

## Compliance

Part L U-value declaration

Certificate

This is to confirm that PVC-U windows and doors manufactured from WHS Halo systems, when used in conjunction with the maximum glass or panel centre pane U-value and warm edge spacer bar technology, will comply with the maximum U-value of 1.6 W/m<sup>2</sup>K for replacement windows, and the maximum of 1.8 W/m<sup>2</sup>K U-value for replacement doors, as required within Approved Document L1B of 2010 Building Regulations for England and Wales (Conservation of Fuel and Power).

PVC-U window and door types covered by this Part L declaration	Maximum Centre Pane U-value for glass or panel W/m²K
Casements	1.5
Tilt & Turns The Building Regulations 2000 Conservation of fuel and power	1.5
Horizontal Pivots	1.5
Top Swings	1.5
Vertical sliders APPROVED DOCUMENT DOCUMENT Residential doors L1B Conservation of fuel and power in existing dwellings	1.5
Residential doors	1.5
French doors	1.5
Tilt & Slide Patio doors Coming into effect 1 October 2010	1.5
In-line Patio doors	1.5
Bi-folding doors	<sup>0</sup> <sub>02</sub> 1.5
Residential doors with midrail (glass/glass & glass/panel)	1.5
Residential doors with vacuum formed panels (solid & glazed)	1.8
Composite doors (solid & glazed slabs)	1.8



U-value calculations and simulations are in accordance with BS EN ISO 10077-1 and BS EN ISO 10077-2 and have been carried out by a BFRC approved simulator. U-value calculations are based on BR 443 window frame size and BS EN 14351-1 door sizes.

This declaration covers 62 mm and 70 mm frame depth; fully steel reinforced sections; external and internal beaded frames; small and large outer frames; systems specific thresholds and all frame colours and finishes.

Insulating glass units utilising warm edge technology with linear thermal transmittance (ψ) of less than 0.05 W/m²K are required to be used in conjunction with this Part L U-value declaration.