

SOLAR FLEX®
The electrical blind in IGU

I-S-T
Vertriebs GmbH

Many just have glass...



... we have the best glass with integrated blind*

*) according to published documents, known data and technical values of known competitors



Glass clear advantage!

Contrary to thermal and sun resistant glass with a permanent function **SOLAR FLEX** transforms with its adjustable reflective louver's ordinary insulation glass into a **glass element with integrated blind**. Interior room conditions can be adjusted to the respective environmental factors (sun-light & temperature).

Due to variable and adaptable slat reflectors of **SOLAR FLEX®** the conditions in the interior can be attuned to the weather- and irradiation conditions outside. At cold weather IGU's with integrated **SOLAR FLEX®** keep the warmth in the interior and helps to save valuable energy.

SOLAR FLEX® gives you additional shading, light control, privacy shield and energy protection in one system.





Product description

The venetian blind is installed within the head of the insulation glass (space 27mm, 29mm or 32 mm). Therefore, it is unaffected by the environment and maintenance free (no cleaning required). Subsequently damages to the venetian blind (internal or external) are impossible.

Lifting, lowering, turning and placement of the slats is done by a 24 Volt feed drive which is supplied with electricity from a transformer, battery, rechargeable battery or solar cell.

The aluminum slats are either powder coated or anodized. A variety of standard colors is available. Upon request we can provide additional colors. Non-reflective backing is available for blinds in all standard colors.

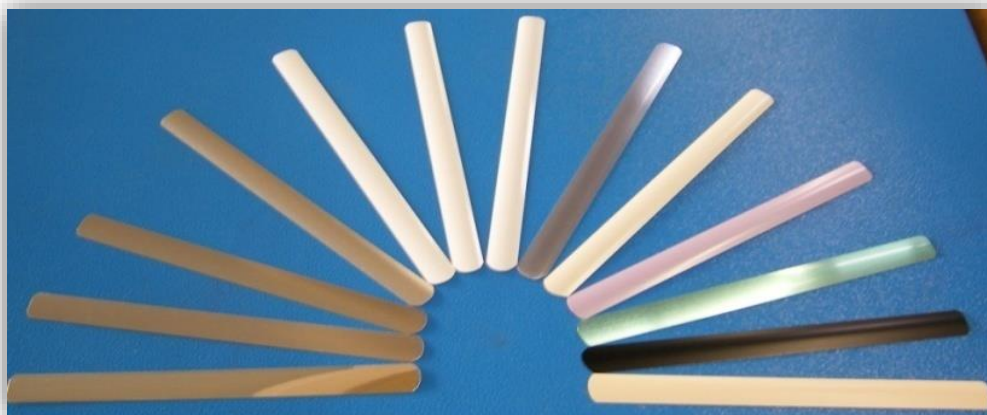
Structure

The head section of the isolation glass cavity houses a shroud (42 mm high) which has been anodized in the matching standard color. It contains the metal patented winding system (does not contain PVC), the end switch and the 24 Volt DC feed drive that lifts, lowers, turns and positions the slats.

The slats are profiled in the cross section. They are made from highly flexible aluminum alloy and are by default anodized and coated. Venetian blinds in white color shades are powder coated.

Slates

Aluminum slates				
Width: 15 or 16 mm Thickness: 0,22 mm		Reflection rate: over 80%		
Slates color: Standard				
Color Nu.	Color outside	Color inside	Reflexion outside	Reflexion inside
0017	Aluminum Silber met.	Aluminum Silber met.	81 %	81 %
0018	Aluminum Silber met.	Stone gray RAL 7030 not reflective	81 %	<1 %
0031	White shiny	White mat	82 %	45 %
Slates special color				
0001	White shiny	White shiny	82 %	82 %
0015	Brass met.	Brass met.	79 %	79 %
0029	Aluminum Silber met.	White mat	81 %	45 %
0089	Aluminum Silber met.	Schwarz matt	81 %	<1 %
0115	Copper brown	Copper brown	79 %	79 %
0717	Grey brown	Grey brown	79 %	79 %
0757	Pearl	Pearl	81 %	81 %
5751	Aluminum Anthracite	Aluminum Anthracite	78 %	78 %
0115/7030	Brass met.	Stone gray RAL 7030 not reflective	79 %	<1 %
0751/7030	Aluminium Anthracite	Stone gray RAL 7030 not reflective	78 %	<1 %
On request, many other colors are available				



Produzierbare Maße

I-S-T SOLAR FLEX® und I-S-T SOLAR FLEX® daylight

SZR (Space)	Standard size			Special production (technical clarification required)		
	27 mm	29 mm	32 mm	27 mm	29 mm	32 mm
Width min.	500 mm	500 mm	500 mm	360 mm	360 mm	360 mm
Width max.	1.200 mm	3.000 mm	3.000 mm	3.000 mm	6.000 mm	6.000 mm
Height min.	250 mm	250 mm	250 mm	100 mm	100 mm	100 mm
Height max.	3.200 mm	3.860 mm	4.500 mm	4.000 mm	4.500 mm	4.500 mm
Surface max.	3,84 m ²	9,0 m ²	18,0 m ²	6,0 m ²	9,0 m ²	18,0 m ²
Comment:	Up to 9.0 m ² tested to VE-07/2					(1)

(1) For sizes over 9.0 m², the glass technology and the control must be technically clarified

Technical values

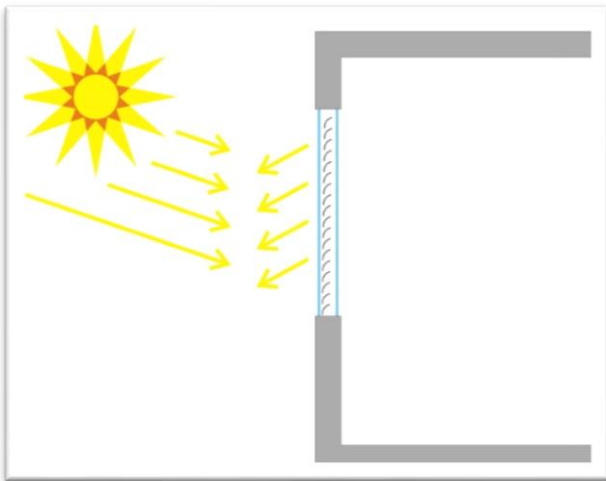
SOLAR FLEX®	
g-value with double glazing 0,08 (8 %)	g-value with triple glazing 0,05 (5 %) - 0,06 (6%)
Ug- value with double glazing 1,1 W/m ² K	Ug-value with triple glazing 0,6 – 0,7 W/m ² K



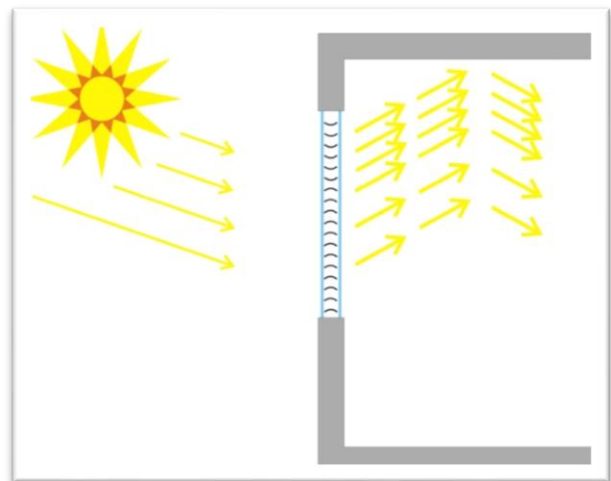
Daylight controlled by SOLAR FLEX®

The functional focal point of I-S-T SOLAR FLEX® is shading. Direct lighting and sun radiation are being blinded out.

When the slat position is open, a part of the incoming daylight will be directed to the ceiling and reflected as diffuse light. This means that rooms will be illuminated better by daylight.



Solar Flex



Solar Flex daylight

Natural daylight increases comfort and performance more than artificial lighting.

Drive control

Glass elements with integrated I-S-T SOLAR FLEX® can be controlled with special developed blind-controls.

All our controls are tuned to the specific requirements inside insulation glass.



Application range





Increased quality of life by I-S-T SOLAR FLEX®

- Better energy values.
- Broad use spectrum.
- Optimal sun protection.
- Targeted light directing into the interior.
- Improvement of room climate.
- Reducing costs for artificial light, heating and air conditioning.
- No maintenance and cleaning of the blind.
- No damages by weather influences or vandalism.
- Weathering resistant.
- Simple handling.
- (electrical switches, remote control or fully automatic)
- Low power consumption.
- (Powered by AC adaptor or batteries)
- Simple installation of dividers in the interior.
- 5 years warranty.
- g-value 8% at standard double glazing.
- Ug-value 1,1 W/m².
- Usability tested concerning guideline VE-07/2.
- Compliance of the work safety regulations.

The price performance of glazing with integrated SOLAR FLEX® will convince you too!