

# Your Quick Guide Glass & Energy Performance

## Revised Building Regulations



At the heart of the Building Regulations relating to window performance lies conservation of fuel and power, which is aimed at making dwellings more energy efficient. The windows and doors must comply with the requirements of the amount of heat that can pass through the glass and framework.

Please note that the new regulations come into force in 2022 across the entire nation, which means any installations taking place now will need to comply with the new regulations.

**Important note regarding New Build Installations:** Building elements used in new homes have a targeted specification value and a limiting value allocated to them. The targeted specification value can be described as the desired u-value and the limiting value is the minimum requirement. A new home is always built to a minimum standard of total energy performance.

## England



### Part L1B 2022 (Replacements)

Replacement Windows	1.4 U-value Window Energy Rating B
Replacement Doors with >60% Glazing	1.4 U-value Doorset Energy Rating C
All Other Replacement Doors	1.4 U-value Doorset Energy Rating B

### Part L1A 2022 (New Builds)

Limiting Standard for any Windows and Doors	1.6 U-value
Targeted Specification Value for Windows and Doors with >60% Glazing	1.2 U-value
Targeted Specification Value for Semi-glazed Doors (30-60% Glazed Area)	1.0 U-value

## Wales



### Part L1B 2022 (Replacements)

Replacement Windows	1.4 U-value Window Energy Rating B
Replacement Doors with >60% Glazing	1.4 U-value Doorset Energy Rating C
All Other Replacement Doors	1.4 U-value Doorset Energy Rating B

### Part L1A 2022 (New Builds)

Limiting Standard for any Windows and Doors	1.4 U-value
Targeted Specification Value for Windows and Doors with >60% Glazing	1.3 U-value
Targeted Specification Value for Semi-glazed Doors (30-60% Glazed Area)	1.0 U-value

## Scotland



### Part L1B 2022 (Replacement)

Replacement Windows	1.4 U-value Window Energy Rating B
Replacement Doors with >60% Glazing	1.4 U-value Doorset Energy Rating B
All Other Replacement Doors	1.4 U-value Doorset Energy Rating B

### Part L1A 2022 (New Builds)

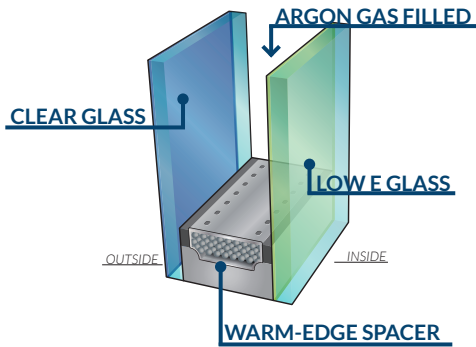
Limiting Standard for any Windows and Doors	1.4 U-value
Targeted Specification Value for any Windows and Doors	1.2 U-value

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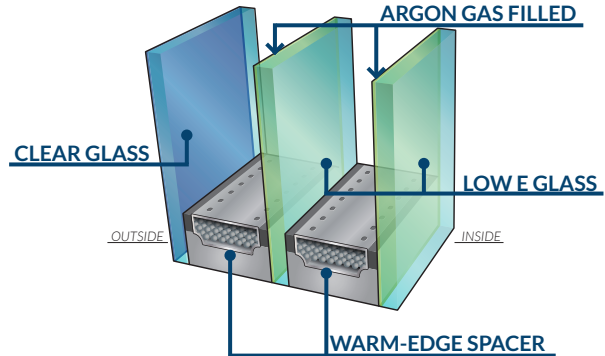
## Our Glass Units

In order to achieve the energy performance levels required by Building Regs we have reworked our product offering to include a selection of high-performing glass unit make-ups. All insulated glass units come with an argon gas insert as standard, which reduces the heat conductance between the panes. This happens because the gas is 6 times denser than air. The warm edge spacer bar incorporated into all units is made from an extruded PVC material and has been specifically designed to reduce transference of heat between the panes of glass keeping more heat inside the property.

### Double Glazed Unit



### Triple Glazed Unit



## Energy Performance

Product	Glass Unit	Laminated Glass	Performance Value(s)
PVCu Sliding Sash Window	Double Glazed: 4/16/4 (24mm)	N	1.4W/m2K / 'A' WER
	Double Glazed: 4/16/4 (24mm) (Thermal Upgrade)	N	1.2W/m2K / 'A' WER
	Double Glazed: 4/14/6.8 (24mm)	Y	1.4W/m2K / 'A' WER
	Double Glazed: 6.8/14/4 (24mm)	Y	1.4W/m2K / 'A' WER
PVCu Casement Window	Double Glazed: 4/20/4 (28mm)	N	1.4W/m2K / 'A' WER
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K / 'B' WER
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K / 'A' WER (Small Frame), 'B' WER (Large Frame)
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6.8/16/4 (28mm)	Y	1.4W/m2K
	Triple Glazed: 4/14/4/14/4 (40mm)	N	1.0W/m2K
	Triple Glazed 4/14/4/12/6.8 (40mm)	Y	1.0W/m2K (Small Frame), 1.1W/m2K (Large Frame)
PVCu Casement Door	Double Glazed: 4/20/4 (28mm)	N	1.4W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Triple Glazed: 4/14/4/14/4 (40mm)	N	1.1W/m2K (French), 1.0W/m2K (Single)
	Triple Glazed 4/14/4/12/6.8 (40mm)	Y	1.1W/m2K
PVCu Flush Window	Double Glazed: 4/20/4 (28mm)	N	1.4W/m2K / 'A' WER (Small Frame), 'B' WER (Large Frame)
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K / 'B' WER
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K / 'A' WER (Small Frame), 'B' WER (Large Frame)
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6.8-16-4 (28mm)	Y	1.4W/m2K / 'B' WER
	Triple Glazed: 4/14/4/14/4 (40mm)	N	1.0W/m2K
	Triple Glazed 4/14/4/12/6.8 (40mm)	Y	1.0W/m2K (Small Frame), 1.1W/m2K (Large Frame)

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## Glass & Energy Performance

### Energy Performance *continued*

Product	Glass Unit	Laminated Glass	Performance Value(s)
PVCu Flush Door	Double Glazed: 4/20/4 (28mm)	N	1.4W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Triple Glazed: 4/14/4/14/4 (40mm)	N	1.1W/m2K
	Triple Glazed 4/14/4/12/6.8 (40mm)	Y	1.1W/m2K
PVCu Sliding Patio Door	Double Glazed: 4/20/4 (28mm)	N	1.4W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Triple Glazed 6-8-6-10-6 (36mm)	N	1.1W/m2K
	Triple Glazed: 4-12-4-12-4 (36mm)	N	1.0W/m2K
	Triple Glazed 4-10-4-12-6.8 (36mm)	Y	1.1W/m2K
	Triple Glazed 6-8-6-10-6.8 (36mm)	Y	1.2W/m2K
Aluminium Bi-fold- & Glazed Door	Double Glazed: 4/16/4 (24mm) Planitherm One	N	1.6W/m2K
	Double Glazed: 4/18/6.8 (28mm) Planitherm One	Y	1.6W/m2K
	Double Glazed: 6/16/6 (28mm) Planitherm One	N	1.6W/m2K
	Double Glazed: 6/16/6.8 (28mm) Planitherm One	Y	1.6W/m2K
	Double Glazed: Morley Glass 8.8/20/4 (32mm) Planitherm One	Y	1.6W/m2K
	Triple Glazed: 4/12/4/12/4 (36mm) Planitherm One	N	1.3W/m2K
	Triple Glazed: 4/10/4/12/6.8 (36mm) Planitherm One	Y	1.4W/m2K
	Triple Glazed: 6/10/6/8/6 (36mm) Planitherm One	N	1.4W/m2K
	Triple Glazed: 6/8/6/10/6.8 (36mm) Planitherm One	Y	1.4W/m2K
	Double Glazed: 4/20/4 (28mm) Planitherm Total+	N	'C' DSER
	Double Glazed: 6/16/6 (28mm) Planitherm Total+	N	'C' DSER
	Double Glazed: 4/18/6.8 (28mm) Planitherm Total+	Y	'C' DSER
	Double Glazed: 6/16/6.8 (28mm) Planitherm Total+	Y	'C' DSER
	Double Glazed: Morley Glass 4/20/4 (28mm) Planitherm Total+	N	'C' DSER
Aluminium Sliding Patio Door	Double Glazed: 4/20/4 (28mm)	N	1.5W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.4W/m2K
	Double Glazed: 6/16/6 (28mm)	N	1.4W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.4W/m2K
	Triple Glazed: 4/12/4/12/4 (36mm)	N	1.2W/m2K
	Triple Glazed: 4/10/4/12/6.8 (36mm)	Y	1.2W/m2K
	Triple Glazed: 6/10/6/8/6 (36mm)	N	1.3W/m2K
	Triple Glazed: 6/8/6/10/6.8 (36mm)	Y	1.3W/m2K
Aluminium Casement Window	Double Glazed: 4/20/4 (28mm)	N	1.6W/m2K / 'B' WER
	Double Glazed: 4/18/6.8 (28mm)	Y	1.5W/m2K
	Double Glazed: 6/16/6 (28mm)	N	1.5W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.5W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	'B' WER
	Triple Glazed: 4/12/4/12/4 (36mm)	N	1.2W/m2K
	Triple Glazed: 4/10/4/12/6.8 (36mm)	Y	1.3W/m2K
	Triple Glazed: 6/10/6/8/6 (36mm)	N	1.3W/m2K
	Triple Glazed: 6/8/6/10/6.8 (36mm)	Y	1.3W/m2K

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## Glass & Energy Performance

### Energy Performance *continued*

Product	Glass Unit	Laminated Glass	Performance Value(s)
Aluminium Heritage Door - Single Open Out	Double Glazed: 6/16/6 (28mm)	N	1.6W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.6W/m2K
	Double Glazed: 6/16/6.8 (28mm)	Y	1.6W/m2K
Aluminium Heritage Door - French Open Out	Double Glazed: 4/20/4 (28mm)	N	'C' DSER
	Double Glazed: 4/18/6.8 (28mm)	Y	'C' DSER
	Double Glazed: 6/16/6 (28mm)	N	'C' DSER
	Double Glazed: 6/16/6.8 (28mm)	Y	'C' DSER
Aluminium Heritage Window	Double Glazed: 4/16/4 (24mm) Planitherm One	N	1.6W/m2K
	Double Glazed: 4/18/6.8 (28mm) Planitherm One	Y	1.6W/m2K
	Double Glazed: 6/16/6 (28mm) Planitherm One	N	1.6W/m2K
	Double Glazed: 6/16/6.8 (28mm) Planitherm One	Y	1.6W/m2K
	Double Glazed: 4/20/4 (28mm) Planitherm Total+	N	'B' WER Not new-build compliant
	Double Glazed: 6/16/6 (28mm) Planitherm Total+	N	'B' WER Not new-build compliant
	Double Glazed: 4/18/6.8 (28mm) Planitherm Total+	Y	'B' WER Not new-build compliant
	Double Glazed: Morley Blinds 4/20/4 (28mm) Planitherm Total+	N	'B' WER Not new-build compliant
Quick-Glide Door	Double Glazed: 4/20/4 (28mm)	N	1.6W/m2K
	Double Glazed: 4/18/6.8 (28mm)	Y	1.6W/m2K
	Triple Glazed: 4/12/4/12/4 (36mm)	N	1.3W/m2K
	Triple Glazed: 4/10/4/12/6.8 (36mm)	Y	1.4W/m2K