



**YOUR GUIDE TO
PART L REGULATIONS**
AND HOW THE SHEERLINE
RANGE COMPLIES

PART L Compliant ✓

USING STANDARD **DOUBLE GLAZING**



SHEERLINE[®]
ALUMINIUM WINDOWS AND DOORS

New Part L Regulations

As the UK moves towards 2025's Future Homes and Buildings Standard, the Government has introduced a range of changes to Building Regulations.

This includes a mandatory 30% cut in carbon for all new homes and a 27% cut for other buildings, including offices and shops.

Part L of the regulations covers the Conservation of Fuel and Power, and sets the minimum thermal performance for various building elements, including windows and doors.

WHAT'S CHANGED?

The revision to Part L sees **thermal standards for windows and doors for both renovation and new-build projects tighten**, as the country looks to reduce its carbon footprint and improve the energy efficiency and thermal performance of everyone's homes.

This table lists the main new thermal requirements of Part L of the latest Building Regulation for Dwellings.

For full details please refer to the Building Regulations Approved Document L on: www.gov.uk/government/collections/approved-documents

PRODUCT TYPE	EXISTING DWELLING Inc Extensions	NEW BUILD LIMITING VALUE*
MAXIMUM U-VALUE W/(M ² K)		
WINDOWS	1.4 OR <div>Window Energy Rating Band minimum B</div>	1.6
DOORS WITH >60% OF INTERNAL FACE GLAZED	1.4 OR <div>Doorset Energy Rating Band minimum C</div>	1.6
OTHER DOORS	1.4 OR <div>Doorset Energy Rating Band minimum B</div>	1.6

***This is the absolute maximum permitted**, with requirements changing based on the overall building specification – we advise checking what is required on a case-by-case basis.

PLEASE NOTE

Building Regulations also state that no window or door should perform more poorly than the element it is replacing. For ease, throughout the document we've listed U-value's without the W/(m²K) suffix.

WHEN DID IT CHANGE?

These changes came into effect on **15th June 2022** and will affect all housing that didn't have planning approval before that date, and on anything that hasn't commenced construction before 15th June 2023.

 HM Government

The Building Regulations 2010

Conservation of
fuel and power

APPROVED DOCUMENT

Volume 2: Buildings other than dwellings

Requirement L1: Conservation of fuel and power

Requirement L2: On-site generation of electricity
Regulations: 6, 22, 23, 24, 25, 25A, 25B, 26, 26C, 27, 27C,
28, 40, 40A, 43, 44 and 44ZA

2021 edition – for use in England

Part L1 to the Building Regulations 2010.
2022 for use in England. It does not apply to work
on or initial notice submitted before that date,
before 15 June 2023. Full detail of the transitional
01/2021 published on gov.uk.

New Requirements

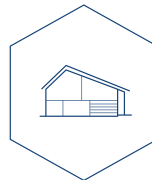


REPLACEMENTS & EXTENSIONS

Thermal transmittance, also known as a U-value, measures the rate of transfer of heat. The better-insulated a window is, the lower the U-value will be.

From 15th June, windows and doors fitted in England have had to meet these stricter standards, with a maximum U-value of 1.4, or an Energy Rating of B for glazed windows and doors, and C for single doors.

This will help create better insulated homes, that require less heating. This move is good for the environment but will leave some window systems and their installers out in the cold as they don't easily meet these more stringent standards. Forcing installers to use more expensive systems or install triple glazed products to comply.



NEW DWELLINGS

The energy efficiency of new-buildings is calculated using the combined performance of every element within a structure, from the walls and roof to the windows and doors.

As the relative performance of all the elements of a building are considered together, the requirements for new buildings aren't as straightforward as they are for renovations.

The 'Limiting Value' for new-build, i.e. the maximum U-value that can be used, is 1.6 for windows and doors to meet the latest regulations.

The Building Regulations also provide a 'notional' example to show how this will work in practise, using a window U-value of 1.2 in their illustration.

Our expectation is that most new-build projects will specify U-values between 1.4 and 1.0, based on both the amount of glazing in the project and the other building materials used.



HOW DOES THIS IMPACT YOU?

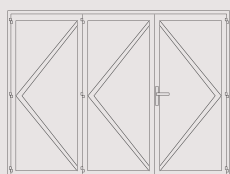
As an installer, you have a legal responsibility to ensure you are supplying and fitting compliant windows and doors and can provide evidence to back this up if required.

THERMLOCKI[®]

The good news is that Sheerline's entire range is compliant with these new standards, using standard double glazing, due to our modern system design and the use of our own unique Thermlock[®] technology for thermal breaks.

PART L COMPLIANCE TABLE

<div>DOUBLE GLAZED</div> <div>STYLES</div> <div>GLASS SPECIFICATION</div> <div>Method of Compliance REPLACEMENT & EXTENSIONS</div> <div>Method of Compliance NEW BUILD</div>			
	<i>Classic</i> WINDOWS	<i>Prestige</i> WINDOWS	<i>Prestige</i> DOORS
	CASEMENT, FIXED AND FRENCH STYLES	CASEMENT, FIXED, FRENCH AND TILT & TURN STYLES	INCLUDING SINGLE, FRENCH, TOPLIGHT AND SIDELIGHT COMBINATIONS
	28mm (4/20/4) Planitherm Total+ / Argon / Clear or 28mm (4/16/6.8) [†] Clear / Argon / Laminated Planitherm Total+	28mm (4/20/4) Planitherm ONE / Argon / Clear or 28mm (4/18/6.8) Planitherm ONE / Argon / Laminated Clear	28mm (4/20/4) Planitherm ONE / Argon / Clear or 28mm (4/18/6.8) Planitherm ONE / Argon / Laminated Clear
	A WER ✓	1.4 U-value ✓	1.4 U-value ✓
	1.5 U-value ✓ Upgraded to Planitherm ONE or 1.6 U-value ✓	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm Total+	1.4 U-value ✓ or 1.5 U-value ✓ Changed to Planitherm Total+
<div>TRIPLE GLAZED</div> <div>36MM</div> <div></div> <div>44MM</div>	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Planitherm ONE x 2 / Argon x 2 / Clear	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Planitherm ONE x 2 / Argon x 2 / Clear	1.1 U-value ✓✓✓ 36mm (4/12/4/12/4) Planitherm ONE x 2 / Argon x 2 / Clear
	A+ WER ✓✓ 36mm (4/12/4/12/4) Planitherm Total+ x 2 / Argon x 2 / Clear	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Planitherm Total+ x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/12/4/10/6.8)	1.2 U-value ✓✓ 36mm (4/12/4/12/4) Planitherm Total+ x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/12/4/10/6.8)
		1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Planitherm ONE x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/16/4/14/6.8)	1.0 U-value ✓✓✓✓ 44mm (4/16/4/16/4) Planitherm ONE x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/16/4/14/6.8)
		1.1 U-value ✓✓✓ A+ WER ✓✓ 44mm (4/16/4/16/4) Planitherm Total+ x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/16/4/14/6.8)	1.1 U-value ✓✓✓ A+ WER ✓✓ 44mm (4/16/4/16/4) Planitherm Total+ x 2 / Argon x 2 / Clear or as above with Laminated Clear (4/16/4/14/6.8)



Prestige BI-FOLD SYSTEM

Prestige LIFT & SLIDE PATIO

SINGLE, FRENCH AND
BI-FOLDING DOORS
UP TO 7 PANES

DOUBLE, TRIPLE AND
QUADRUPLE TRACKED
UP TO 4 PANES

28mm (4/20/4)
Planitherm ONE / Argon / Clear
or

28mm (4/18/6.8)
Planitherm ONE / Argon /
Laminated Clear

28mm (4/20/4)
Planitherm ONE / Argon / Clear
or

28mm (4/18/6.8)
Planitherm ONE / Argon /
Laminated Clear

1.4 U-value ✓

1.4 U-value ✓

1.4 U-value ✓

or

1.5 U-value ✓

Changed to **Planitherm Total+**

1.4 U-value ✓

or

1.5 U-value ✓

Changed to **Planitherm Total+**

1.1 U-value ✓✓✓

36mm (4/12/4/12/4)
Planitherm ONE x 2 / Argon x 2 / Clear

1.2 U-value ✓✓

36mm (4/12/4/12/4)
Planitherm Total+ x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/12/4/10/6.8)

1.0 U-value ✓✓✓✓

44mm (4/16/4/16/4)
Planitherm ONE x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/16/4/14/6.8)

1.1 U-value ✓✓✓✓ **A+ WER** ✓✓

44mm (4/16/4/16/4)
Planitherm Total+ x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/16/4/14/6.8)

1.1 U-value ✓✓✓

36mm (4/12/4/12/4)
Planitherm ONE x 2 / Argon x 2 / Clear

1.2 U-value ✓✓

36mm (4/12/4/12/4)
Planitherm Total+ x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/12/4/10/6.8)

1.0 U-value ✓✓✓✓

44mm (4/16/4/16/4)
Planitherm ONE x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/16/4/14/6.8)

1.1 U-value ✓✓✓✓ **A+ WER** ✓✓

44mm (4/16/4/16/4)
Planitherm Total+ x 2 / Argon x 2 / Clear
or
as above with **Laminated Clear**
(4/16/4/14/6.8)

PART L Compliant ✓

KEEPING COMPLIANCE SIMPLE

Rest assured, Sheerline's complete range is designed to meet an individual building's requirements easily, whether for a renovation / extension or a new dwelling.

ITHERMLOCKI®

Powered by Thermlock® technology, we are committed to staying at the forefront of efficient aluminium solutions that will help the UK move towards 2025's Future Homes Standard.

**PLEASE
NOTE**

†We have shown the internal low-e pane laminated in our WER specification as this maximises the g-value (solar gain), giving the best possible WER result.

**The low-e (Low-Emissivity) glass we've shown in our WER examples is Planitherm Total+, but similar results can be achieved with other 5% low-e glass options such as Guardian ClimaGuard A, or Pilkington K Glass S.*

The thermal control glass shown is Planitherm ONE, but is interchangeable with other 1% low-e glass options such as Guardian ClimaGuard 1.0, or Pilkington Optitherm 1.0.

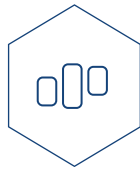
 **SHEERLINE**®
ALUMINIUM WINDOWS AND DOORS

Performance Built In As Standard

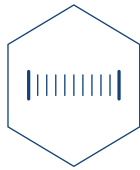
All Sheerline aluminium systems are built around our own unique Thermlock® technology.

Our ultra-wide Thermlock® thermal breaks benefit from integrated multi-chambered designs, creating efficient insulation inside every Sheerline products. Far superior to smaller two-piece polyamide alternatives.

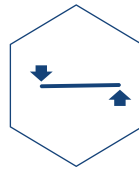
Designed and manufactured by us, Thermlock® offers almost double the insulation when compared to polyamide. Making our windows, doors, bi-folds and lanterns inherently more efficient than systems that use polyamide thermal breaks.



**MULTI
CHAMBERED
THERMAL
BREAK**



**WIDER
INTEGRATED
ONE-PIECE
DESIGN**

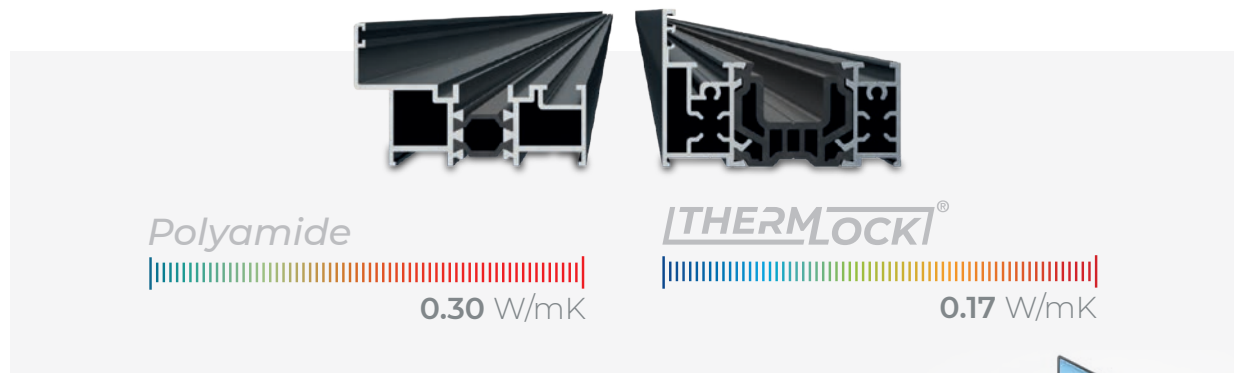


**RIGID AND
MORE
STABLE**



**WARMER
THAN
POLYAMIDE**

Working in conjunction with high-performance, double and triple glazing to create a thermal barrier that reduces heat transfer, Thermlock® helps keep homes well insulated against the worst of the UK weather.



FOR EXTRA PEACE OF MIND

Sheerline's cills, ancillaries and corner posts, also feature this same technology coupled to innovative in-built weather sealing that keep draughts and rain safely outside.

This all goes to make Sheerline the most thermally efficient aluminium system in its class.

THERMAL CALCULATOR

Sheerline fabricators have access to our own easy to use Energy Rating and U-value calculator, putting the power of Thermlock® at their fingertips

Keeping Compliance Simple

Our entire range complies
with the new regulations using
standard 28mm double glazing.



Sheerline's complete aluminium range is designed to meet an individual building's requirements easily, whether a product is being used in a renovation or extension, or as part of a new dwelling. **Powered by Thermlock® technology**, we are committed to staying at the forefront of efficient aluminium solutions that will help the UK move towards 2025's Future Homes Standard.

Insulated with
THERMLOCKI®
technology

Our Product Range

With a shared design philosophy and built around the same ingenious and unique engineering principles, Sheerline's aluminium systems are designed to be used seamlessly together.

Sheerline's comprehensive range of premium aluminium products are easy to install, and offer class leading performance combined with quick, hassle-free installation. From universal clip-in beads that remove the need for wedge gasketing, to flat backed cills that fit plaster reveals perfectly, our system has been designed to be as installer friendly as possible.

With aesthetics, colours, styles and performance that match perfectly across all products, Sheerline is easy to sell and results in installations that customers love.

Why fit a mismatch of products when you can offer complete, cohesive solutions that have been designed to work perfectly together?



Classic

With ultra slim sightlines, as low as 59mm, our Classic window system is an ideal replacement for traditional steel windows, or for ultra-modern, minimalist renovations and extensions.

CASEMENTS, FRENCH, FIXED, BOW AND BAY WINDOWS



Prestige

Our most versatile window and door range, Prestige offers our widest range of options that means its suitable for the widest range of projects.

CASEMENTS, TILT & TURN, FRENCH, FIXED, BOW AND BAY WINDOWS, SINGLE AND FRENCH DOORS



Prestige BI-FOLDING DOOR

Beautifully balanced Prestige Bi-folds provide slim, equal 138mm sash-to-sash sightlines to ensure light bathes interiors, even when doors are closed. Providing bright airy interiors no matter what style of configuration you choose.

SINGLE, FRENCH AND BI-FOLDING DOORS



Prestige COMPOSITE DOOR FRAME

Ultra-rigid, premium aluminium composite door frames combine strength and durability with exceptional thermal performance.

All in a style that perfectly matches the rest of the Sheerline range of products for the complete aluminium look.



ROOF LANTERN

Our industry award winning S1 system is the UK's most secure, sustainable and stylish roof lantern. With great looks from every angle – due to our unique ultra-low line aesthetics.



Manufactured and designed in the UK, innovative aluminium windows and doors with a unique approach to integrated systems design.

www.sheerline.com

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Official Police Security Initiative



All the information provided in this guide is based on our informed opinion, test data and the publicly available information at the time of publishing. If you are in doubt about compliance with this, or any other element of Building Regulations please seek independent advice as appropriate or speak to your local Building Control Officer.