



Preparing for Approved Document L 2026

A Guide for Window and Door Manufacturers,
Fabricators and System Providers



Approved Document L 2026 represents one of the most significant changes to thermal performance compliance requirements in recent years. While many in the fenestration sector have focused on notional and limiting U-value targets, the most significant change is how thermal performance will be calculated and evidenced.

When the new Approved Document L1 2026 comes into effect from March 2027, standard benchmark-size U-value calculations will no longer be accepted for windows and doors installed into new dwellings in England and Wales. Instead, manufacturers and suppliers will be expected to provide U-values based on the actual size, specification and configuration of each opening.

This guide explains:

- Why the regulations are changing
- What the new requirements mean in practice
- The impact on manufacturers and fabricators
- The role of technology and automation
- How businesses can prepare for implementation
- What future developments may mean for the industry

Understanding the Future Homes Standard

The Future Homes Standard forms part of the UK Government's commitment to achieving Net Zero carbon emissions by 2050. New homes built under the standard are expected to produce around 75% fewer carbon emissions than homes built to 2013 standards.

This reduction will be achieved through a combination of:

- Improved building fabric performance
- Greater airtightness
- Low-carbon heating systems
- Solar energy generation
- Battery storage technologies
- Energy recovery systems

For the window and door sector, the emphasis is shifting away from simply meeting a thermal target and towards demonstrating the real-world performance of installed products.

Why Approved Document L is Changing

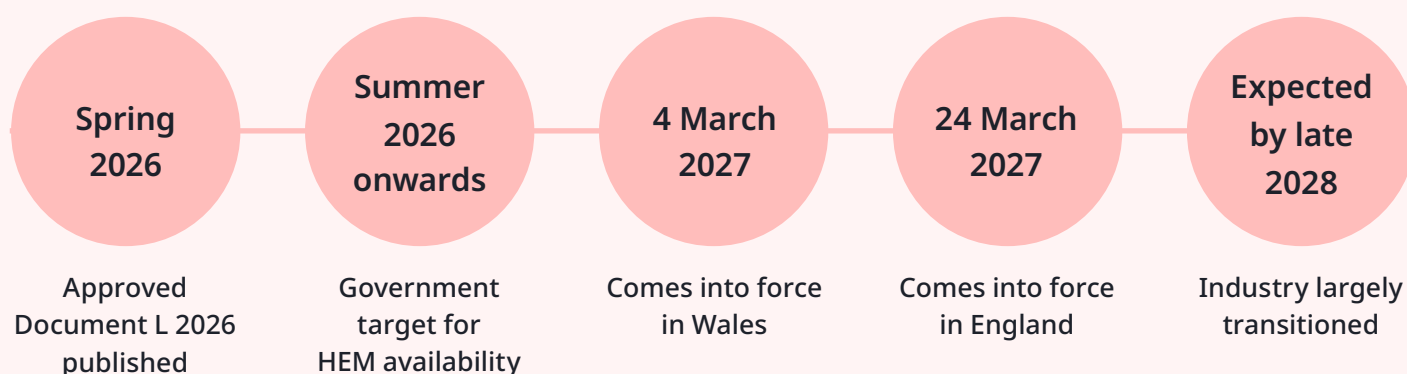
Historically, U-values have typically been calculated using benchmark representative window and door sizes.

However, government analysis concluded that these benchmark sizes are not representative of many products installed in new homes.

Most openings in new dwellings are smaller than the benchmark dimensions. Because larger glazed areas generally deliver better U-Values, benchmark calculations can result in declared U-values that are better than the actual performance of installed products.

Approved Document L1 2026 aims to close this performance gap by requiring calculations based on the actual products being installed.

Key dates



Transition periods will be available in specific circumstances, but these maybe more restrictive than under previous editions of Document L

What Will Change?

Current approach

Most declared U-values are based on:

- Standard window sizes
- Standard door sizes
- Representative configurations
- Generic product assumptions
- Representative product families

This approach remains acceptable for many replacement installations in existing dwellings.

Future approach

For new dwellings, calculations must be based on:

- Actual window/doorset dimensions
- Actual product configurations
- Including all components

Every window and door opening will effectively be a bespoke U-Value calculation.

Components that must be included

Under the new approach, U-value calculations will need to account for all relevant product features, including:

- Mullions
- Transoms
- Sills
- Dummy sashes
- Dummy transoms/mullion rails
- Frame extensions
- Georgian/attached bars
- Non-dead-load-bearing baypoles and couplers

Only certain structural components such as load-bearing couplers and bay poles may be treated differently within broader dwelling calculations.

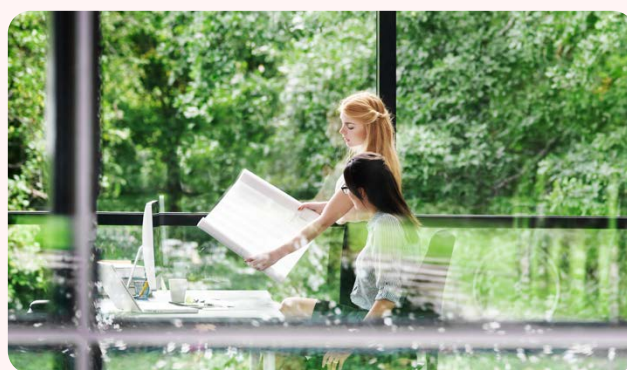
This represents a substantial increase in calculation complexity compared with current methods.

What should you do next?

For businesses supplying windows and doors into the new-build sector, the move to Approved Document L 2026 is more than a compliance update, it represents a fundamental change in how U-values are calculated and evidenced.

Every opening will require a bespoke calculation based on its actual size, configuration and component parts, making automation essential.

Whether calculations are generated through ERP software, a dedicated U-value calculator or a third-party solution, systems should be reviewed now to ensure they can accommodate the additional data requirements.



Early engagement with house builders, SAP assessors and warranty providers will also help organizations understand future expectations and demonstrate that the U-value information they provide is accurate, transparent and compliant with Approved Document L1:2026.

England and Wales requirements

Approved Document L 2026 aligns notional values in England and Wales, but some limiting U-values differ. Please refer to the tables on this and the following page.

Current and future requirements at a glance

In Wales, ADL 2026 comes into effect on 4 March 2027, followed in England on 24 March 2027. This is extended by a further 6 months for Higher Risk Buildings (HRB’s) and a further 12-month transition period exists for developments with planning permission.

New Dwellings

	England				Wales			
	Notional U-Value W/(m²·K)		Limiting U-Value W/(m²·K)		Notional U-Value W/(m²·K)		Limiting U-Value W/(m²·K)	
Approved Document L1	2021	2026	2021	2026	2022	2026	2022	2026
Windows	1.2	1.2	1.6	1.6	1.3	1.2	1.4	1.4
Doors >60% glazed	1.2	1.2	1.6	1.6	1.3	1.2	1.4	1.4
Doors <60% glazed	1.0	1.0	1.6	1.6	1.0	1.0	1.4	1.4
Fire Doors >60% glazed	1.2	1.2	1.6	1.6	1.3	1.2	1.4	1.4
Fire Doors <60% glazed	1.0	1.0	1.6	1.6	1.0	1.0	1.4	1.4

Note 1: ADL1 2026 will require U-Values for new dwellings to be based on either measurement (hot box testing) or calculations which are based on the actual size and configuration of the window. In future, U-Values tested or calculated to standard models and configurations (e.g.: 1230mm wide x 1480mm high window with central divider), will not be possible.

Existing Dwellings

	England				Wales			
	Limiting U-Value W/(m²·K)		Energy Rating (WER/DSER)		Limiting U-Value W/(m²·K)		Energy Rating (WER/DSER)	
Approved Document L1	2021	2026	2021	2026	2022	2026	2022	2026
Windows	1.4	1.4	B	B	1.4	1.4	B	B
Doors >60% glazed	1.4	1.4	C	C	1.4	1.4	C	C
Doors <60% glazed	1.4	1.4	B	B	1.4	1.4	B	B
Fire Doors >60% glazed ^{note1}	1.4	1.4	C	C	1.4	1.4	C	C
Fire Doors <60% glazed ^{note1}	1.4	1.4	B	B	1.4	1.4	B	B

Note 1: For external fire doorsets, as defined in Appendix A of Approved Document B, Volume 1, a maximum U-value of 1.8W/(m²·K) is permissible.

Note 2: Tested or calculated U-Values can continue to be provided for standard models and configurations (eg: 1230mm wide x 1480mm high window with central divider), however, calculating using the actual size and configuration of the window/doorset is an option.

New and existing buildings other than dwellings

England						
	Notional U-Value W/ (m ² ·K)		Limiting U-Value W/ (m ² ·K)		Energy Rating (WER/ DSER)	
Approved Document L2	2021	2026	2021	2026	2021	2026
Windows	1.4	Note2	1.6	1.6	-	-
Windows in buildings similar to dwellings	-	-	1.6	1.6	B	B
Doors >60% glazed	1.9	Note2	1.6	1.6	-	-
Doors <60% glazed	1.9	Note2	1.6	1.6	-	-
Fire Doors >60% glazed ^{note1}	1.9	Note2	1.6	1.6	-	-
Fire Doors <60% glazed ^{note1}	1.9	Note2	1.6	1.6	-	-

Note 1: For external fire doorsets, as defined in Appendix A of Approved Document B, Volume 2, a maximum U-value of 1.8W/(m²·K) is permissible.

Note 2: Notional U-Values for SBEM / non-domestic buildings in England (Part L 2026) have not yet been formally published in the NCM Modelling Guide.

Note 3: Tested or calculated U-Values can continue to be provided for standard models and configurations (eg: 1230mm wide x 1480mm high window with central divider), however, calculating using the actual size and configuration of the window/doorset is an option.

New and existing buildings other than dwellings

Wales								
	New Buildings Other than Dwellings				Existing Buildings Other than Dwellings			
	Notional U-Value W/(m ² ·K)		Limiting U-Value W/(m ² ·K)		Limiting U-Value W/(m ² ·K)		Energy Rating (WER/DSER)	
Approved Document L2	2022	2026	2022	2026	2022	2026	2022	2026
Windows	1.4	Note2	1.6	1.6	1.8	1.8	-	-
Windows in buildings similar to dwellings	-	-	-	-	1.4	1.4	B	B
Doors >60% glazed	1.9	Note2	1.8	1.8	1.8	1.8	-	-
Doors <60% glazed	1.9	Note2	1.8	1.8	1.8	1.8	-	-
Fire Doors >60% glazed	1.9	Note2	1.8	1.8	1.8	1.8	-	-
Fire Doors <60% glazed	1.9	Note2	1.8	1.8	1.8	1.8	-	-
High usage Entrance Doors	1.9	Note2	3.0	3.0	3.5	3.5	-	-

Note 1: Tested or calculated U-Values can continue to be provided for standard models and configurations (e.g.: 1230mm wide x 1480mm high window with central divider), however, calculating using the actual size and configuration of the window/doorset is an option.

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Calculating the exact size and configuration – the challenge

One of the key issues is the thermal performance of smaller openings.

As windows become smaller, it results in:

- Frame area represents a larger proportion of the opening
- Glazing area reduces
- Overall U-values increase (worsen)

This means small windows typically installed in cloakrooms, bathrooms and utility rooms may become more challenging to achieve limiting U-Values using high performing, thermally efficient, double-glazed solutions and, triple glazing may become increasingly common.

Demand for bespoke calculations

The Government has ambitious housebuilding targets for the current Parliament.

Using recent housing completion figures and average opening numbers per property which are below Govt. targets, the industry would need to generate almost:

- **1.4 million** bespoke window U-value calculations annually
- **350,000** bespoke door U-value calculations annually

Producing this volume of calculations manually would be impractical for many businesses.

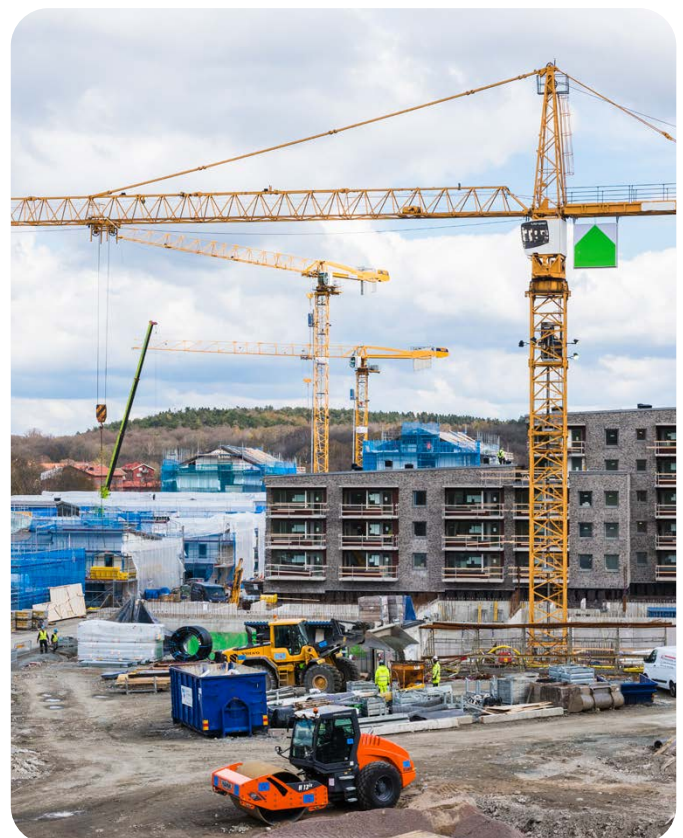
Why technology will be critical

The transition to bespoke, opening-specific calculations may require:

- Calculation software
- ERP integration
- Automated workflows
- Digital product data
- Improved calculation accuracy

Businesses should begin assessing whether their current systems are capable of:

- Generating exact size and configuration U-Values
- Incorporating all required components
- Producing outputs at scale
- Sharing information efficiently across the supply chain



Looking ahead: The Home Energy Model (HEM)

Beyond Approved Document L 2026, the industry should also be aware of the Home Energy Model (HEM).

HEM is expected to become the future methodology for residential energy assessment, replacing SAP 10.3 and will initially operate alongside SAP for a determined period of time before SAP is retired.

Unlike SAP, HEM is expected to consider:

- Greater detail of Individual opening characteristics
- Orientation
- Exposure
- Shading effects
- Detailed glazing and frame data

This signals a move towards more detailed, performance-based building assessments.

What success looks like

Organizations that are well prepared for Approved Document L 2026 will be able to:

- Generate fabric opening specific U-Values efficiently
- Provide reliable data to customers, assessors and stakeholders
- Reduce compliance risk
- Support Government net zero targets
- Adapt more easily to future regulatory developments



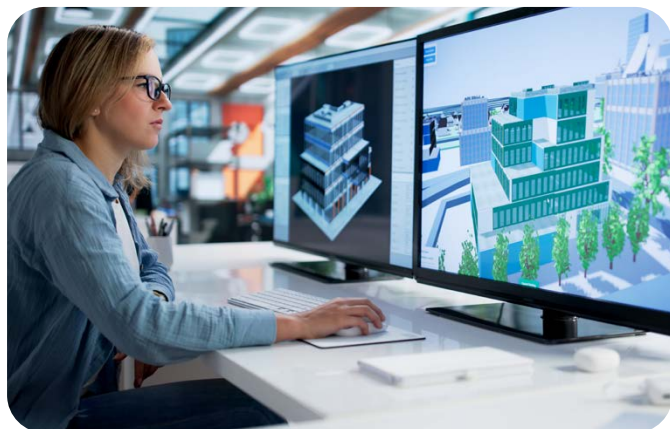
How BSI Can Help

Two New BSI Certificates of Conformity

To support the transition to opening-specific U-Value calculations, BSI has developed two new Certificates of Conformity designed to provide confidence in both the underlying thermal performance data and the software used to generate bespoke U-Values. Together, they create an end-to-end chain of assurance backed by UKAS accreditation.

BSI U-Value Certificate of Conformity for Window and Door Set Calculations

Designed for system designers, product designers and manufacturers who undertake thermal modelling and U-Value calculations, this certificate provides independent verification that the underlying thermal data has been generated in accordance with Approved Document L guidance, BR 443 and BS EN ISO 10077 Parts 1 and 2.



BSI Certificate of Conformity for U-Value Calculation Programs

Designed for software providers and technology developers, this certificate confirms that a U-Value calculation program correctly applies the methodology and formulae contained within BS EN ISO 10077-1, providing confidence in the accuracy and consistency of calculation outputs.

While Approved Document L 2026 does not require U-Values to be certified, manufacturers and suppliers will be expected to provide bespoke U-Value calculations for new dwellings.

Independent certification offers a practical way to demonstrate that product information is accurate, transparent, trustworthy and compliant with recognized industry standards. SAP 10.3 guidance also recommends the use of certified manufacturer U-Value data in preference to default values where available.

Benefits of BSI Certification

End-to-end assurance from thermal data input through to calculation output.

Greater transparency and consistency across the supply chain.

UKAS accreditation to BS EN ISO 10077-1, BS EN ISO 10077-2 and relevant clauses of BR 443.

Increased confidence for house builders, SAP assessors, warranty providers and regulators.

A Complete Assurance Chain.

Used together, the two Certificates of Conformity provide assurance from the accuracy of the underlying thermal performance data through to the software used to generate opening-specific U-Values.

Organizations can pursue either certificate independently or combine both to create a fully verified calculation process that supports confidence throughout the supply chain.

Preparing Your Business

Step 1

Review current capabilities

Questions to ask yourself:

- Can we generate bespoke U-values today?
- Can we include all required product components?
- Do our calculations align with Approved Document L1:2026 requirements?

Step 2

Review software

Consider whether existing software can:

- Produce exact size and configuration U-Value calculations
- Handle increased calculation volumes
- Integrate into existing workflows
- Reduce administrative burden

Step 3

Engage stakeholders

Early conversations should take place with:

- Housebuilders
- Warranty providers
- SAP assessors
- Building control teams
- Architects

Understanding future information requirements now will reduce disruption later.

Step 4

Strengthen data management

The quality of thermal calculations depends on the quality of input data.

Organizations should review:

- Competence/resources
- Calculation methodologies
- Product databases
- Data ownership
- Component libraries

Reliable information will become increasingly important throughout the product lifecycle.

Step 5

Demonstrate confidence

Customers are likely to seek increasing reassurance that U-value information is:

- Accurate
- Traceable
- Transparent
- Compliant

Building confidence in thermal performance data may become a differentiator as the market adjusts to new requirements.



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