

## Helping you meet Part L of Government Building Regulations

- The preferred methods of demonstrating a window's compliance with the new
   Part L regulations are 'hot box' testing, or calculation to the European standard.
- In the absence of these, the Government has calculated minimum (default) values which may be used.
- The table shows the relevant data for windows with wood and PVC-U frames, and highlights the performance of the Pilkington range of products.
- Using a variety of low emissivity glass types, the table shows how these units help windows easily meet the new requirements.



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## Understanding the Government's data on U values.

These are indicative U values only – for more accurate measurements, hot box tests must be carried out on individual window/frame combinations

## Indicative U values for windows with wood or PVC-U frames

		Gap between panes		
εn is the emissivity of		6mm	12mm	16mm or more
the low E glass. Those quoted are normal emissivities – uncoated glass is assumed to have a normal emissivity of 0.89	Single glazing		4.8	
	Double glazing (air filled)	3.1	2.8	2.7
	• Double glazing (low E, εn = 0.2, air filled)	2.7	2.3	2.1
Alternatively, specify Pilkington <b>Insulight</b> ™ Therm 1.7	Double glazing (low E, εn = 0.15, air filled)  • e.g. an insulating unit incorporating Pilkington <b>K Glass</b> ™	2.7	2.2	2.0
Alternatively, specify Pilkington <b>Insulight</b> ™ Therm 1.4  The gas mixture is assumed to consist of 90% argon and 10% air	Double glazing (low E, $\varepsilon n = 0.1$ , air filled)	2.6	2.1	1.9
	Double glazing (low E, εn = 0.05, air filled) e.g. an insulating unit incorporating  • Pilkington <b>Optitherm</b> ™SN	2.6	2.0	1.8
	Double glazing (argon filled)	2.9	2.7	2.6
	Double glazing (low E, $\varepsilon n = 0.2$ , argon filled)	2.5	2.1	2.0
	Double glazing (low E, $\varepsilon n = 0.1$ , argon filled)	2.3	1.9	1.8
Alternatively, specify Pilkington <b>Insulight</b> ™ Therm 1.2	Double glazing (low E, εn = 0.05, argon filled) e.g. an insulating unit incorporating  • Pilkington <b>Optitherm</b> ™SN	2.3	1.8	1.7
	Solid wooden door		3.0	

For doors that are half-glazed, the U value is the average of the appropriate window U value and that of the non-glazed part of the door (e.g. U3.0 for a wooden door) The shaded boxes highlight the configurations that will achieve U2.0 or better – the maximum U value permissible for windows under the elemental method of the new Part L

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