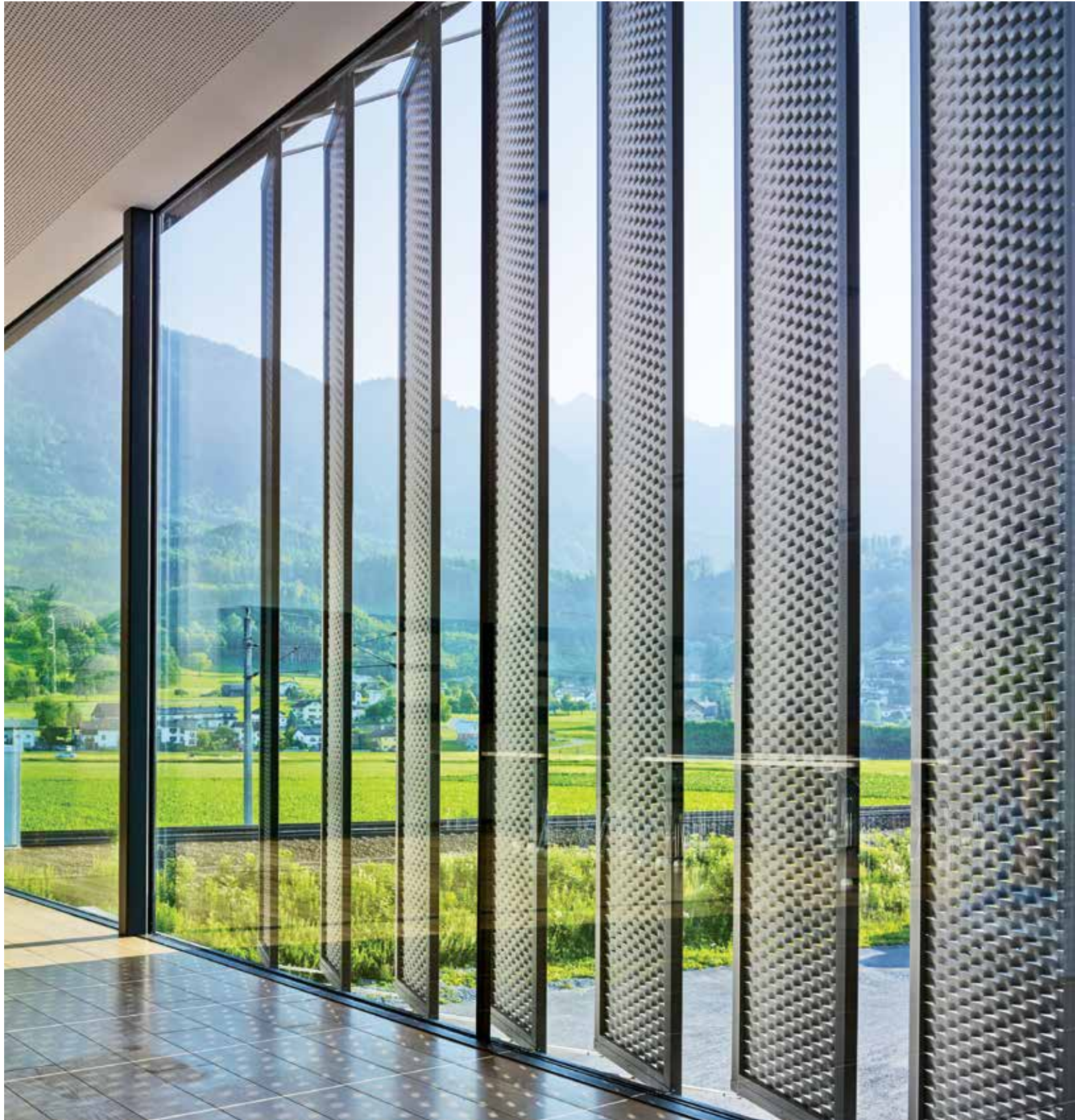


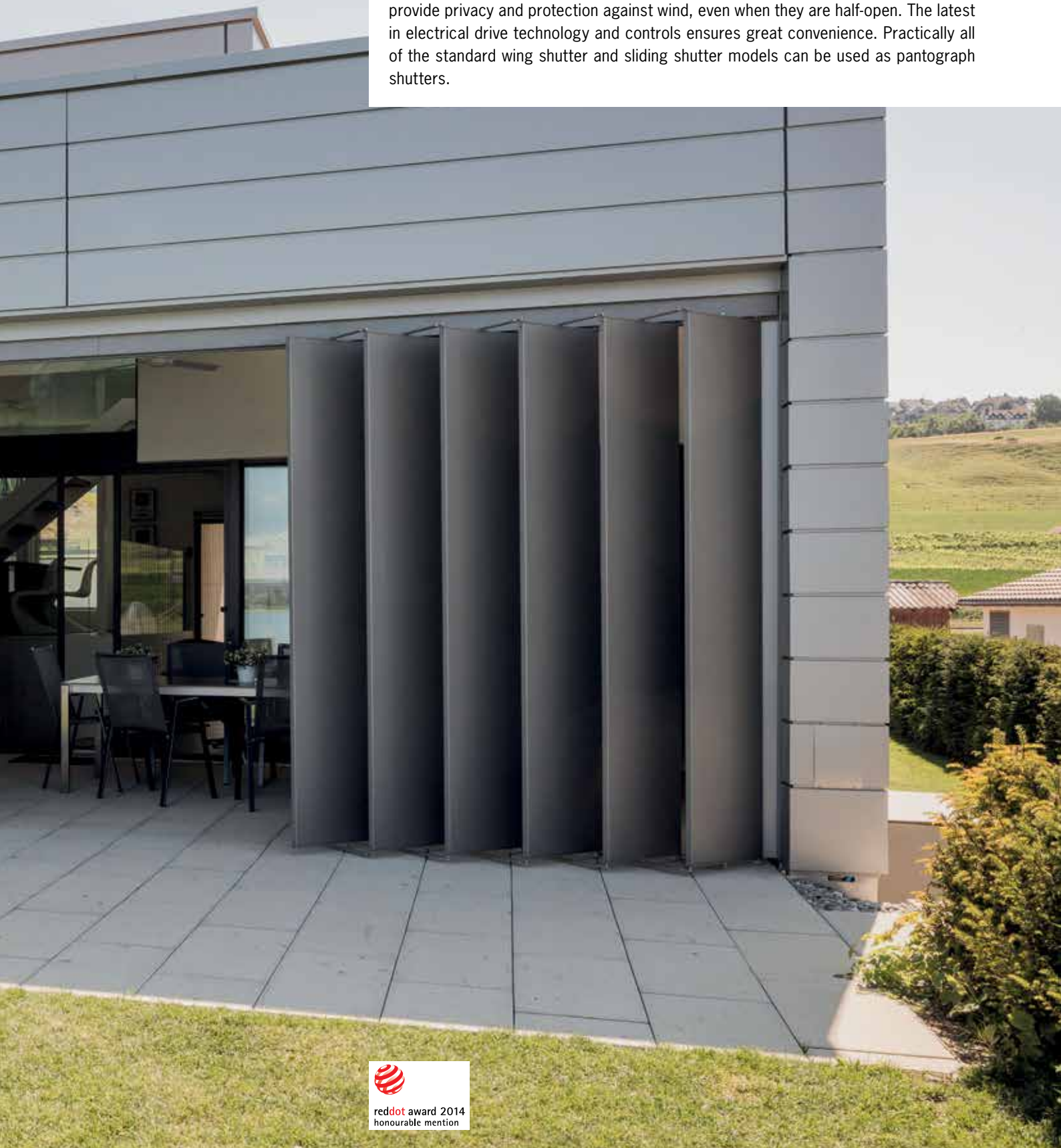
Window shutters from Griesser.
Pantograph shutters

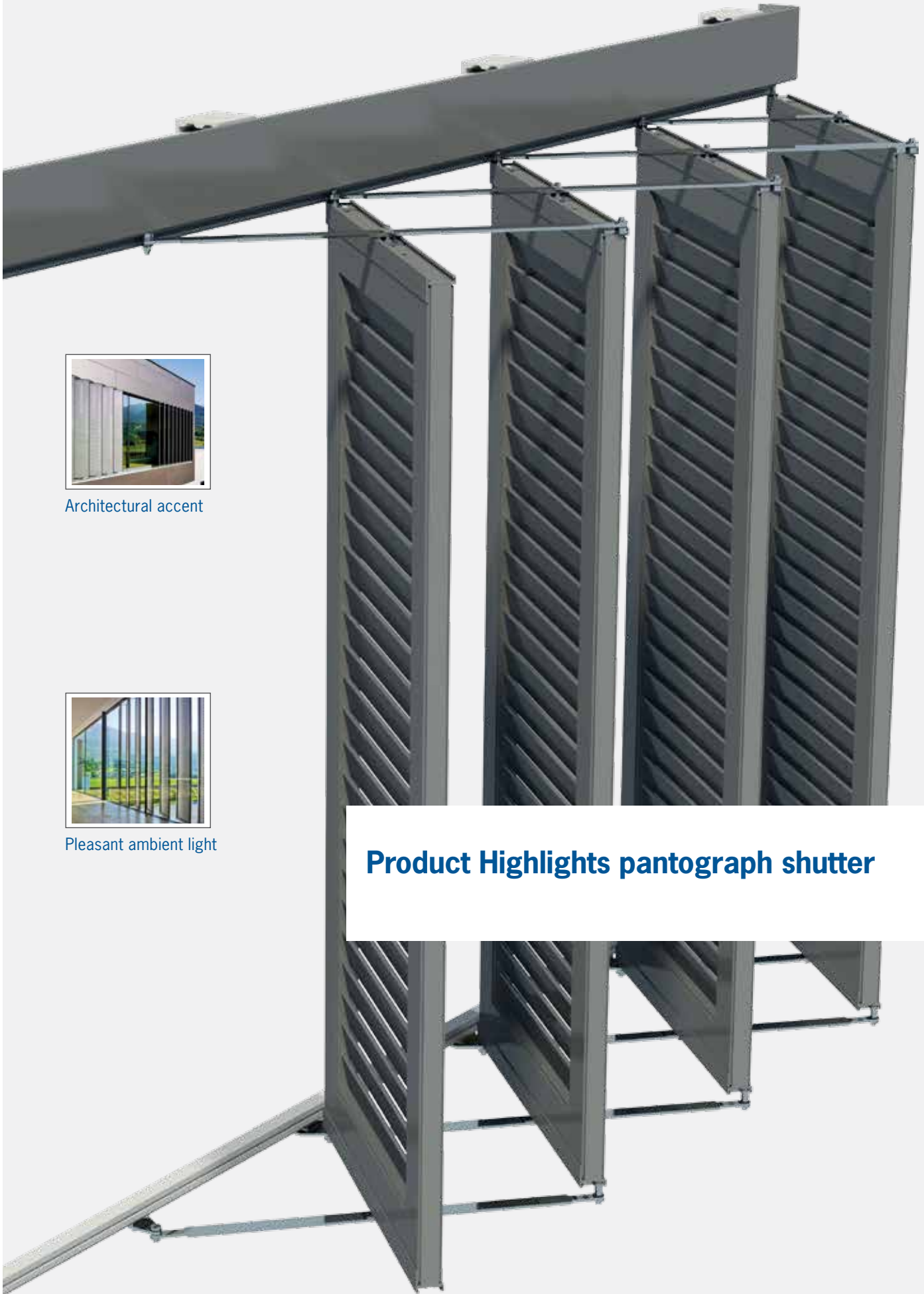




Pantograph shutters

Pantograph shutters are an attractive alternative to sliding, sliding bi-fold or wing shutters and offer interesting opportunities for architectural design. The design options are unlimited. Furthermore, pantograph shutters from the Griesser Company enable special lighting atmospheres and shading effects in rooms through various opening angles. When open, the pantograph shutters are at right angles to the facade and provide privacy and protection against wind, even when they are half-open. The latest in electrical drive technology and controls ensures great convenience. Practically all of the standard wing shutter and sliding shutter models can be used as pantograph shutters.





Architectural accent



Pleasant ambient light

Product Highlights pantograph shutter

PRODUCT ADVANTAGES IN DETAIL



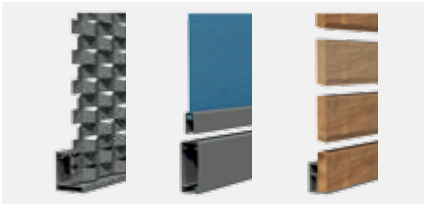
Pleasant ambient light

The amount of light passing through is regulated by the angle of the panel opening to the sashes. This makes a specific ambient light possible and gives any room a pleasant atmosphere.



Architectural accent

Pantograph shutters are an attractive alternative to sliding, folding or hinged shutters and offer interesting possibilities for architectural design. The design potential is unlimited.



Broad range of models

A complete range of pantograph shutter models are available. To give your building a special accent, you can individualize by selecting infill of wood, fabric, grille or metal plate.

Griesser's pantograph shutters score points not only for its standard models and many options for combining, but also for its custom solutions.



Always following the sun

Griesser's completely modern controls ensure that the panels are always at an optimal angle for solar tracking thus ensuring a high degree of comfort.



Wind and privacy protection

The pantograph shutter provides optimal wind and privacy protection, even when half-opened.

Fixed slats

Model A

The traditional

Model A consists of high-quality extruded aluminium profiles. This model variation is used in the most varied building designs.



Frame profile:	71 x 33 mm
SLIM:	40 x 33 mm
Lamella profile: with 2 intermediate struts for reinforcement	50 x 10 mm

Model T

The modern version with lightproof lamella

Model T catches the eye with its opaque design, while at the same time the slats are uniform in appearance inside and out. This model is also often used as separating element in the balcony area.



Frame profile:	71 x 33 mm
Lamella profile: with intermediate struts	50 x 18 mm

Model R

Shutters with the modern rhomboid lamella

Model R consists of high-quality extruded aluminium profiles. Innovative façade optics can be realised with this product solution thanks to various installation variants.



Frame profile:	71 x 33 mm
Lamella profile: with 2 intermediate struts for reinforcement	60 x 6 mm

Model H Alu

Aluminium frame with rhomboid aluminium lamella

The frame of the Model H Alu is manufactured from high-quality extruded aluminium profiles. The frame dimension (45x55 mm) used enables designs with considerably larger elements. The aluminium slats are screwed onto the frame from behind using U-profiles; horizontal or vertical versions are also possible.

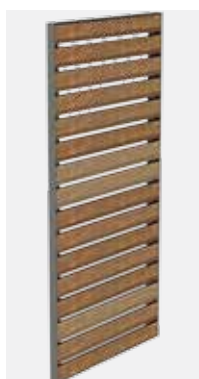


Frame profile:	55 x 45 mm
SLIM:	42 x 31 mm
Lamella profile:	60 x 15 mm
SLIM:	35 x 15 mm

Model H Wood

Aluminium frame with wooden lamella

The frame consists of extruded aluminium profiles that are joined with corner angles. The wooden slat consisting of untreated larch is invisibly screwed to the frame with a clip profile. The design of this profile also allows the realisation of large panel designs. The frame can be coated in all colors – a nice contrast with the wooden slat.



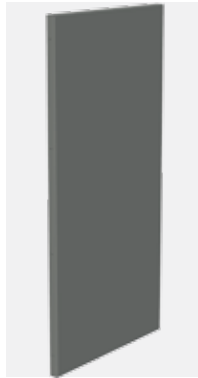
Frame profile:	55 x 45 mm
SLIM:	42 x 31 mm
Lamella profile:	
Wooden lamella made of Siberian larch, untreated 60 x 15 mm	

Fillings, covers

Model S

The sliding shutter

Model S consists of an extruded profile frame and a 2 mm aluminium sheet. The aluminium sheet is bevelled and riveted on the top, bottom and sides. This results in a plane surface with the rivets not visible.

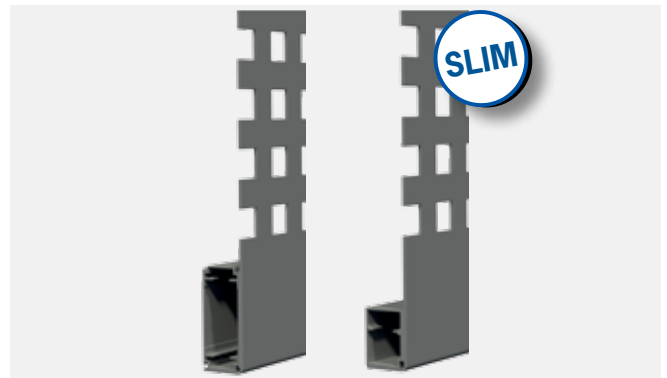
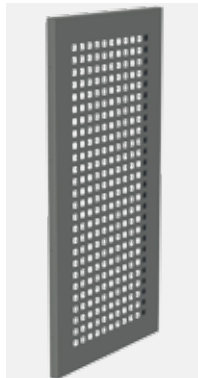


Frame profile: SYS 70 x 30 mm
SLIM: 40 x 31 mm
Sheet: 2 mm aluminium sheet, solid, bevelled and riveted on the top, bottom and sides

Model SL

The sliding shutter with perforation

Model S consists of an extruded profile frame and a perforated 2 mm aluminium sheet. The aluminium sheet is bevelled and riveted on the top, bottom and sides. This results in a plane surface with the rivets not visible that can be varied with different perforation patterns. Besides standard perforations (rectangular or round perforations), individual perforation patterns can also be realised.



Frame profile: SYS 70 x 30 mm
SLIM: 40 x 31 mm
Sheet: 2 mm aluminium sheet, bevelled and riveted on the top, bottom and sides
Standard perforations:
Q 20 x 20, Q 35 x 35, RU 20 and RU 30 mm
distance between hole edges \geq 20 mm

Model Sentum

**Aluminium frame with
extruded metal**

Model Sentum consists of an extruded profile frame with a SLIM surface and riveted in extruded metal. The aluminium sheet is riveted on circumferentially on the surface. The modern extruded metal profile provides shade but still allows light into the building.



Frame profile: 55 x 45 mm
SLIM: 42 x 31 mm
Filling: 2 mm extruded aluminium metal, riveted to the frame on the surface side
Mesh according to choice (optional)

Model Platina

**Aluminium frame with
Fundermax Panel**

Model Platina consists of an extruded profile frame and a Fundermax Uni-Decor panel. This model ideally complements modern façade designs and also allows largely dimensioned sliding shutter constructions through mullions and transoms. Contrary to the SLIM design, a frame is not visible from the front.



Frame profile: 71 x 33 mm
SLIM: 42 x 31 mm
Filling: Max. exterior NT both sides
Thickness: 8 mm
Core: F quality, brown
Flammable class: B

Color and accent

0070 NT carbonite	0085 NT white
0074 NT pastel gray	0689 NT deep red
0075 NT dark red	0161 NT natural afro
0077 NT graphite	AUTN



FOLDING SCISSOR SHUTTER DESIGN

With 2, 3 or 4 sashes

5-sash

6-sash

7-sash

8-sash

HEIGHT*

max. 3000 mm

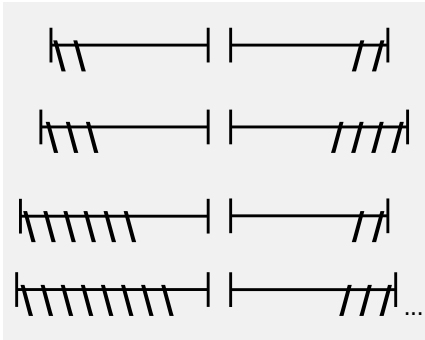
max. 2800 mm

max. 2600 mm

max. 2400 mm

max. 2200 mm

* Height dimension is dependent on the number of sashes in the system



Pantograph shutters limit stop pattern,
extract

Pantograph shutters, a design for every application

Pantograph shutters can be furnished with up to eight sashes per system. Thanks to the possibility of combining left-hand and right-hand systems, symmetrical and asymmetrical systems can be used in any combination, thus making it possible to implement up to 16 sashes per window. A design with an even or uneven number of sashes for each system is possible in the standard version.





Griesser BiLine wireless control

ELECTRICAL DRIVE PANTOGRAPH SHUTTERS

Individual or master control

Automatic timer

Automatic sun control

Safety sensing edge with wind or rain sensor

THE AUTOMATIC CHOICE.

Automation solutions for pantograph shutters extend the attributes of the window roller shutter as an architectural style element and classical shading component to include the property of operating convenience. Individual elements or entire groups can be moved via button, bus control or even wireless controls – without windows or doors having to be opened. In addition, radio systems have the advantage of being installed quickly, not only in new buildings but also when refitting an automated system in existing buildings. The associated control is integrated in the switch cabinet in the standard configuration.

Flexible lighting atmosphere, trend-setting technology

Thanks to their electronic controls, pantograph shutters offer the opportunity of controlling the lighting atmosphere in a building in a way that was not previously possible with window roller shutters. Sun, wind and rain sensors are used to adjust the elements to a wide variety of weather conditions. Furthermore, additional solutions can also be used to store automatic timers, vacation programs, etc. In terms of hardware, a number of solutions are available here from Griesser for application. The sashes are stabilized by the scissor technology and thus also protected mechanically against weather conditions.

Tailored shading concept

The motors used by Griesser are low-noise, precise and reliable.

The version can be used with both even and odd numbers of sashes.

This means that an individualized shading concept can be implemented for each of them.



SMART ELECTRONICS

Motorization

Simple closing of the house at the push of a button.

Control center

Closing all of the window roller shutters at the push of a button when leaving the house.

Automation

A random switching feature makes the house appear occupied.

SAFETY THROUGH SMART ELECTRONICS

An automated solar shading system offers more than just aesthetics and thermal comfort. It also creates safety. The first three minutes are decisive when it comes to an attempted break-in. Even the most secure window roller shutters are of no use if one forgets to close them when one leaves the house. This is where the automation solutions with state-of-the-art electronics from Griesser come into play. They close the window roller shutters at the simple press of a button – and you can have the house appear to be inhabited by using random switching or an automatic timer.

SECURITY THROUGH OPTIMUM PRODUCT COORDINATION

Products from Griesser offer both mechanical and electronic safety systems in order to meet the increasing security needs of the residents and the safety requirements of the insurance companies. On the one hand, the folding scissor system offers necessary safety intervals while on the other hand an additional protection mechanism is integrated by means of the smart and tested electronics.

PANTOGRAPH SHUTTERS, CERTIFIED SAFETY

The designated product meets the stipulations contained in the directives:

Directive 2006/42/EC on machinery, with amendments

Directive 2004/108/EC on electromagnetic compatibility, with amendments

Directive 2006/95/EC on low-voltage devices, with amendments

Construction Products Regulation 305/2011 (replaces the Construction Products Directive 89/106/EEC)

Compliance with the stipulations contained in the directives is documented by adherence to the following standards:

EN 61000-6-2 | EN 61000-6-3 | EN 60335-1 | EN 60335-2-97 | EN 60034-5

The entire system is DIN-tested and thus in conformance with CE. Development and design took place in accordance with EN 13659.

The following tests have been performed and classified:



TEST DESCRIPTION

Resistance against repeated operations

Utilization safety - danger of injury during operation

Resistance to wind load

Incorrect operation - corner load

Corrosion behavior

CLASSIFICATION STANDARD

EN 13659

EN 13659

EN 13659

EN 13659

EN 1670

TESTING STANDARD

EN 14201

EN 12045

EN 1932

EN 12194

ISO 9227

CLASSIFICATION

3

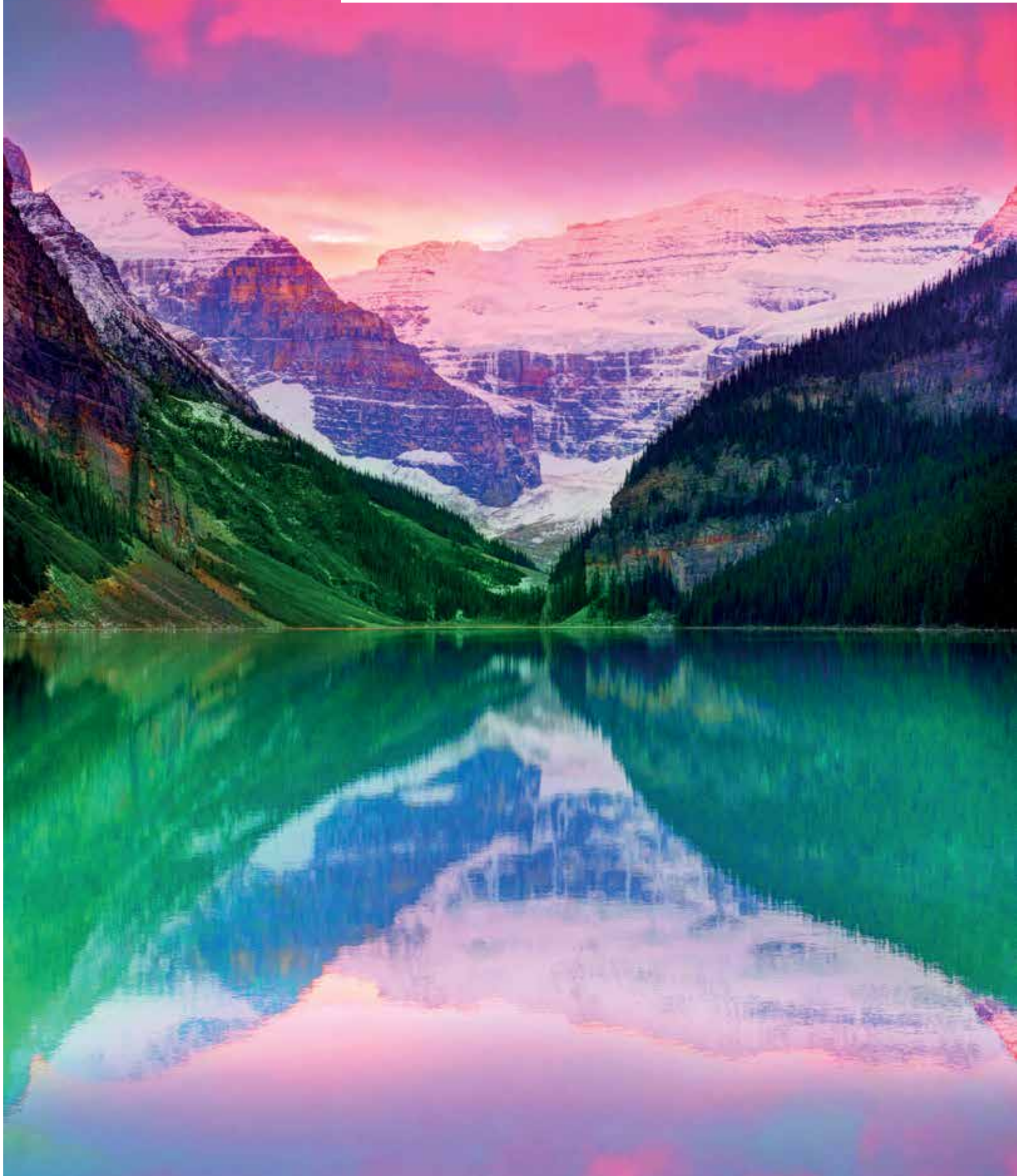
provided

6

passed

passed

Our color scheme





SURFACE STRUCTURE GRICOLORS

Semi-gloss



SURFACE STRUCTURE GRIRAL COLORS

Semi-gloss

Fine structure-matte

COLORS

The colors of our window roller shutters should reflect your wishes, lend distinction to the character of the architecture and create a personal atmosphere. These wishes are a daily challenge to our developers, planners and coaters.

Powder coating

The powder coating of aluminum has proven to be an environmentally friendly, cost-appropriate and long-lasting alternative to lacquering. It is resistant to both impacts and weather.

RAL, NCS, VSR and Metallic colors as well as wood decor

The wide color spectrum from Griesser leaves nothing to be desired. Select your desired color from our two standard color collections GriColors and GriRal Colors and lend your building an individual note.

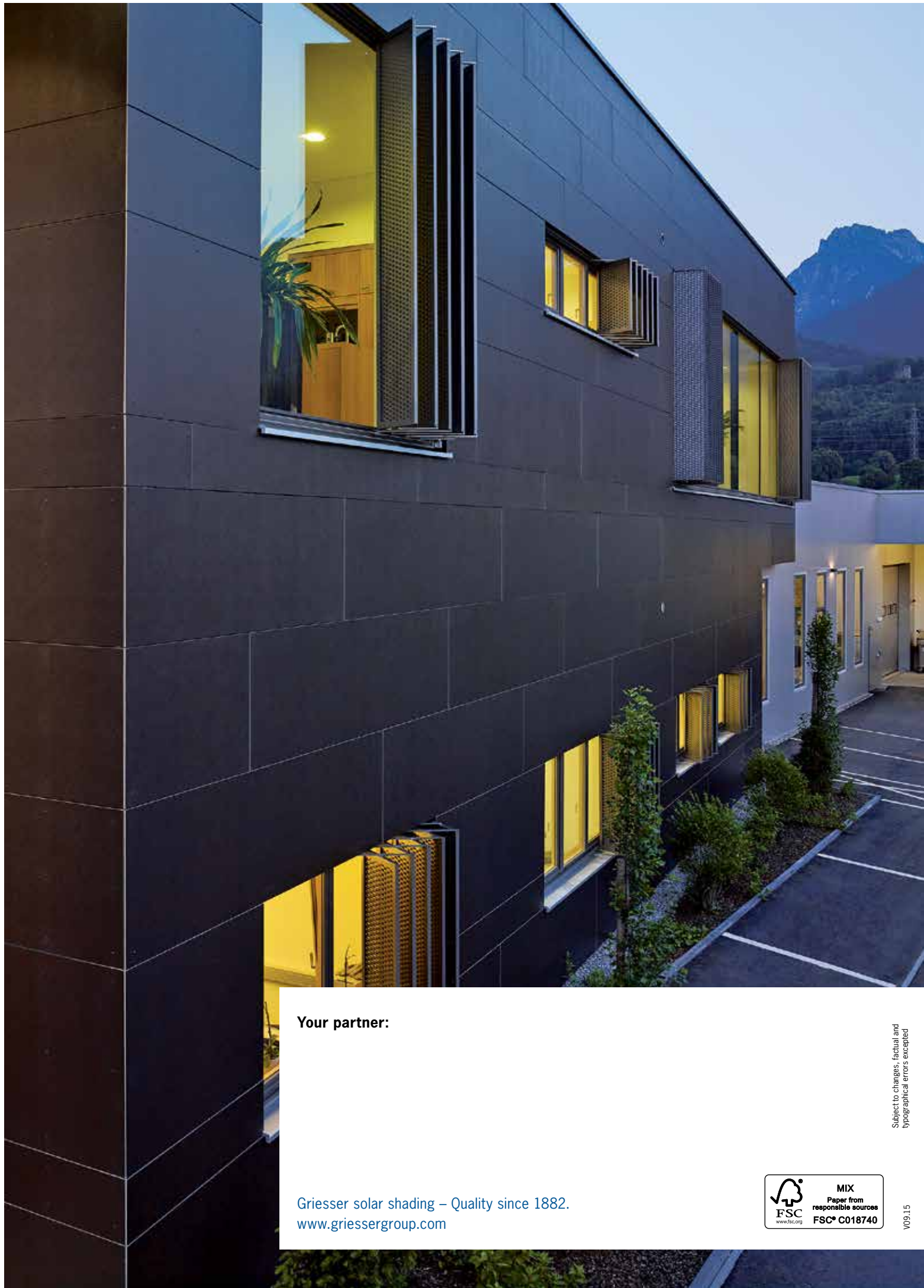
Surfaces Variety for every purpose

With the aid of a special coating process, Griesser window roller shutters can be produced in a variety of surface appearances such as smooth and finely structured. The surface structure provides the color or the decor once again with a new appearance.

Wood materials, facade plates and textiles

In addition to the colors, a variety of structures is also possible. The unique feature here is the wood decor: It convinces not only by its astoundingly true-to-nature appearance, but also by its convincing weather resistance.

Special combinations of materials also contribute to the great variety of Griesser window roller shutters. From individually printable fabric covers made of Soltis textile to slat versions made of natural wood, Plexiglas or Fundermax – there are practically no limits to fulfilling customer preferences.



Your partner:

Griesser solar shading – Quality since 1882.
www.griessergroup.com



Subject to changes, factual and
typographical errors excepted

V09.15