

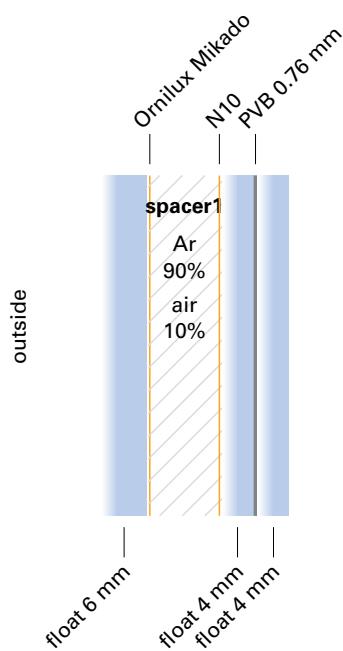
Calculated Properties of Insulating Glass Units (IGUs)



project: Ornilux

glass type: mikado UNO // Ug 1,0

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Performance Data ASHRAE and NFRC	outside	inside	Units: mm 90° (90° = vertical)
light transmittance	66 %		
light reflectance	24 %	25 %	
direct energy transmittance	35 %		
energy reflectance	39 %		
energy absorbance (1st pane)	16 %		
energy absorbance (2nd pane)	9 %		
ultraviolet transmittance	0 %		
light to solar heat gain coefficient	1.5		
solar heat gain coefficient (SHGC)	44 %		
total shading coefficient (SC)	51 %		
heat transfer coefficient SI (U-value_{winter}):	1.4 W/m²K		
heat transfer coefficient IP (U-value_{winter}):	0.2 BTU/(ft²hF)		
heat transfer coefficient SI (U-value_{summer}):	1.4 W/m²K		
heat transfer coefficient IP (U-value_{summer}):	0.2 BTU/(ft²hF)		
colour rendering index (transmittance):	96		
colour rendering index (reflectance):	92		
Relative Heat Gain	331 W/m ²		
Relative Heat Gain	105 BTU/(ft ² h)		

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arcon specifies product tolerances for coated semi-finished glass products according to the valid version of EN1096-4. Upon request, arcon will provide a type list (Q-Zert) of externally monitored insulating glass units including declared tolerances. Semi-finished uncoated glass products employed by arcon are used for the uncoated panes in the IGU assembly for calculating performance data. Slightly deviating performance parameters may occur if semi-finished uncoated glass products from other sources are used. In order to avoid propagation of rounding differences, several decimal places are included in the calculation and results are rounded to integers. Therefore, the relation "solar factor = direct energy transmittance + secondary heat transfer" is not always fulfilled. The calculated U-value is valid for the central part of the glazing only. Influences of the glazing edge due to thermal bridges (spacer and window frame) are not considered.

arcon sunbelt and arcon sunlite must be used on surface #2 (double glazed units) or surface #2 and #4 (triple glazed units), respectively. As a matter of principle, arcon coatings are not approved for use on monolithic panes and in insulating glass units with coating on the outer surfaces.

arcon reserves the right to change product performance characteristics without notice. Mistakes and errors cannot be excluded. Not every combination of substrate and coating can be fabricated although it may be calculated. Please contact our sales organisation for manufacturability. Recommendations regarding tempered and heat-strengthened glass do not include static load estimations nor do they replace thermal stress analysis. Those assessments must be performed separately.

calculation performed by:

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