

**kuraray**

# ARCHITECTURAL GLAZING

PVB FILM FOR  
LAMINATED SAFETY GLASS

Photo: macbae - www.photocase.de

PRODUCT INFORMATION

**TROSIFOL<sup>®</sup>**



#### PRODUCT PROPERTIES:

**Very low inherent colour (yellowness) for high-clarity laminated glass**

**High edge stability for outstanding long-term strength**

**Different degrees of adhesion for optimum results in different applications**

**Simple edge seaming**

**Low odour**

**Minimal electrostatic charging**

## TROSIFOL® – YOUR PARTNER FOR THE FUTURE

Reliable and long lasting adhesion is the key to long-term stability in architectural glazing. TROSIFOL® products are well known for their excellent adhesion properties.

This is one of the reasons why TROSIFOL® is one of the world's leading manufacturers of PVB films for laminated safety glass.

There are long-term relationships between TROSIFOL® and its customers that ensure success for both businesses.

Aside from its products, TROSIFOL® offers a wide range of cooperation possibilities including expert technical service, support in designing new production lines and the development of innovative and customised product solutions. TROSIFOL® is certified to DIN EN ISO 9001:2000, ISO/TS 16949, DIN EN ISO 14001:2004 and OHSAS 18001:1999.

## TROSIFOL® BG – STANDARD PRODUCTS FOR ARCHITECTURAL APPLICATIONS

TROSIFOL® offers a wide range of products for different applications in architectural glazing. Safety glass laminated with TROSIFOL® has excellent product properties in respect of safety, security, long term stability, noise reduction and UV protection. Furthermore TROSIFOL® PVB films offer outstanding optical characteristics such as transparency and light stability.

TROSIFOL® BG is the standard product designed for the architectural glazing sector, with premium product properties for optimum laminated glass products. It has high mechanical strength, very low plasticiser volatility and significantly reduced electrostatic charging. The film's low level of inherent colour yields a visible and measurable improvement in the optical glass quality, particularly of multiple laminates.

Owing to the varying requirements of laminated safety glass, we continue to supply film types

with different degrees of adhesion in our aim to help you achieve optimum production results.

TROSIFOL® BG R10/15 is the product line for all standard laminated glass applications and particularly for penetration-resistant glazing conforming to the requirements of EN 356.

For optimum production yield in special applications, e.g. the production of laminated safety glass with toughened glass, we recommend TROSIFOL® BG R20.

All products satisfy the quality requirements of EN ISO 14449, EN ISO 12543-4, EN 356 and EN 12600 as well as the relevant international quality standards. TROSIFOL® products can be supplied, as desired by the customer, refrigerated or PE-interleaved.



## TROSIFOL® BG R10/15

**TROSIFOL® BG R10/15 with medium adhesion for standard applications in the laminated safety glass sector.**  
Available in widths of 300 to 3210 mm.

Type	Thickness [mm]	Colour	Light transmittance* [%]	Colour code	Length of refrigerated roll [m]	Length of roll PE-interleaved [m]
R15	0.38	Clear	87	-	500/1000	400
R10/R15	0.76	Clear	87	-	250/500	200
R15	1.14	Clear	87	-	150/330	150
R15	1.52	Clear	87	-	125/250	125
R15	2.28	Clear	86	-	177	95
R15	0.38	Sand white	70	W 40.71	400	400
R15	0.38	White translucent	60	W 30.65	400/1000	400
R15	0.38	Light blue-green	73	8.40.73	400	400
R15	0.38	Ocean blue	76	7.40.71	400	400
R15	0.38	Medium bronze	55	3.10.52	400	400
R15	0.38	Grey	45	6.60.44	400	400
R15	0.38	Asahi grey	42	6.50.42	400	400
R15	0.38	Light brown	55	S 40.55	400	400
R15	0.38	Medium brown	24	S 60.28	400	400
R15	0.76	White translucent	59	W 30.65	250	200
R15	0.76	Grey	44	6.65.44	250	200
R15	0.76	Medium bronze	53	3.10.52	250	200
R15	0.76	Bronze	36	3.60.38	250	200
R15	0.76	Light blue-green	72	8.40.73	250	200

## TROSIFOL® BG R20

**TROSIFOL® BG R20 with high adhesion for special applications in the laminated safety glass sector.**  
Available in widths of 300 to 3210 mm.

Type	Thickness [mm]	Colour	Light transmittance* [%]	Colour code	Length of refrigerated roll [m]	Length of roll PE-interleaved [m]
R20	0.76	Clear	87	-	250/500	200
R20	1.14	Clear	87	-	150/330	150
R20	1.52	Clear	87	-	125/250	125

\* LSG with 2 x 4 mm float glass



## TROSIFOL® – SPECIAL PRODUCTS FOR ARCHITECTURAL APPLICATIONS

With the development of new applications for architectural glazing, the demand for innovation in laminated safety glass is increasing continuously. With its state-of-the-art production equipment and technology, TROSIFOL® manufactures PVB films that convert laminated safety glass into multi-functional products.

TROSIFOL® SOUND CONTROL and TROSIFOL® COLOUR are two examples of films for creative and innovative design with glass.

### TROSIFOL® SOUND CONTROL

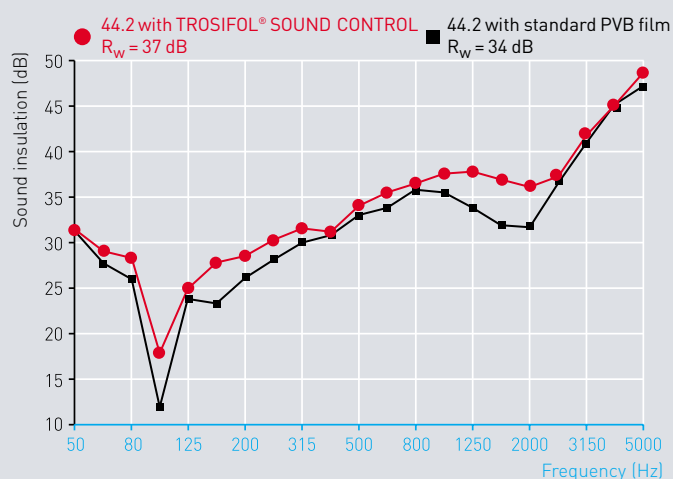
TROSIFOL® SOUND CONTROL is a PVB film with excellent noise reduction properties. Compared to a standard glass unit of the same thickness you will achieve an improvement in sound reduction of approx. 3 dB with TROSIFOL® SOUND CONTROL. The manufacturing process of laminated safety

glass with TROSIFOL® SOUND CONTROL is as simple and efficient as with standard products for architectural glazing. Safety glass laminated with TROSIFOL® SOUND CONTROL shows excellent characteristics in respect of safety and security, long-term stability, optical performance and light stability.

Thickness* [mm]	Colour	Light transmittance [%]	Weighted sound reduction $R_w$ [dB]	Width [mm]	Length of roll PE-interleaved [m]
0.76	Clear	88	37 (LSG 44.2)	300 - 3210	200/450
1.14	Clear	88	37 (LSG 44.3)	300 - 3210	150/330

\* 1.52 mm film thickness on request

### ACOUSTIC PROPERTIES OF TROSIFOL® SOUND CONTROL



### ACOUSTIC PROPERTIES OF IGU WITH TROSIFOL® SOUND CONTROL\*\*:

Construction of IGU			Weighted sound reduction
Glass [mm]	Gas space* [mm]	Glass [mm]	$R_w$ [dB]
4	16	44.2	39
6	16	44.2	41
8	16	44.2	42
10	16	44.2	44
44.2	16	66.2	47
44.3	16	66.3	49
44.3	20	66.3	50

\* Filled with Argon  
\*\* Measurements in accordance with DIN EN 20140-3/ DIN EN ISO 140

## TROSIFOL® COLOUR

**TROSIFOL® COLOUR is a PVB film for coloured laminated safety glass. The excellent colourfastness of TROSIFOL® COLOUR makes it suitable for both indoor and outdoor applications.**

**The wide range of basic colours can be combined to create an almost unlimited number of colour shades. Moreover, any individual colour can be prepared on request.**

Colour	Code*	Max. Width [mm]	Thickness [mm]	Roll length [m]	Application
Yellow	Y.85	2250	0.38	30/200	outdoor and indoor
Orange	O.55	2250	0.38	30/200	outdoor and indoor
Red	R.30	2250	0.38	30/200	outdoor and indoor
Light green	G.80	2250	0.38	30/200	outdoor and indoor
Green	G.39	2250	0.38	30/200	outdoor and indoor
Dark green	G.41	2250	0.38	30/200	outdoor and indoor
Sky blue	B.54	2250	0.38	30/200	outdoor and indoor
Blue	B.43	2250	0.38	30/200	outdoor and indoor
Medium blue	B.37	2250	0.38	30/200	outdoor and indoor
Brilliant blue	B.31	2250	0.38	30/200	outdoor and indoor
Violet	V.30	2250	0.38	30/200	outdoor and indoor
Black	S.00	2250	0.38	30/200	outdoor and indoor
White	W.17	2250	0.38	30/200	outdoor and indoor

\* Figure = Light transmittance in % in accordance with EN 410

All rolls are supplied PE-interleaved in the standard widths 1000 mm, 1600 mm and 2250 mm.

Additional widths of 800/1200/1400/1800/2000 mm are available if purchased in amounts of at least 500 sq.m. per colour type (200 m roll length only).





## TROSIFOL® – TECHNICAL DATA

### TROSIFOL® BG R10/15

Type	Thickness [mm]	Water content [%]	Surface roughness R <sub>Z</sub> * [μm]
R15	0.38	0.45	40
R15	0.76	0.45	40
R10	0.76	0.45	40
R15	1.14	0.45	40
R15	1.52	0.45	40
R15	2.28	0.45	40

### TROSIFOL® BG R20

Type	Thickness [mm]	Water content [%]	Surface roughness R <sub>Z</sub> * [μm]
R20	0.76	0.45	40
R20	1.14	0.45	40
R20	1.52	0.45	40

### TROSIFOL® SC

Product	Thickness [mm]	Water content [%]	Surface roughness R <sub>Z</sub> * [μm]
TROSIFOL® SC	0.76	0.45	45
TROSIFOL® SC	1.14	0.45	45

### TROSIFOL® HR100

Product	Thickness [mm]	Water content [%]	Surface roughness R <sub>Z</sub> * [μm]
TROSIFOL® HR100	0.76	0.43	100

All details are typical averages.

\* Values measured in accordance with EN ISO 4287

## TROSIFOL® – LOGISTICS AND PACKAGING

TROSIFOL® products are packed in vapour-tight bags. Depending on the width, the rolls are dispatched in vertical or horizontal packaging.

### MULTI-WAY PACKAGES – HORIZONTAL

Max. roll width [mm]	Type 1 dimensions [mm]			Type 2 dimensions [mm]		
	Length	Width	Height	Length	Width	Height
1600	1800	595	805	–	–	–
2000	2160	595	805	2145	590	730
2250	2480	595	805	2395	590	730
2600	2830	595	805	2950	590	730
3210	3400	595	805	3390	590	730
3210 (Jumbo size)	3400	780	980	–	–	–



Multi-way packages – horizontal

### ONE-WAY PACKAGES – HORIZONTAL

Max. roll width [mm]	Dimensions [mm]		
	Length	Width	Height
1850	2070	590	750
2160	2240	590	750
2590	2750	590	750
3210	3400	590	760



One-way packages – horizontal

### DRUM PACKAGES – VERTICAL

Max. roll width [mm]	Dimensions [mm]	
	Diameter	Height
740	570	800
850	570	900
1000	570	1060
1150	570	1200
1320	570	1380



Drum packages – vertical

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