SCREEN ZIP



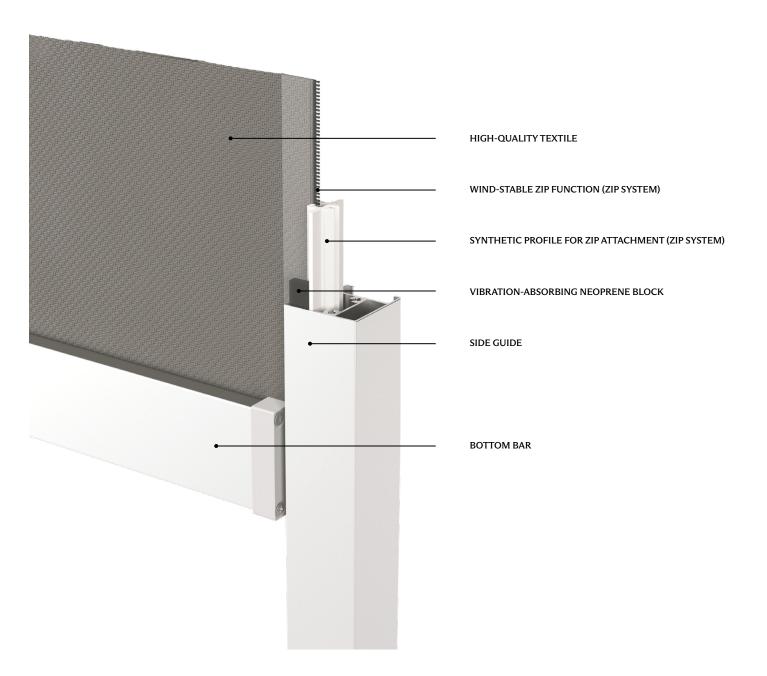
Fischer **

ABOUT SCREEN ZIP

Screen Zip is an external solar shading system that features an innovative zip mechanism, effortlessly combining style and functionality. The integrated zip, which secures the fabric within vertical side channels, ensures wind stability and durability for many years to come. This makes Screen Zip an ideal solution for both private, commercial, and public buildings.

Screen Zip operates with a motor for optimal functionality. Our extensive selection of textiles provides a variety of aesthetic and functional options that can complement any architectural style while effectively minimising solar heat within the building. Screen Zip is offered in six standard colours, with options for customisation in special RAL colours.

Select from three distinct types of Screen Zip, each offering unique features designed to meet the specific requirements of your building project. Whether you need a traditional installation, an integrated solution, or an inverted roll option that aligns with the facade, Screen Zip provides a customised solution. We are committed to addressing the need for solar shading that integrates seamlessly with any architectural design.



TYPES



SCREEN ZIP FACADE

The traditional version of Screen Zip is a highly versatile solution that can be installed on most facades. It is designed for quick and efficient installations without sacrificing quality or effectiveness.

Available in three sizes and featuring two distinct cassette designs.



SCREEN ZIP BUILD-IN

For those seeking an integrated and discreet solution for their building, Screen Zip Build-In is designed to be seamlessly incorporated into the structure above window frames. This option is ideal for both new constructions and renovation projects. When not in use, the screen blends elegantly into the building's design, preserving its aesthetics.

Screen Zip Build-In is offered in two sizes.



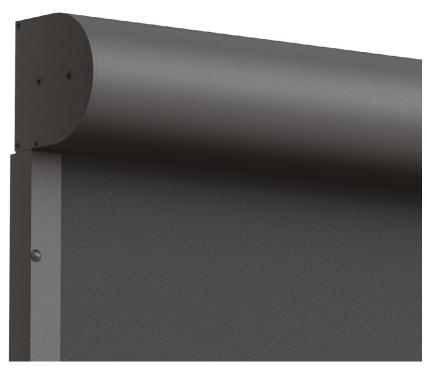
SCREEN ZIP INVERTED

The Screen Zip Inverted stands out by its inverted roll function, making it ideal for installations where the textile must roll down past an edge above the window or align with the facade. This feature is particularly useful for achieving a streamlined appearance.

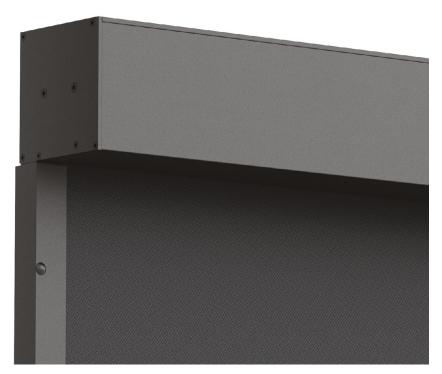
The Screen Zip Inverted is offered in two sizes.

CASSETTE

The aluminium cassettes are made of extruded profiles and are equipped with CNC-machined end caps. They are available in both square and D-shapes, depending on the specific model. The dimensions of each cassette are defined by the selected system; for detailed information, please see the product specification tables.



D-shaped cassette



Square cassette



OPERATION

Screen Zip is tailored to accommodate various environments and diverse application requirements, which is why we provide a range of motorised control options. Should you require a more specialised solution, our experienced advisors are ready to assist in selecting and customising alternative motor variants.

MOTOR 230V AC CONTROLLED BY MOTOR RELAY

This solution is ideal for larger commercial or public construction projects that require the integration of automated control systems like SunSync, which specialises in managing sun shading¹.

Motor options include, among others:

Somfy LT50: Standard wired motor with mechanical end limit switch.

1SunSync offers advanced features such as automatic control and seamless integration with Building Management Systems. Discover more at sunsync.dk.

MOTOR 230V AC WITH WIRELESS CONTROL

Somfy IO and RTS motors are ideal for smaller installations or private homes, offering wireless control options. The IO system in particularly excels in its integration with smart home technologies. It can be controlled via app and used with wireless sensors for increased comfort and energy efficiency.

Choose from the following motors:

- Somfy LT50 RTS: Standard wireless operation that uses one-way communication.
- Somfy IO Sunilus: Motor with IO Home Control technology that uses two-way communication.
- · Somfy IO Maestria: Motor with IO Home Control technology that uses two-way communication and includes an obstacle detection system.

MOTOR FOR SCREEN ZIP 100 SOLAR

Use solar energy to power your Screen Zip with the Somfy 12V DC IO motor. The motor is powered by a battery pack, which is recharged by a built-in solar panel situated on the front of the cassette.

The Somfy 12V DC IO motor is especially well-suited for locations with restricted access to power supply, as it operates effectively as a self-sustaining unit.

MOTOR CONNECTING TO 12V DC EMERGENCY POWER RELAY

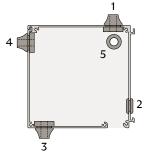
In situations where a Screen Zip needs an emergency power source, it is equipped with a 12V DC motor. An example is the Sunsync U1-12V, specifically designed to ensure the motor remains operational during power outages.

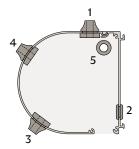
MOTOR CABLE

Screen Zip offers multiple options for the motor cable output, which can be customised for the specific project. Please see the illustration for an overview of the output paths for the motor cable in the two cassette designs. To enhance installation flexibility, we also provide Hirschmann connectors as an option.

We refer to the technical drawings for each Screen Zip model, which include precise dimensions and specific locations for the motor cable outputs. The drawings are available in DWG format.







Outputs for the motor cable



SYSTEM COLOURS

The profiles are available in six standard colours, as shown below. Additionally, you have the option to request RAL special colours, allowing you to select solar shading that perfectly complements your building.



ANODISED: Natural



WHITE: RAL 9010 gloss 70



WHITE: RAL 9010 textured



BLACK: RAL 9005 gloss 70



BLACK: RAL 9005 textured



ANTHRACITE: Noir 2100 Sable

BOTTOM BAR

Screen Zip is mounted with a rectangular bottom bar made of extruded aluminium with a steel core to add weight and stability. The bottom bar not only secures the textile but also acts as a counterweight to keep it taut. For tall and narrow systems under one meter, a larger and heavier bottom bar may be added for increased support. Each bottom bar is equipped with plastic end caps in light grey or black.

SIDE GUIDES

The side guides for Screen Zip are crafted from extruded aluminium to seamlessly integrate with the textile, ensuring precise alignment along the system's edges. The installation screws are discreetly covered by plastic caps designed to match standard profile colours.

The overview below presents the four variants of side guides. We offer customisation for all window types. The illustrations indicate the placement of mounting screws.

SINGLE SIDE GUIDE

The single side guide is offered with either an open or closed base. The open base ('B') is ideal for most constructions and allow for added distance to the facade with help from spacers or distance profiles. Additionally, the single side guide is utilised for hinged side guides.

The closed base ('D') provides stable fixation in constructions where the installation surface is too narrow to support a side guide with an open base.

Please see illustrations for dimensions.

DOUBLE SIDE GUIDE

The double side guide ('B') is used where systems are placed closely together, e.g., on large glass surfaces. Extra distance to the facade can be achieved with distance brackets.

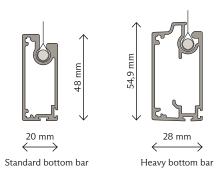
SIDE GUIDE FOR SIDE INSTALLATION

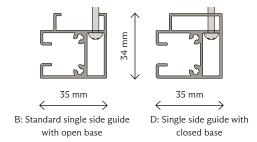
Side mounted guides ('N') are designed for situations where front mounting is not possible.

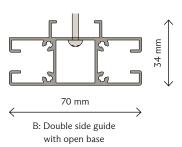
HINGED SIDE GUIDES

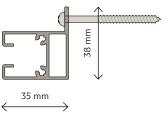
Hinged single side guides are designed for use with outward-opening, top hinged windows. Each side guide features just two fixing points. The side guide is anchored at the top using a hinge bracket within the cassette and secured at the bottom of the window frame with a specialised sliding bracket. This setup guarantees that no vertical load is transferred to the window frame while still allowing the window to be opened for emergency access.

Please be aware that the required distance between the side guide and the window frame varies based on the positioning of the hinge points and the desired opening angle. Typically, a hinged system will have reduced height and width to ensure stability against wind.

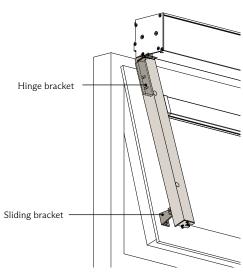








N: Recess-mounted side guide



H: Hinged side guide principle

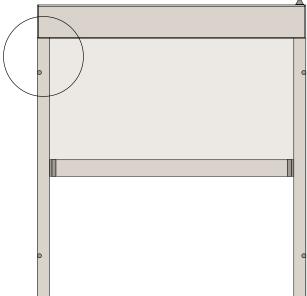


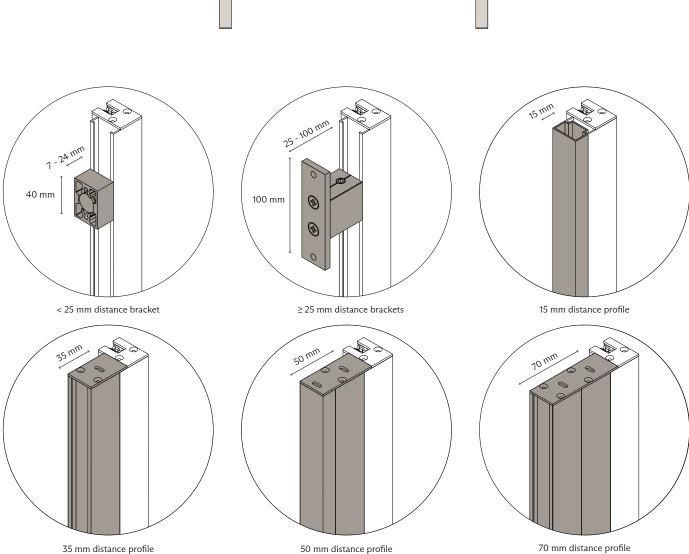
DISTANCE

Distance can be added to the side guide variants 'B' (single side guide with open base and double side guide) using distance brackets or distance profiles:

- Distance brackets are mounted at the side guide's fixing point and come in two variants for distances less than 2.5 cm and equal to or longer than 2.5 cm.
- Distance profiles are placed at the full height of the side guide and are available in the following depths: 15, 35, 50, and 70 mm.

Please see illustrations below.

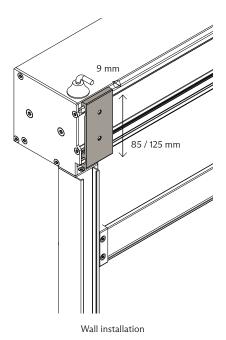


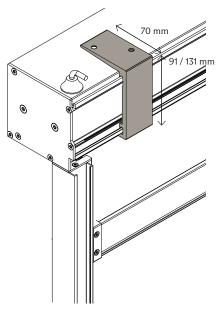


CASSETTE MOUNTING

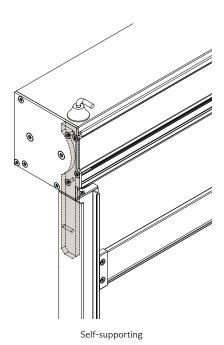
There are two options for mounting the cassette: bracket or self-supporting

- Bracket: the cassette is mounted with brackets which are fastened to the facade. Brackets are available for both wall and ceiling installations. Please see the measurements illustrated below.
- Self-supporting: the cassette is installed with internal brackets in the side guide profile, eliminating the need for any attachment to the facade.









SERIAL CONNECTION

It is possible to connect Screen Zip systems when needed, such as for optimizing electrical work. Two systems can be mechanically linked with a shaft and operated by a single motor. The distance between the systems can range from 0 to 100 cm. When connecting two Screen Zips, the motor is placed either on the far left of the left system or on the far right of the right system.

Please note, there may be limitations on system size when connecting screens.



PRODUCT SPECIFICATIONS

SCREEN ZIP FACADE	CASSETTE DIMENSIONS HEIGHT & DEPTH IN MM	OPERATION	CONFIGURATION CODE	CASSETTE INSTALLATION	MAX. DIMENSIONS	
	SCREEN ZIP SZ 95 H: 95 mm D: D-formet: 114 mm/Square: 103 m	Motor	SZ 95-B	Bracket Self-supporting	W: 300 x H: 300 cm	
D-shaped	SCREEN ZIP SZ 100 solar¹ H: 112 mm D: 100 mm	Motor with solar panel	SZ 100-S	Self-supporting	W: 300 x H: 330 cm	
Square	SCREEN SZ ZIP 125 H: 125 mm D: 134 mm	Motor	SZ 125-B	Bracket Self-supporting ²	W: 450 x H: 450 cm W: 600 x H: 300 cm W: 300 x H: 600 cm	

SCREEN ZIP BUILD-IN	CASSETTE DIMENSIONS HEIGHT & DEPTH IN MM	OPERATION	CONFIGURATION CODE	CASSETTE INSTALLATION	MAX. DIMENSIONS
	SCREEN ZIP SZ 100 i H: 112 mm D: 100 mm	Motor	SZ 100i-B	Self-supporting	W: 300 x H: 330 cm
	SCREEN ZIP SZ 105 i H: 112 mm D: 113 mm	Motor	SZ 105i-B	Bracket Self-supporting	W: 300 x H: 330cm

SCREEN ZIP INVERTED	CASSETTE DIMENSIONS HEIGHT & DEPTH IN MM	OPERATION	CONFIGURATION CODE	CASSETTE INSTALLATION	MAX. DIMENSIONS	
	SCREEN ZIP SZ 95 ov H: 95 mm D: 95 mm	Motor	SZ 95ov-B	Self-supporting	W: 300 x H: 260 cm	
	SCREEN ZIP SZ 125 ov H: 125 mm D: 125 mm	Motor	SZ 125ov-B	Self-supporting	W: 350 x H: 350 cm	

¹Screen Zip SZ 100 solar only available with square cassette



²Self-supporting up to 350 x 350 cm

MAXIMUM WIND TOLERANCE FOR SCREEN ZIP

Screen Zip is engineered to endure strong winds, but selecting the appropriate size is crucial to meet specific solar shading needs under varying wind conditions. In the table below, please find the wind limit values for the different Screen Zip system sizes.

$\begin{array}{c} \text{width} \ \rightarrow \\ \text{height} \end{array}$	1,0 M	1,5 M	2,0 M	2,5 M	3,0 M	3,5 M	4,0 M	4,5 M	5,0 M	5,5 M	6,0 M
1,0 M	30 m/s	30 m/s	30 m/s	21 m/s	15 m/s	15 m/s	15 m/s				
1,5 M	30 m/s	30 m/s	30 m/s	21 m/s	15 m/s	15 m/s	12 m/s				
2,0 M	30 m/s	30 m/s	30 m/s	21 m/s	21 m/s	21 m/s	21 m/s	18 m/s	15 m/s	12 m/s	12 m/s
2,5 M	30 m/s	30 m/s	30 m/s	21 m/s	21 m/s	21 m/s	18 m/s	18 m/s	12 m/s	12 m/s	12 m/s
3,0 M	30 m/s	30 m/s	30 m/s	21 m/s	21 m/s	21 m/s	18 m/s	15 m/s	12 m/s	12 m/s	12m/s
3,5 M	25 m/s	25 m/s	25 m/s	21 m/s	21 m/s	21 m/s	18 m/s	15 m/s			
4,0 M	25 m/s	25 m/s	25 m/s	21 m/s	21 m/s	18 m/s	15 m/s				
4,5 M	21 m/s	21 m/s	21 m/s	21 m/s	18 m/s	18 m/s					
5,0 M	21 m/s	21 m/s	21 m/s	18 m/s	18 m/s						
5,5 M	18 m/s										
6,0 M	18 m/s										

PLEASE NOTE!

- Wind limits are determined based on gusts lasting not longer than 2 seconds.
- Wind limits are based on single side guides mounted directly on the window (with approximately 20 mm between the glass and the textile).
- When the distance between the side guide and the window is greater than 0 cm and less than or equal to 13 cm, the wind limit is reduced by 4% per cm.*

Please be aware that the table of wind limit values serves as a guideline and is intended as general information. Individual circumstances and requirements may differ, so we strongly recommend consulting an experienced advisor to ensure the right choice of Screen Zip tailored to specific weather conditions and application needs.

*EXAMPLE WITH GREATER DISTANCE

Distance between window and side guide: 6 cmScreen W x H: $2.0 \times 3.0 \text{ m}$ Wind limit according to table: 30 m/s

New calculated wind limit: $30 \text{ m/s} - (30 \text{ m/s} \times 6 \text{ cm} \times 0.04) = 22.8 \text{ m/s}$



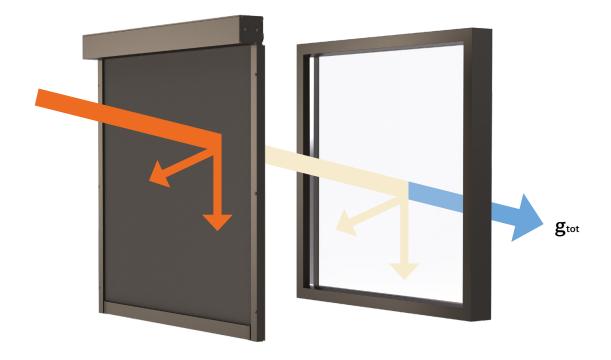
TEXTILE

Fischer's collection features high-quality textiles crafted from durable PVC-coated fiberglass, alongside a select range of PVC-free options. Please view our product sheet titled 'Screen Textile Colours & Specifications' for more detailed specifications, including the textiles' openness factors, light transmissions, reflections, weights, and colours. Physical samples are available in the collection folder.

G-VALUES

The g-value of glass, along with the overall g-value that incorporates solar shading (G-total), plays a crucial role in influencing the indoor climate. The g-value is a measure of the ability to regulate solar heat and thus reduce overheating, helping to maintain a comfortable and temperate indoor environment.

The g-value of the glass is specified as g, while the overall g-value for a window with solar shading is referred to as gtot. Gtot represents the amount of solar energy that penetrates a window geared with external solar shading. For instance, a gtot of 0.10 means that only 10% of the solar energy transmits through a solar shaded glass.



The diagram demonstrates a notable decrease in incoming solar energy, g_{tot} , on a three-layer thermal window geared with solar shading.

G-TOTAL

The table below shows the g_{tot} values for three standard windows in combination with textiles from the Fischer collection. It is important to note that the chosen type of glass naturally will affect the overall g-value, as well as other factors such as U-value, light transmission, and colour rendering of incoming light. Regardless of the glass type, a textile always has a significant effect upon g_{tot} . Typically, a textile paired with a standard double or triple-layer thermal window will prevent approximately 90% of solar energy from penetrating.

Choosing the external Screen Zip offers the benefits of a more transparent window, enhancing light transmission and improving colour rendering. At the same time, Screen Zip effectively reduces heat from incoming solar energy.

TEXTILE ITEM NO.	COLOUR PRIMARY/SECONDARY	GLASS F g= 0,64 - U= 1,1	GLASS G g= 0,33 - U= 1,0	GLASS H g= 0,53 - U= 0,7
160021	Grey/Black	0,09	0,08	0,07
160022	Black/Grey	0,10	0,08	0,07
160023	Grey/Grey	0,09	0,08	0,07
160024	White/Grey	0,09	0,07	0,07
160025	Grey/White	0,10	0,08	0,08
160026	Grey/Sand	0,09	0,08	0,07
160027	Sand/Grey	0,09	0,07	0,07
160028	Pearl Grey/Pearl Grey	0,11	0,08	0,09
160029	White/White	0,16	0,10	0,13
160030	Black/Black	0,10	0,09	0,07
160035	Bronze/Bronze	0,10	0,08	0,07
160036	Bronze/Sand	0,10	0,08	0,08
160037	Sand/Bronze	0,09	0,08	0,07
160040	Pure Black/Pure Black	0,10	0,09	0,07
160047	Anthracite Grey/Anthracite Grey	0,12	0,09	0,09

REFERENCE GLASS ACCORDING TO 14501:2021:

GLASS F: 2-layer window. 4 mm float / 16 mm argon / 4 mm float with "low emission coating"

GLASS G: 2-layer window. 6 mm float with "sun control coating" / 16 mm argon / 4 mm float

GLASS H: 3-layer window. 4 mm float with "low emission coating" / 12 mm $\frac{1}{2}$ mm float / 12 mm argon / 4 mm float with "low emission coating". The above calculations of $\frac{1}{2}$ are made according to EN 52022-1.

PLEASE NOTE

The g-value used for calculating solar energy transmission pertains specifically to the properties of the glass, rather than the total g-value of the entire window. We highly recommend seeking the expertise of a qualified advisor for accurate calculations of the g_{tot} values relevant to your specific project.

EPD

Our Screen Zip is EPD-verified. Find EPD documentation on our website or read more in the EPD Denmark EPD database.

