

*Thin Double Glazing
for the Restoration
of Period Properties*

Histoglass

H₈
Histoglass

Thin Double Glazing

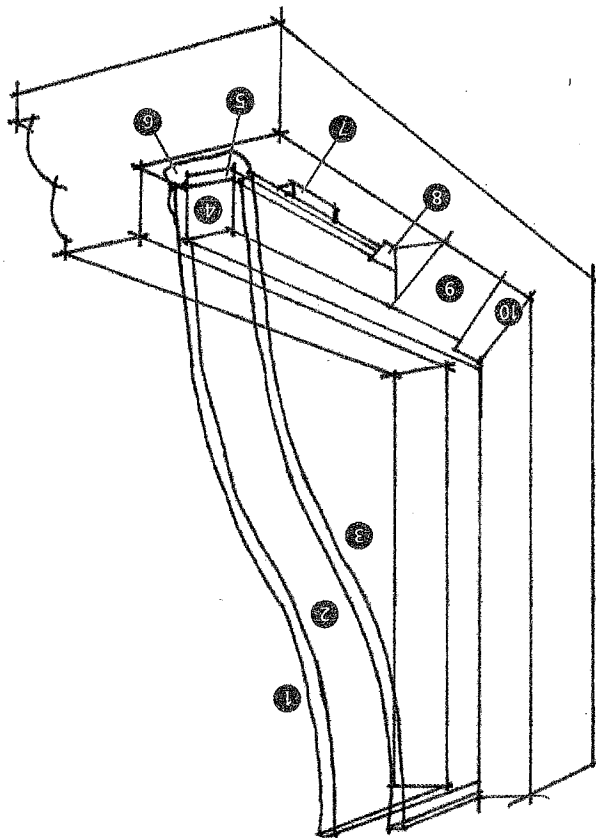
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Source: Approved Document L1B
Source: Scottish Government - Building Standards Division

Acoustic Performance Performance Class	Thermal Performance Class	Requirement England and Wales	
		Building Regulations Part L New fittings in extensions	Building Regulations Part L Replacement windows
A	1	1.8	1.8
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B	2	1.8	1.8
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D	4	1.8	1.8
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F	6	1.8	1.8
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G	7	1.8	1.8
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H	8	1.8	1.8
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I	9	1.8	1.8
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J	10	1.8	1.8
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K	11	1.8	1.8
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L	12	1.8	1.8
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M	13	1.8	1.8
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N	14	1.8	1.8
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O	15	1.8	1.8
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P	16	1.8	1.8
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Q	17	1.8	1.8
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V	22	1.8	1.8
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X	24	1.8	1.8
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Y	25	1.8	1.8
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Z	26	1.8	1.8
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AA	27	1.8	1.8
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AB	28	1.8	1.8
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AC	29	1.8	1.8
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AD	30	1.8	1.8
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AE	31	1.8	1.8
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AF	32	1.8	1.8
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AG	33	1.8	1.8
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AH	34	1.8	1.8
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AI	35	1.8	1.8
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AJ	36	1.8	1.8
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AK	37	1.8	1.8
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AL	38	1.8	1.8
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AM	39	1.8	1.8
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AN	40	1.8	1.8
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AO	41	1.8	1.8
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AP	42	1.8	1.8
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AQ	43	1.8	1.8
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AR	44	1.8	1.8
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AS	45	1.8	1.8
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AT	46	1.8	1.8
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AU	47	1.8	1.8
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AV	48	1.8	1.8
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AW	49	1.8	1.8
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AX	50	1.8	1.8
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AY	51	1.8	1.8
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AZ	52	1.8	1.8
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BA	53	1.8	1.8
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		2.0	1.8
		2.0	1.8
BB	54	1.8	1.8
		2.0	1.8
		2.0	1.8
		2.0	1.8



1. Low-E float glass inner pane
2. Gas-filled cavity
3. Outer pane
4. Aluminium spacer bar
5. Perimeter seal
6. Sealant – Kawo Elastokitt
7. Hardwood spacer
8. Sprig
9. Putty line – Kawo Elastokitt
10. Paint overlapping onto glass by 1-2mm

Why an aluminium spacer bar and not warm-edge?

Warm edge technology is now standard for conventional double glazing, and the required width of up to 18mm for the edge seal is well hidden in large rebates. For historic windows this is of course not an option. Because of the width of the glazing bars, the perimeter seal needs to be much smaller, which unfortunately cannot be achieved with warm edge technology without compromising the quality.

Available in 4 types: D10, D11, D12 and D13. Each providing varying acoustic and thermal insulation properties. The inner pane has a Low Emissivity coating, the cavity is gas-filled and the outer pane can be chosen from any of our (Historic) Glass Types. Inner and outer panes can be in Toughened and Laminated Glazing. In existing frames the rebate should be at least 16mm deep and 8mm wide. For new frames and a 10mm unit, the optimal depth of the rebate is 18.5 mm, the overall width of the glazing bar 24mm (with a 10mm rebate width/height).

Our solution

The only reliable way to ensure consistent quality in the production of our units is to work with a primary seal which bonds the 2 panes of glass to the aluminium spacer bar, and a secondary (perimeter) seal to make sure the unit retains the gas. This combination makes our perimeter seal 7-8mm. If we could use different materials to reduce this and still be able to guarantee the longevity of our product, we certainly would. After 25 years of testing, though, we haven't found a way yet!

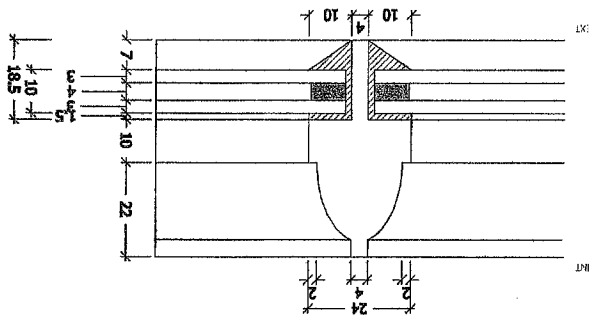
In summary

- Total thickness of units starting at 10mm. The only system of its kind to conform to all 6 parts of BS EN 1279.
- Covered by a 7 year manufacturers warranty.
- Available with Toughened and Laminated Glass.
- For the outer pane please select from our selection of glass types (see our brochure Historic Glass Types) for all options and more information.
- We recommend installation using putty to obtain the look of single-glazed units. We supply a specially developed, non-inseal based sealant and putty for the installation of the units, this guarantees the highest possible quality. The aluminium profile can be coloured in any RAL-colour to match the colour of the paintwork of the frames.

Does the aluminium spacer bar create a cold bridge?

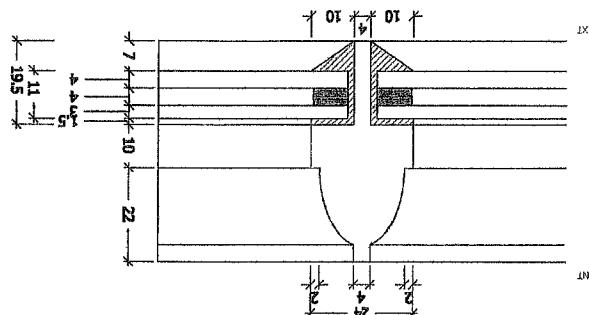
All materials have thermal conductivity, some higher than others. Aluminium and glass individually have a relatively high conductivity and if the aluminium spacer bar touched the glass directly, it would most certainly create a cold bridge. However, this is not the case as the primary seal provides a barrier between the two products and as the thermal conductivity of this seal is negligible, the cold-bridge effect is also negligible.

D10



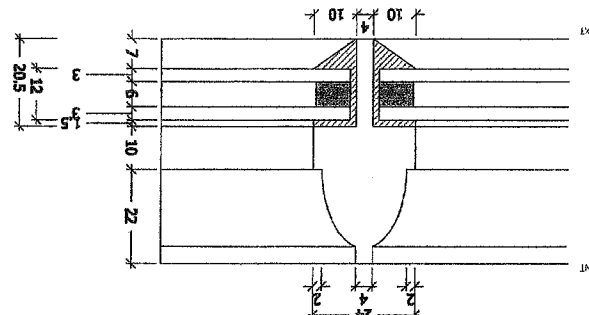
Thickness
3-4-3mm (10mm)
Weight
15kg/m.sq
U-value
1.9 (W/m2K)

D11



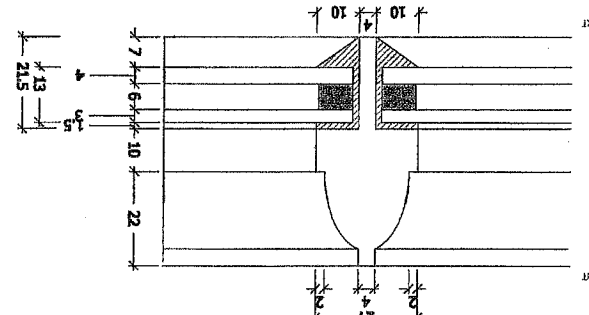
Thickness
3-4-4mm (11mm)
Weight
17.5kg/m.sq
U-value
1.9 (W/m2K)
Noise Reduction
34dB

D12



Thickness
3-6-3mm (12mm)
Weight
15kg/m.sq
U-value
1.5 (W/m2K)

D13



Thickness
3-6-4mm (13mm)
Weight
17.5kg/m.sq
U-value
1.5 (W/m2K)