

Thermal

Thermal Insulation is measured in U Values, the U Value measures how well a building component in this instance a window keeps heat inside the room.

What is a U-Value?

The U-Value is a measurement of heat flow through the window, the lower the U Value the better the performance and this effectively means less heat is escaping out through the window.

U-Value measures only the 'centre pane value' this means it only measures the U Value of the glass not the whole window including all framing U Value.

The Technical Explanation

U-Value describes how much thermal energy in Watts (W) is transferred through the window with the size of 1 metre square (m²) at a temperature difference between the inner and outer face of glass is 1 kelvin (K) (+1 degree Celcius). Therefore the unit for U-Value is W/(m²K).

What is WER?

The WER is Window Energy Rating this is the new system which took effect from 2010 for measuring the performance of new windows (both replacement double glazing and windows in newly built properties).

WER measures the whole thermal performance of a window including the U Value In order to help explain to customers who are asking about A,B,C energy rated windows as a typical thermal performance we have calculated the following...

Secondary Glazing with 6mm energy saving (low E) K glass, fitted over a typical traditional timber window will achieve a WER Rating Scale of:

B or C Rated

Secondary Glazing with double glazed energy saving (low E) K glass, fitted over a typical traditional timber window will achieve a

WER Rating Scale of:

A Rated

All this is approx. and dependant on the cavity and the glazing thickness (usually 4mm) of the primary window.

Important Information

The guidelines set out in Part L of the Building Regulations do not and never have apply to Secondary Glazing. The Secondary Window does not have to comply.

Building Regulations

L1B – Existing dwellings, England & Wales

Windows

- Window Energy Rating minimum Band C
- Whole element U-Value 1.6W/m²K or better

Doors

- Whole element U-Value 1.8W/m²K or better

L1A – New dwellings, England & Wales Windows,

doors and curtain walling

- Whole element U-Value 2.0Wm²k