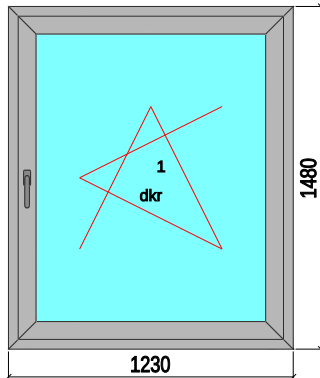


## U-value

Date: 01.11.2024



Construction with 1 element, 1230 mm x 1480 mm

### [1] 1-part Window

Profile system: IDEAL 8000® / energeto® 8000 aluskin, Joint  
 Colour: inside without foil/ outside RAL 7016 Anthracite grey,  
 Base component ap white  
 Gasket: papyrus-white  
 Frame: 180x05 Blendrahmen 80 mm (Reinforcements: 259107)  
 Sash: 180x20 Sash 77 mm (Reinforcements: 259022)  
 Fitting: 1x Tilt-and-turn right  
 Handle: Window Consisting of:  
 Fenstergriff  
 Infill panel: ClimaGuard® Premium2 (CE) VSG33.1 UG 0.60 EU,  
 120633 Glazing beads Classic-line

Size dependent calculation

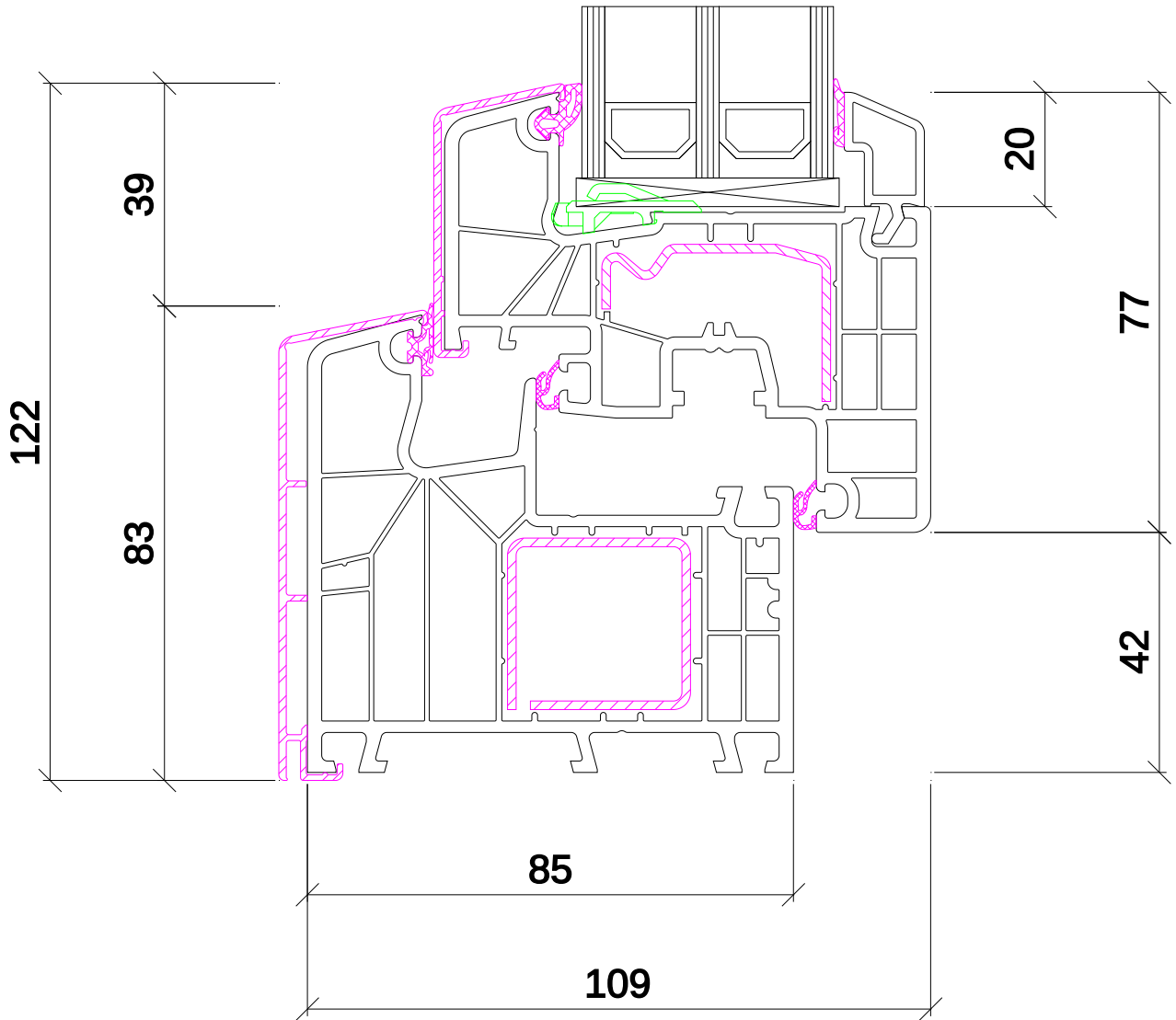
### [1] Window

| U <sub>w</sub>       | U <sub>g,m</sub>     | U <sub>f,m</sub>     | ΣA <sub>f</sub> | ΣA <sub>g</sub> | ΣL <sub>g</sub> | P <sub>sig,m</sub> |
|----------------------|----------------------|----------------------|-----------------|-----------------|-----------------|--------------------|
| W/(m <sup>2</sup> K) | W/(m <sup>2</sup> K) | W/(m <sup>2</sup> K) | m <sup>2</sup>  | m <sup>2</sup>  | m               | W/(mK)             |
| 0.83                 | 0.60                 | 1.0                  | 0.59            | 1.23            | 4.468           | 0.040              |

Standard window calculation

### [1] Window

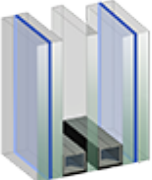
| U <sub>w</sub>       | U <sub>g,m</sub>     | U <sub>f,m</sub>     | ΣA <sub>f</sub> | ΣA <sub>g</sub> | ΣL <sub>g</sub> | P <sub>sig,m</sub> |
|----------------------|----------------------|----------------------|-----------------|-----------------|-----------------|--------------------|
| W/(m <sup>2</sup> K) | W/(m <sup>2</sup> K) | W/(m <sup>2</sup> K) | m <sup>2</sup>  | m <sup>2</sup>  | m               | W/(mK)             |
| 0.83                 | 0.60                 | 1.0                  | 0.59            | 1.23            | 4.468           | 0.040              |



# Europe

| Make-up Name | Glass 1 & Coating        | Glass 2 & Coating                                     | Visible Light |                            |                      | Solar Energy  |             |                   |                              | Thermal Properties | Embodied CO <sub>2</sub>       | Acoustic Values |      |     |
|--------------|--------------------------|---|---------------|----------------------------|----------------------|---------------|-------------|-------------------|------------------------------|--------------------|--------------------------------|-----------------|------|-----|
|              |                          |   | Transmittance | Reflectance                |                      | Transmittance | Reflectance | Solar Factor (g%) | Secondary Heat Transfer (qj) | U-Value            | [eq. kg/m <sup>2</sup> ] A1-A3 | RW(C;Ctr)       | OITC | STC |
|              |                          |   |               | Visible (τ <sub>v</sub> %) | ρ <sub>v</sub> % out |               |             |                   |                              |                    |                                |                 |      |     |
| Make-up 01   | Guardian ExtraClear (CE) | ClimaGuard® Premium2 (CE) on Guardian ExtraClear (CE) | 72.8          | 15.6                       | 15.6                 | 42.9          | 27.6        | 50.0              | 7.1                          | 0.6                | 46.97                          | 40(-2;-5)       | 32   | 40  |

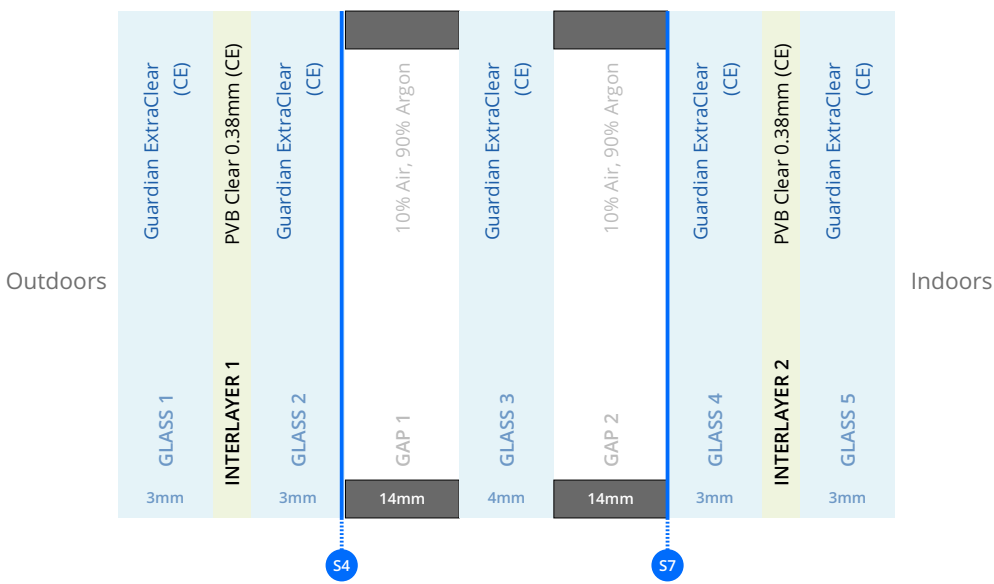
Calculation Standard: EN 410:2011 / EN 673:2011



Total Unit (Nominal):  
44.762 mm

Glazing Weight:  
38.8 kg/m<sup>2</sup>

Slope: 90°



Outdoors Indoors

### Coatings

- S4 SURFACE 4 COATING ClimaGuard® Premium2 (CE)
- S7 SURFACE 7 COATING ClimaGuard® Premium2 (CE)

### Important Notes

Calculations and terms in this report are based on EN 410:2011/EN 673:2011. The performance values shown above represent nominal values for the center of glass with no spacer system or framing. Solar Factor (g) and Secondary Heat Transfer (qj) are not available for sloped glazing, as no calculation method is prescribed by the standard for these attributes.

The KIWA logo and KIWA Validation Report MD - 14/477/GL are provided as evidence of validation of the Guardian Performance Calculator software, program version 4.1, for execution of calculations of luminous and solar characteristics of glazing and thermal transmittance, according to EN 410:2011 and EN 673:2011.