devices – EN 13363-1; EN 13363-2; ISO 15099
- Air permeability – NP EN 1026; NP EN 12207

Additional parameters:

- Light transmission – EN 410
- Acoustic attenuation of the window – EN ISO 140-3; EN ISO 717-1

The system provides 2 kinds of labels

The energy label
(for promotional and marketing purposes)



The registry label
(for multiple purposes)



ANFAJE is member of:

CPCI – Confederação Portuguesa da Construção e do Imobiliário

FAECF - Federation of European Window and Curtain Wall Manufacturers' Association

FORUM IBERO AMERICANO de Janelas, Portas e Fachadas

