

# SPECIFICATION DATABASE



U28WWW - 7/24 - V1.0

Royale  
Collection

## 'u' Value - 2800 Wide Frame White Window

### Summary of U Value Calculation

Undertaken by MB Frames PVCu Limit, of 43-0011009086

Reference Number: 2800 White Wide Window

Deceuninck Window: Heritage 2800 storm casement (4.4.4.4.7.7.1)

Calculation Date: 2024-07-12

Calculated following the principles of EN ISO 10077-1:2006

### Basic Dimensions

Width of Opening: 1230 mm

Height of Opening: 1480 mm

### Window Glazing Profile

Number of Spaces: 1 (Double Glazing)

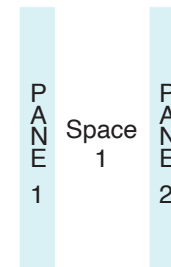
Gas Temperature: 283.15 K (10°C)

Normal Emissivity of Internal Glass Surface: 0.89

| Space | Width | Gas Type            |
|-------|-------|---------------------|
| 1     | 20 mm | 10% Air : 90% Argon |

| Space | e1               | e2               |
|-------|------------------|------------------|
| 1     | 0.05 (0.06 corr) | 0.89 (0.84 corr) |

| Pane | Thickness |
|------|-----------|
| 1    | 4 mm      |
| 2    | 4 mm      |



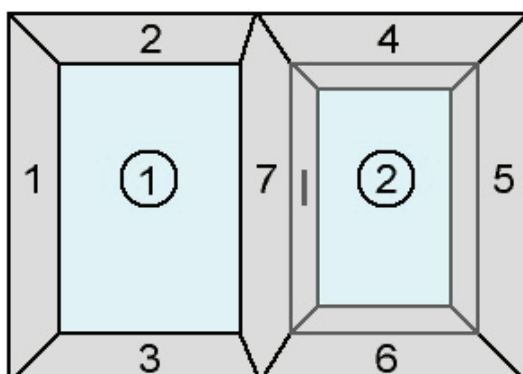
Total Thickness of Glazing: 28 mm

External Heat Transfer Coefficient: 25 W/m<sup>2</sup>.K

Internal Heat Transfer Coefficient: 7.7 W/m<sup>2</sup>.K

### Configuration of Unit: Frame & Pane Areas

Numbers on each frame edge correspond to the Frame Side in the frame table on the next page, and Circled Numbers refer to the Pane in the panes table.



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This data has been produced by the Oracle U Value Calculator.  
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Build Check Publications Ltd. For verification contact publications@buildcheck.co.uk.  
Calculations valid for one month.

Software Version: 2.1

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## 'u' Value - 2800 Wide Frame White Window

### Summary of U Value Calculation (ctd)

Reference Number: 2800 White Wide Window

Deceuninck Window: Heritage 2800 storm casement (4.4.4.4.7.7.1)

Calculation Date: 2024-07-12

### Window Frame

| Side | A f,i                | A f,e                | A frame              | Int. Frame W | Ext. Frame W | U frame                  |
|------|----------------------|----------------------|----------------------|--------------|--------------|--------------------------|
| 1    | 0.099 m <sup>2</sup> | 0.099 m <sup>2</sup> | 0.099 m <sup>2</sup> | 70 mm        | 70 mm        | 1.26 W/m <sup>2</sup> .K |
| 2    | 0.039 m <sup>2</sup> | 0.039 m <sup>2</sup> | 0.039 m <sup>2</sup> | 70 mm        | 70 mm        | 1.26 W/m <sup>2</sup> .K |
| 3    | 0.039 m <sup>2</sup> | 0.039 m <sup>2</sup> | 0.039 m <sup>2</sup> | 70 mm        | 70 mm        | 1.26 W/m <sup>2</sup> .K |
| 4    | 0.059 m <sup>2</sup> | 0.059 m <sup>2</sup> | 0.059 m <sup>2</sup> | 115 mm       | 115 mm       | 1.32 W/m <sup>2</sup> .K |
| 5    | 0.157 m <sup>2</sup> | 0.157 m <sup>2</sup> | 0.157 m <sup>2</sup> | 115 mm       | 115 mm       | 1.32 W/m <sup>2</sup> .K |
| 6    | 0.059 m <sup>2</sup> | 0.059 m <sup>2</sup> | 0.059 m <sup>2</sup> | 115 mm       | 115 mm       | 1.32 W/m <sup>2</sup> .K |
| 7    | 0.159 m <sup>2</sup> | 0.159 m <sup>2</sup> | 0.159 m <sup>2</sup> | 115 mm       | 115 mm       | 1.41 W/m <sup>2</sup> .K |

$$\Sigma A_{\text{frame}} : 0.612 \text{ m}^2$$

$$\Sigma A_{\text{frame}} \cdot U_{\text{frame}} : 0.810 \text{ W/K}$$

### Window Panes

| Pane | Type  | A panel              | U panel                   | Perimeter | Spacer               | PSI         |
|------|-------|----------------------|---------------------------|-----------|----------------------|-------------|
| 1    | Glass | 0.685 m <sup>2</sup> | 1.219 W/m <sup>2</sup> .K | 3.702 m   | Superspacer Standard | 0.036 W/m.K |
| 2    | Glass | 0.524 m <sup>2</sup> | 1.219 W/m <sup>2</sup> .K | 3.338 m   | Superspacer Standard | 0.036 W/m.K |

$$\Sigma A_{\text{pane}} : 1.208 \text{ m}^2$$

$$\Sigma A_{\text{pane}} \cdot U_{\text{pane}} : 1.474 \text{ W/K}$$

$$\Sigma l_{\text{pane}} \cdot \psi_{\text{pane}} : 0.253 \text{ W/K}$$

Total Thermal Conductance of Glazing: 1.54W/m<sup>2</sup>.K

No cross bars and no attached bars: 0 W/m<sup>2</sup>.K

Final U Value for Unit: 1.4 W/m<sup>2</sup>.K

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