



Steel Window Association

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Product Development Group

Technical Consultant

Peter W Johnson

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Building Regulations England & Wales Part L 2010 summary extracts from Approved Documents

New Buildings ADL1a and ADL2a

25% overall reduction on 2006 Target CO² Emission Rate implies typical expected U-value for windows and pedestrian doors of 1.5 W/m²K.

Worst acceptable building average U-value for windows and pedestrian doors:
2.0 W/m²K in dwellings, 2.2 W/m²K in other buildings.

Thermal bridging heat loss around perimeter of windows and doors to be calculated using quality assured accredited construction details, otherwise penalty default values will be applied, eg 0.15 W/mK in dwellings that would add 0.45 W/m²K to a standard reference window U-value.

Building Emission Rate calculations accompanied by specification of fabric elements to be submitted to Building Control at design stage both before work starts and on completion.

Existing Buildings ADL1b and ADL2b

Standard for replacement windows in dwellings, or for new windows in extensions:
no worse than U-value 1.6 W/m²K or Window Energy Rating Band C;
for external doors, whether glazed or not, no worse than U-value 1.8 W/m²K.

Standard for replacement windows and pedestrian doors in other buildings, or for new windows and doors in extensions:
no worse than U-value 1.8 W/m²K;
excepting high usage entrance doors allowed up to U-value 3.5 W/m²K.

The U-value of the window can be calculated for the smaller of the two standard windows defined in BS EN 14351-1. (Annex E Determination of characteristics 4.12 Thermal transmittance gives 1.23 m x 1.48 m without defining a configuration.)

"Where the replacement windows are unable to meet the requirements... because of the need to maintain the external appearance of the façade or the character of the building, replacement windows should meet a centre pane U-value of 1.2 W/m²K, or single glazing should be supplemented with low-e secondary glazing."

"Historic and traditional buildings... have an exemption from the energy efficiency requirements where compliance would unacceptably alter the character or appearance:

- a. listed buildings
- b. buildings in conservation areas
- c. scheduled ancient monuments

There are three further classes... where special considerations...may apply:

- a. buildings... of architectural and historical interest... referred to... in a local authority's development plan...
- b. buildings... of architectural and historical interest within national parks, areas of outstanding national beauty, registered historic parks and gardens...
- c. buildings of traditional construction with permeable fabric that both absorbs and readily allows the evaporation of moisture."

"The aim should be to improve energy efficiency as far as is reasonably practicable... The guidance given by English Heritage should be taken into account... (as also) the advice of the local authority's conservation officer."
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