

## OKAWOOD - Insulating Glass with Wooden Interlayer

OKAWOOD is a successful synthesis between the classical and the modern construction material, between wood and glass. OKAWOOD offers:

- efficient directionally selective sun protection
- very good heat insulation
- light transmission with characteristic colour tones
- partial though-vision



High-quality "Dark Red Meranti" wood is fixed as a grid in the cavity. The delicate wooden bars with a visible width of 10 mm are supported at intervals of 50-60 cm by vertical supporting bars.



The wooden grid acts as a solar protection element and allows a warm tint of daylight to enter between the bars.

**The wood used comes from plantations.**

### Technical data

Angle of incidence	0°	15°	30°	45°	60°
TSET	0.28	-	0.17	0.13	0.11
T <sub>v</sub>	0.29	0.23	0.10	0.04	0.02

$T_v$ , diff. ca. 14 % (This value is an estimate, no measured value is available at present)

U-value: approx. 1.3 - 1.6 - 1.9 W/(m<sup>2</sup>K) (0.23-0.29-0.33 Btu/hr/ft<sup>2</sup>/°F), depending on filler gas.

U-values refer to European Standard EN 673. Please contact our sales department for values according to ASHRAE conditions.

TSET (total solar energy transmittance or solar heat gain coefficient) and transmission values refer to European Standard EN 410. Values according to ISO 9050 may differ by 1-2%.

Legend and related values:

	<b>unit</b>	<b>standard</b>	<b>technical term</b>
<b>U</b>	W/(m <sup>2</sup> K)	DIN EN 673 DIN EN 674	Thermal transmittance, $U_g = U$
<b>TSET</b>	%	DIN EN 410	Total solar energy transmittance or solar heat gain coefficient
<b>T<sub>v</sub></b>	%	DIN EN 410	Light transmission (direct/hemispheric)
<b>R<sub>w</sub></b>	dB	DIN EN 20140	Sound reduction coefficient
<b>F<sub>c</sub></b>	%	DIN 4108	Reduction factor of a solar control system, $F_c = TSET / TSET_{reference}$
<b>SC</b>	%	GANA Manual	Shading coefficient, $SC = TSET / 0.86$

The above data are approximate data. They are based on measurements of recognized test institutes and calculations derived from these measurements.

At the moment, not all suppliers have adapted their key data to the currently applicable regulations. When making comparisons, please pay attention to the relevant manufacturer's notes. On the basis of the old standards, total solar energy transmittances as well as shading coefficient values are each 1-3% lower, the former U-value according to DIBt/DIN is 0.1 W/(m<sup>2</sup>K) lower.

## Structure

Outer pane Float toughened (thickness according to static requirements)

Cavity 18 mm with sawn, unfinished wooden Meranti grid. Please inquire for other finishings.

Inner pane float toughened with low E coating (thickness according to static requirements)

The material used as interlayer is a natural product. For this reason, deviations in colour, brightness and alignment of the wooden louvres may occur. Also spots of natural resin may appear at the surface of the wood.

## Dimensions and weight

Visible width of wooden grid

horizontal bars 10 mm, intervals 10 mm

vertical support elements 10 mm, intervals 50-60 cm

Glass dimensions

Height up to 350 cm, width up to 170 cm

Weight of wooden interlayer approx. 4.9 kg/m<sup>2</sup>

Widths of over 170 cm need a butt joint. A small gap or deviations in the alignment of adjoining bars may be visible.

More detail information you can find in our General Customer Notes "OKAWOOD Insulating Glass with Timber Insert".

