

Save Energy Costs and Improve Work Environment with MULTIFILM®



THE TASK

Large windows, one of the most important characteristic of modern office and administration buildings, make the working environment friendlier because they allow contact to the outside world. But large glass panes create new problems inside the building:

- High temperature levels
- Too much light causing dazzle

The higher temperature levels in the building will cause the airconditioning work load to increase. This would mean additional costs for the airconditioning systems. Reducing the energy transmission through windows from outside to inside will be most desirable to:

- Save airconditioning energy
- Avoid extreme temperature levels
- Avoid glare and dazzle
- Control the level of incoming light
- Block harmful UV-radiation

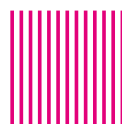
Effective sunprotection systems should be easily accessible, which means that they are best installed inside.

THE SOLUTION

MULTIFILM-film roller- and vertical blinds use a special, metal coated yet transparent film. The film surface reflects up to 80 % of the incoming radiation. Only a fraction of the sun rays passes through the film and is thereby diffused.

The result is a greatly reduced heat load and an effective dazzle protection. This creates a pleasant visual environment and offers superb protection against dazzle and high temperature levels. The key benefits are:

- Effective protection against high temperatures caused by sun energy
- Energy costs saving on airconditioning
- Improve work environment
- Effective protection against dazzle
- Unrestricted view of the surroundings
- Easy to use and maintain
- Blend well with internal furnishings
- No disturbance to the facade



MULTIFILM®

Perfection for windows

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THE PROPERTIES

Technical data selected MULTIFILM-film types	30 SiAt		20SiBc		40SiGy#		10SiSi	
	Film	Film+ glass 4/12/4	Film	Film+ glass 4/12/4	Film	Film+ glass 4/12/4	Film	Film+ glass 4/12/4
colour window side colour room side	Silver Anthracit		Silver Bronze		Silvergrey Dark grey		Silver Silver	
Solar Transmittance (%)	4,2 ⁺	3,4 ⁺	3,2 ⁺	2,5 ⁺	3,6	2,8	2,7 [#]	1,1 [*]
Visible Light Transmittance (%)	3,2 ⁺	2,9 ⁺	2,2 ⁺	2,0 ⁺	—	2,4	1,6 [#]	1,4 ⁺
Solar Reflectance (%)	73,4 ⁺	55,4 ⁺	72,1 ⁺	55,1 ⁺	64,0	48,6	74,0 [#]	60,1 ⁺
Total Energy Transmittance Degree (g-Value)	0,100 ⁺	0,226 ⁺	0,096 ⁺	0,229 ⁺	—	0,241	0,094 [#]	0,192 ⁺
Reduction of Anti Sun Effect (z-Value)	—	0,296 ⁺	—	0,300 ⁺	—	0,316	—	0,252 ⁺
Heat Transmittance Coefficient (k-Value) [W*m ⁻² *K ⁻¹]	—	1,70 [*]	—	1,70 [*]	—	1,85	—	1,70 [*]

* measured by Fraunhofer-Institut für Bauphysik Stuttgart

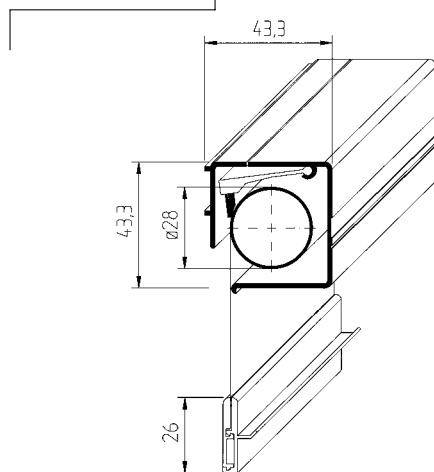
+ measured by Institut für Lichttechnik der Technischen Universität Berlin

measured by MULTIFILM

The insulating glass system has the identification g-value = 0.8 and k-value = 2.4. The datas will be changed if the slats are turned. k-Value was measured for roller blinds. A larger distance between film and window-glass and certain type of window have negative impact on the k-Value.

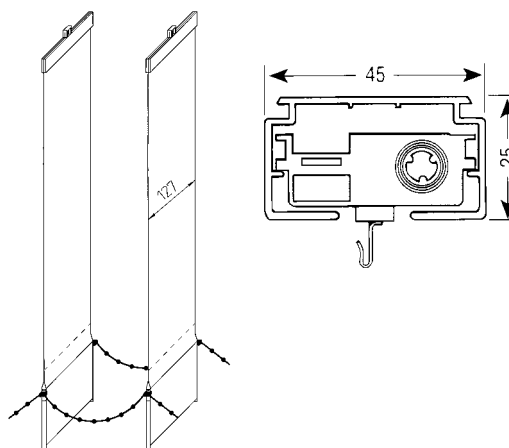
The film type 40SiGy can be used with either side facing the window.

THE PRODUCTS



MULTIFILM-film rollers feature casings with built-in brushes and side guides. External surfaces with clear anodized or powder coated in RAL colours are available.

The product line includes manually operated and electronically controlled motor driven roller blinds. MULTIFILM-film roller blinds are best suited for smaller windows up to a maximum height of 2200 mm.



MULTIFILM vertical blind systems feature include extruded guide rails with anodized or white colour coated. The vertical film slats are transparent and they provide you with a continuous view of the outside world. MULTIFILM vertical blinds are exceptionally useful in areas where many PCs or VDUs are used in rooms with large windows; or when such areas need effective sun protection.



Perfection for windows
are available from: