



PART L 2010 COMPLIANCE DETAILS

Options for Showing Compliance with Part L for Windows & Doors are as follows:

The U-values for windows and doors are to be calculated using the methods set out in BR443 and are to be based on the whole unit combining the performance of the glass and frame with four possible demonstration methods dependant upon the type of building:

- For existing dwellings or existing buildings domestic in character use window energy ratings WER's (see details of BSI or BFRC schemes)
- Thermal calculation using standard window and doors size and configurations shown in BR443/EN14351-1 (see details in the matrix below) or
- Thermal calculation using actual window and door sizes for the project (use Sapa Biblio)
(An area weighted average calculation for the project windows and doors is to be taken for new build. Existing replacement windows and doors have a limiting U-value figure for each element)
- For dwellings or buildings domestic in character use look up figures in SAP 2009 Table 6e in the absence of test data. Thermal performance figures are dependant on thermal break and glazing specifications (results are generally poor and would require the use of triple glazing)

PART L1B & L2B (EXISTING) 2010 COMPLIANCE MATRIX

The matrices below show the glazing specifications and edge spacer details to meet the target U-values

TO MEET PART L1B EXISTING DWELLINGS										
Windows to achieve 1.6 U Value					Note: This table is based on EN14351/BR443					
Doors to Achieve 1.8 U Value					standard window and doors see below					
Actual sizes will give differing results										
Product Details	WER	Glass Centre Pane & Edge Spacer Spec								
		1.0			1.1			1.2		
		Wrm Edge	Swss Spcr	Supr Spcr	Wrm Edge	Swss Spcr	Supr Spcr	Wrm Edge	Swss Spcr	Supr Spcr
DUALFRAME										
Dualframe 75 Casement (DF305, DF327, DF331)	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Casement (DF304, DF327, DF331)	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Casement (DF304, DF327, DF335)	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 HP Single Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 HP Double Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualfold Sliding Folding Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Si Casement	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Si TBT	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Vertical Sliding Window	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Tilting Vertical Sliding Window	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Horizontal Sliding Window	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown										
Crown 75 Casement	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown 52 Casement	A-C	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Single Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Double Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Patio		✓	✓	✓	✓	✓	✓	✓	✓	✓

TO MEET PART L2B EXISTING NON-DWELLINGS										
Windows to achieve 1.8 U Value					Note: This table is based on EN14351/BR443					
Doors to Achieve 1.8 U Value					standard window and doors see below					
High Use Entrance Doors 3.5 U Value					Actual sizes will give differing results					
Product Details	WER	Glass Centre Pane & Edge Spacer Spec								
		1.0			1.1			1.2		
		Wrm Edge	Swss Spcr	Supr Spcr	Wrm Edge	Swss Spcr	Supr Spcr	Wrm Edge	Swss Spcr	Supr Spcr
DUALFRAME										
Dualframe 75 Casement Standard Duty		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Casement Heavy Duty		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 HP Single Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 HP Double Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualfold Sliding Folding Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Si Casement		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Si TBT		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 55 Pivot		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualframe 75 Reversible Window		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Vertical Sliding Window		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Tilting Vertical Sliding Window		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dualslide Horizontal Sliding Window		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown										
Crown 75 Casement		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown 52 Casement		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Single Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Double Door Std Threshold		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crown Patio		✓	✓	✓	✓	✓	✓	✓	✓	✓
STORMFRAME										
Stormframe ST HP Single Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stormframe ST HP Double Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stormframe 202 HP Single Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stormframe 202 HP Double Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
SECUR II										
Secur II Single Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
Secur II Double Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
POWERFRAME										
Powerframe 80 Single Door		✓	✓	✓	✓	✓	✓	✓	✓	✓
Powerframe 80 Double Door		✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTES

- Actual Window or Door sizes can be used in place of the standard configurations which will affect performance
- Please note products comply in replacement applications by using the sealed unit and edge spacer detailed
- Where the specific thermal edge spacer is unknown then a generic edge detail has been simulated to give the calculated result
- Columns headed 1.0, 1.1 and 1.2 all refer to centre pane U-values of a sealed unit, 90% Argon fill and softcoat will be required to meet the specified U-value figure.
- Please contact your glass supplier to get precise glazing specifications for any quoted glass unit performance.
- The WER column is intended to give the range of rating that can be achieved by the product and needs to be accredited by a certification scheme such as BFRC or BSI.
- Wrm Edge = a generic warm edge unit Swss Spcr = Swiss Spacer
Supr Spcr = Super Spacer

WHAT ABOUT PART L1A AND PART L2A NEW BUILD?

Part L1A & Part L2A call for windows and doors to meet an area weighted average U value, with a worst acceptable figure. For L1A a U-Value of 2.0W/m2K and for L2A a U-Value of 2.2W/m2K. All products and glazing specifications on the above charts clearly meet these requirements. It is likely that there will be an improvement necessary to achieve the building Target Emissions Rate in which case there will be a project specific area weighted average requirement to be met. In these situations a project specific calculation is likely to be required as can be achieved in the Sapa Biblio software. In a number of cases the project requirement would be 1.8 W/m2K or higher then the matrix for Parts L1B and L2B above can be used.

Shopfronts or Display Screens as they are termed in the documents do not have to meet thermal performance requirements with certain stipulations that they are at the external perimeter of the building with access to a pedestrian thoroughfare, with screen heights being less than 3m and having no permanent work area within one glazing height.

Curtain Walling is considered in L2A with a limiting area weighted average of 2.2W/m2K and in L2B as a formula with the limiting figure being the lower of 1.8W/m2K or the product of $U_{limit} = 0.8 + \{(1.2 + (FOL \times 0.5)) \times GF\}$ where FOL is the Fraction of Opening Lights and GF is the Glazed Fraction. The actual U-value of the typical project curtain walling element can be calculated using the Sapa Biblio software.

